An Occupational Therapy Needs Assessment for At-Risk High School Students Attending

An Alternative Education Program: A Case Study

May 2010

This research, submitted by Brittany McFadden, has been approved and accepted
in partial fulfillment of the requirements for the degree of
Master of Science in Occupational Therapy from the University of Puget Sound.

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Committee Chairperson: Yvonne Swinth, PhD, OTR/L, FAOTA

_____
Reader #1: Renee Watling, PhD, OTR/L

_____
Director, Occupational Therapy Program: George Tomlin, PhD, OTR/L

_____
Dean of Graduate Studies: Sarah Moore, PhD

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Abstract

The purpose of this mixed-methods needs assessment was to identify how occupational therapy services might support at-risk high school students enrolled in an alternative education program. Sixteen staff members and 24 students completed a survey addressing potential needs across performance areas and client factors within the domain of occupational therapy. Interviews and observation were used to add breadth and depth to these survey data. The findings indicated a need for intervention in multiple areas including time management, behavior regulation, attention, health and wellness, stress management, communication skills, job skills, and goal setting. Students and staff indicated similar areas of needs and staff members with and without special education training rated students similarly. The results support the need for occupational therapy services to support alternative education programs in order to facilitate student engagement in academic and social environments and better prepare students to be successful in life roles and occupations. Provision of occupational therapy to students in alternative education programs is recommended and collaborative strategies for intervention are discussed.

As the focus on school achievement standards and national testing has increased, a greater number of students are being considered as “at-risk” for dropping out of school, which in turn places these students at increased risk for future delinquency, incarceration, and economic limitations (United States General Accounting Office [GAO], 2002). In response to the rise in the number of students unable to fit the mold of the traditional education system, there has been an increase in alternative education programs. These programs cater to students who find themselves disenfranchised from mainstream education with the intention to reconnect students to academics and promote successful transitions to adulthood by meeting the academic, social and emotional needs of the students (Aron & Zweig, 2003).

While research has been done that evaluates the needs of students in specific alternative education programs (Dirette & Kolak, 2004; Foley & Pang, 2006), evidence to show how programs are successfully addressing the needs of enrolled students is minimal and based on observational reports. What evidence there is suggests that holistic programs that address the environment, interpersonal skills and specific student factors through community involvement and skill-building programs show positive effects for reducing student drop-out and promoting successful transitions to adulthood (D’Angelo & Zemanick, 2009; Flannery, Kopkowski, & Rosales, 2008). Unfortunately, while alternative education programs show promise, based on outcome research of current program features and assessment of student needs, research suggests that these programs may yet provide greater support for at-risk students (Cox, Davidson & Bynum, 1995; Dirette & Kolak, 2004). Despite a high percentage of students in alternative education programs being reported as having a disability, many teachers in these programs do not have special education training and fewer supportive services are provided as part of these programs (Foley & Pang, 2006).

Occupational therapists hold to the statement that, “Society has an obligation to provide the reasonable accommodations necessary to allow individuals access to social, educational, recreational, and vocational opportunities” (Hansen & Hinojosa, 2004, p. 668). Occupational therapists provide services both in the community and in educational settings, and believe that each individual has a right to participate in society, thereby seeking to ameliorate obstacles that prevent full participation in desired roles and occupations (Hansen & Hinojosa, 2004). Additionally, occupational therapists are skilled in transition planning, conducting activity analysis to match task demands to the individual, and supporting the fulfillment of educational and social roles – skills that have potential to be highly effective in alternative education settings. This study, therefore, seeks to examine the need for occupational therapy in alternative education programs.

Background

Alternative programs. In a report from the National Center for Education Statistics for the 2000-2001 school year, Kleiner, Porch and Farris (2002) noted results from a nationwide survey identifying 10,900 alternative education programs for at-risk students nationwide as being separate from the regular school with no mainstream involvement. These include community based schools, charter schools or those within a juvenile detention center. Such programs typically have low student-teacher ratios, smaller classes, and a curriculum progressing toward attainment of a regular high school diploma (Kleiner et al., 2002; Tobin & Sprague, 1999). Alternative programs often collaborate with multiple organizations and services outside of the educational system. The most common services include the juvenile justice system, mental health agencies, law enforcement, and child protective services, each aimed at addressing specific student factors. A GAO (2002) report indicated that “alternative learning environments

attempt to create a more supportive and personalized learning environment for students to help them overcome some of the risk factors associated with dropping out" (p. 20). According to Zweig (2003), regardless of whether placement in an alternative program is by choice, from failure to meet academic standards, due to behavioral problems, or the result of a disciplinary procedure, alternative education programs seek to help students who have become detached from the traditional education setting and to reconnect students to society.

Student characteristics. During the 2000-2001 school year over 600,000 students were enrolled in alternative education or at-risk student programs nationwide (Kleiner et al., 2002). These youth often do not develop the meaningful connections to education or society that are typically seen among their peers, or they come to lose these connections that are necessary for successful development and the transition to adult roles (Zweig, 2003). This detachment can come through various avenues including expulsion or suspension from school and dropping-out (Zweig, 2003). Such students already face a range of variables stacked against their chances of success, and detachment from education and dropping out can lead to further disadvantages and challenges throughout life often resulting in future poverty, incarceration and hardship. Concerning vulnerable youth and the need for alternative education, Zweig (2003) pointed out:

> [These are] youth who are currently struggling to be successful in their roles as adolescents and who are socially, educationally, and economically disadvantaged relative to their peers. These are youth who are not connected to education, employment or organizations that prepare them for successful adulthood. (p. 1)

Student characteristics that tend to lead to detachment from traditional education include: scoring two grades below peers on achievement tests; being a year or more behind in completing course work or experiencing academic failure; becoming pregnant or being a parent; having a history of

abuse, mental health problems, or poverty; having a disability; demonstrating chronic truancy; participating in health risk behavior; and being involved in the juvenile justice system or foster care (D'Angelo & Zemanick, 2009; Kleiner et al., 2002; Lange, 1998; Lange & Sletten, 2002; Lehr, Lanners, & Lange, 2003; Saunders & Saunders, 2001; Zweig, 2003).

Successful programs. In describing what makes an alternative program successful, Tobin and Sprague (1999) stated: "The program must identify what causes and maintains the problem behavior as well as pro-social behaviors to replace problematic patterns of behavior" (p. 10). They further highlight the importance of supporting social skills because deficits in social skills are associated with delinquency and poor vocational outcomes. The literature further indicates that when programs incorporate training in business etiquette, establish internships and organize field trips they thereby build connections between academics and work that promote career awareness and put education in context. In so doing they can foster improved test scores, reduce rates of expulsion, and decrease behavior problems (Flannery et al., 2008; GAO, 2002). Successful programs have utilized participation in community-based vocational shops where students were assigned real job, paired with mentors from the community, included in decisions about the program, provided life-skills training, and helped to link personal goals to future education or work (Benz, Lindstrom, & Yovanoff, 2000; D'Angelo & Zemanick, 2009; Flannery et al., 2008; Lange & Sletten, 2002; Quinn, Poirier, Faller, Gable, & Tonelson, 2006). As a result, student-reported benefits have included opportunities to explore career options, learn specific goal setting skills, increase confidence, develop a sense of belonging and greater self-esteem, and build better decision making skills (D'Angelo & Zemanick, 2009; Benz et al., 2000).

The students' perspective. Although fewer studies document the perspectives of students in alternative education, a study by Benz et al. (2000) showed that both at-risk and not-

at-risk students wanted to gain functional skills. Students had their own goals and wanted to learn what *they* wanted to learn, not what the school dictated they learn. Additionally, students reported that support from staff and the individualized services to meet personal goals in alternative education programs were helpful.

Occupational therapy in schools. School-based services are one of the largest practice settings within the field of occupational therapy (AOTA, n.d). Occupational therapists possess a strong background in mental health, human development and activity participation with specialized skills to address not only academic challenges, but social, emotional and behavioral needs as well (AOTA, 2009; 2008a). Specific areas that an occupational therapist may address for at-risk students in alternative education may include but are not limited to study skills, independence in self-care, problem solving skills, healthy habit and routine development, vocational interest development and prevocational training (AOTA, 2009).

Federal laws that apply to occupational therapy in school settings include the Individuals with Disabilities Improvement Act (IDEA 2004), Section 504 of the Rehabilitation Act of 1973, and No Child Left Behind (NCLB) Act of 2001 (AOTA, 2004). While occupational therapy services have more frequently been provided through IDEA 2004 to address the needs of qualified students with disabilities through an Individualized Education Plan (IEP), NCLB requires that schools provide services to support successful participation of all children, particularly students such as those in this study who are at increased risk due to extenuating challenges (AOTA, n.d.).

Recent focus has also been given to Response to Intervention (RtI), an evidence based model of approaching academic and behavioral needs of all students to support those who are struggling in the educational environment or those with poor behavior and self management

skills (AOTA, 2008b; Clark, Brouwer, Schmidt, & Alexander, 2008; Clark & Polichino, 2010). The principles of RtI presume that all children can learn if instruction is structured effectively and that through supportive intervention, performance can be supported at the general education level without a need for further referral to special education (Clark et al., 2008). RtI applies to occupational therapy services in educational settings as therapists possess the knowledge and skills to provide direct and consultative intervention to address these academic and behavioral needs.

The exact number of students with disabilities attending alternative education programs is not known as students often enter alternative programs without a known diagnosis, or they may choose not to disclose a diagnosis. Once enrolled, evaluation for services often does not occur (Lange & Sletten, 2002). By serving all students as directed by RtI and NCLB, occupational therapists may be able to support the needs of every student to facilitate successful participation, not only in the education setting, but toward other meaningful social and community roles. Furthermore, RtI and NCLB may have important implications for providing services to students in alternative education programs as research shows that the rate of students who drop out of regular educational settings is higher for students with emotional or behavioral disorders and other disabilities (Lange & Sletten, 2002).

Occupational therapy needs within alternative education. Dirette and Kolak (2004) conducted a needs assessment at three alternative education programs in Michigan to determine the role of occupational therapy with at-risk students. Results of 47 surveys completed by educators, administrative staff, school counselors and student support staff indicated that 80% of students demonstrated problems in time management skills, healthy play and leisure pursuits, healthy lifestyle behaviors, and cognitive tasks involving multitasking and other high level

cognitive functions. Problems associated with verbal and nonverbal communication skills, self-control and appropriate behaviors were identified in over 60% of students. Additionally, the education staff reported a high percentage of students with known diagnoses that negatively influenced learning. The researchers commented that while removal from traditional settings into alternative programs attempts to correct the problems by a change in environment, there are many deficits in client factors and performance skills that may be limiting these students' academic performance. As others have demonstrated (Tobin & Sprague, 1999), addressing social and behavioral problems can support learning by allowing the student to focus on school. Additionally, Zweig (2003) pointed out that alternative education settings provide a way to intervene in the lives of at-risk youth whether these interventions are family-based, health-based or education-based.

While Dirette and Kolak (2004) documented teacher perceptions of areas in which at-risk students struggle, the researchers did not report personal observation of included program dynamics, current program descriptions and offerings, or student perspectives. The researchers examined three programs: one program each in city, suburban and rural settings. Differences among the programs, however, were not discussed. Another limitation of this study was the limited geographic area which the programs and students represented: all programs were located in one state in the Midwest. As one of the only reports documenting the needs of at-risk students in alternative education related to the domain of occupational therapy, conclusions cannot be reached as to whether the characteristics of these students are representative of a greater population of at-risk students in alternative education programs. Research in other geographic regions is needed to further understand the characteristics and needs of students and programs across the United States.

At-risk students in alternative education programs demonstrate deficits in executive function, healthy lifestyle, behavior, play and leisure, attention span, memory, and stress and anger management (Dirette & Kolack, 2004). These deficits fall within the occupational therapy domain of practice (AOTA, 2008a) and present an opportunity for occupational therapists to further support students in alternative education settings.

Concerning occupational therapy, the American Occupational Therapy Association (AOTA, 2007) states:

> Humans are complex beings engaged in a dynamic process of interaction with the physical, social, temporal, cultural, psychological, spiritual and virtual environments. Through active engagement within the internal and external environments, humans evolve, change, and adapt […] with the goal of participation in meaningful occupation that supports survival, self-actualization, occupational balance, and quality of life (p. 678).

This philosophy of occupational therapy is in concert with the characteristics of successful alternative education programs that focus more holistically on student needs; however, the literature is just beginning to highlight the need for occupational therapy intervention with this population. As Dirette and Kolak (2004) pointed out, “Occupational therapy brings a unique perspective to the school system” (p. 340). As stated, recent trends in service provision are addressing student needs in general education settings; yet specific application to at-risk students in alternative programs has not been adequately examined. Based on the results of their investigation, Dirette and Kolak (2004) concluded that there is potential for occupational therapists to be effective in empowering at-risk students through programs and services that

promote success in school and support successful and meaningful participation in life and society.

While occupational therapy is poised to powerfully enhance the lives of at-risk students in alternative education programs, little research exists showing the involvement of occupational therapy in such programs or the potential role of occupational therapy in providing successful alternative education experiences for at-risk adolescents. Barriers to services provision may include a lack of understanding regarding the role of occupational therapy in meeting the needs of these students, a lack of identifying the needs of these students as related to the domain of occupational therapy, and a lack of funding. For there to be the provision and funding of these services, it is necessary that the needs of these students be further examined. Connections between the scope of occupational therapy practice and student reports of self-identified needs specifically tied to the domain of occupational therapy need to be examined. Results from research on the needs of these students have been confined to specific geographic areas (Dirette & Kolak, 2004) and are of unknown generalizability. Therefore, the purpose of the current study is to identify the needs for occupational therapy services for at-risk youth in alternative education programs in western Washington by conducting a needs-assessment using a survey distributed to students and staff members in conjunction with interviews and observation of the program. For the purpose of this study, alternative education programs are those physically separated from a traditional school and that do not involve mainstream class time, and which service students identified by the program director or principal as “at-risk” based on behavior, academic performance and life circumstances prior to enrollment in the program.

Method

Research Design

A needs-assessment using a mixed-methodology approach including surveys, interviews and observations was used to gain information from staff and students at one alternative education program in Washington State. Originally it was anticipated that 3 programs would be assessed; however the recruitment process yielded one program that met the inclusion criteria and that agreed to participate within the timeframe for the study.

Participants

For the purposes of this study, programs that serve at-risk students in grades 9-12 with classes that are delivered on-site were solicited for participation. Programs were excluded that incorporate mainstreamed class time, were designed to address a specific type of behavior or diagnosis, or in which online delivery of classes was the primary instructional method. Mandatory placement and choice-based placement programs were included.

Staff members included those who the principal considered familiar with the behavior, challenges and strengths of the students. Student participants were those attending the included program. Characteristics of at-risk students typically included poor academic performance; being pregnant; having a history of a disability, mental health problems, sexual abuse or poverty; being expelled from a traditional school; and being involved in health risk behaviors, chronic truancy or the juvenile justice system (D'Angelo & Zemanick, 2009; Lange, 1998; personal communication with principal, March 10, 2010).

Materials

Two survey questionnaires (staff version and student version) were designed for this study. Questions were formatted by the researcher using the *Occupational Therapy Practice*

Framework, 2nd edition (*Framework-II*; AOTA, 2008a), Dirette and Kolack (2004); the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995); the Modified Interest Checklist (MOHO, n.d.); and questions developed by Wyler (unpublished Master's thesis, 1998). Closed-ended questions pertaining to client factors, performance skills, and performance patterns as outlined in the *Framework-II* (AOTA, 2008a) were developed. Questions addressed specific areas that were believed to represent areas the respondent may feel are supportive of or a barrier to performance in the program, engagement in desired roles and activities, and transition to adult life. Furthermore, questions inquired about further support and instruction that respondents believe could be beneficial to the alternative education setting. Questions were reviewed by two doctorally prepared occupational therapy educators who have experience with occupational therapy in the school setting. The staff version was reviewed by two teachers from alternative education programs. The student version was reviewed by a 12th grade high school student for clarity and readability. Questions were revised based upon reviewer feedback.

The complete survey packet consisted of a cover letter, consent form, copy of the consent form, and appropriate version of the questionnaire. The signed consent of a parent or guardian was required for students under the age of 18.

Staff questionnaire. The staff questionnaire consisted of various question formats asking respondents to describe student characteristics, identify various aspects of student performance and student needs, and indicate favorability regarding the inclusion of occupational therapy based services and collaboration. Response formats included rank-order responses, Likert scale, and multiple choice (Portney & Watkins, 2009). The questionnaire took approximately 15 minutes to complete.

Student questionnaire. The student questionnaire was similar to the staff questionnaire in terms of asking participants to identify areas that were perceived as supportive of or barriers to performance in desired areas. Response formats included rank-order responses, Likert scale, and multiple choice (Portney & Watkins, 2009). Questions asked students to remark on areas they perceived as challenging, how well prepared they felt for skills needed after school, whether they desired further instruction in particular areas, and opinions regarding suggested ways occupational therapy could be involved in the program. The questionnaire took approximately 15 minutes to complete.

Rationale

A questionnaire that could be completed independently at home was intended to minimize disruption to the classroom and to provide students the opportunity to obtain signed consent from a parent or guardian. Through discussion with the principal it was determined that taking surveys home would negatively impact the return rate. It was therefore decided that only consent forms would be passed out to students under the age of 18 to be taken home and signed by a parent or guardian. All surveys would be completed on campus.

Observation of the program took place with the purpose and focus of determining what a typical day looks like to better contextualize the student and staff responses on the surveys. The nature of alternative programs is such that individual programs may vary greatly from one another across settings in ways such as how classes are conducted, the types of classes offered, the dynamics between students and teachers, and the environment in which the learning takes place. Field notes of these observations and informal interviews with staff members were written by hand. An interview with the principal was used to obtain general information about the program and students to further contextualize survey responses.

Procedure

This study was approved by the Institutional Review Board of the University of Puget Sound. A listing of alternative education programs was obtained from the Washington Association of Learning Alternatives (WALA) website (www.walakids.com). Programs that met the inclusion criteria were written on individual pieces of paper and put in a container. Programs were selected and contacted in random order by drawing names from the container. An email explaining the study and soliciting participation was sent to the program director or principal of each selected program and a follow-up call was made within 48 hours. Recruitment lasted for one week based on IRB requirements. Despite the intention to conduct the study at three separate programs, only one program meeting inclusion criteria confirmed participation within the deadline. An initial meeting with the principal was held to discuss the study procedure and materials. Based on the principal's recommendation, changes to the original protocol were made in order to maximize the response rate and minimize disruption to the school-day. A subsequent interview with the principal was conducted and audio-taped to provide information regarding the structure of the alternative program, supportive services, admittance procedures, student factors, and number of students and staff. The researcher attended a staff meeting to present the purpose of the study. The principal asked the researcher to provide a brief description of occupational therapy services in an educational setting. Each staff member received a complete survey packet and was given instructions to return the completed consent form and survey in the provided envelope to the lock box located in the office.

The protocol for the student surveys was discussed with the staff and further changes were made. Originally it was intended that the researcher would present the study to students and distribute complete survey packets to them. Students would then obtain the signature of a

parent or guardian and return the completed survey and consent form to a locked collection box in the office. Based on staff discussion, it was determined that the study would take place over one school week. The researcher was on campus Tuesday and Friday.

For students 17 years old and younger, first period teachers would distribute the consent form and cover letter to the students on Monday and ask them to participate. Instructions were given to return the signed consent form to the front desk by Thursday. Surveys were removed from the student packets and held for later. Each core-room teacher collected enough packets for his or her students (approximately 20 surveys per teacher). The secretary kept all returned forms in a file. Students with a consent form on file were pulled from class on Tuesday or Friday and the researcher presented the survey. Students completed the survey and turned it in enclosed in a provided envelope to maintain confidentiality.

On Tuesday the principal pulled out of class those students who were at least 18 years old and who wished to participate. The researcher presented the purpose of the study and obtained a signed consent form from each student. Students then received and completed the survey and turned it in enclosed in a provided envelope to maintain confidentiality.

The researcher remained at the school for 5 hours on Tuesday to make observations. While alternative programs may have commonalities in structure and curriculum; however, variability between programs in implementation gives rise to unique dynamics within each program. Therefore the purpose of this observation was to gain a better understanding of this particular program and provide context for survey and interview results.

The researcher returned on Friday, presented the survey to additional students who had since returned a consent form, and picked up all remaining staff surveys and materials. Upon receipt of the completed surveys the researcher immediately separated the survey from the

consent form to ensure confidentiality and privacy. Signed consent forms were secured in a locked file cabinet at the university. Survey packets were reviewed only by the researcher and research committee members.

Data Analysis

Reponses were coded and entered into a computer database for the purposes of analysis. The Statistical Package for the Social Sciences (SPSS, 1999) was used to analyze the data from the questionnaires to determine measures of central tendency and variability. Chi square analyses were conducted to compare the responses of students and staff.

Results

Forty-eight alternative high school programs within 35 miles of the sponsoring university were identified and contacted. One program meeting inclusion criteria agreed to participate by the date required for submitting proof of agreed program participation in the study to the University Institutional Review Board. Due to the small sample size, results should be interpreted with caution; percentages are based on a small *n*. Results were compiled from personal communication with the principal (March 10, 2010), personal communication with staff members (March 19 & 23, 2010), observation (March 23, 2010) and surveys.

The alternative program

The participating program is located in a suburban area and serves students from multiple districts. Students may commute upwards of 20 miles to attend the program and represent multiple population areas around the city. The program typically serves approximately 105 to 125 students with 90-100 on campus on any given day. Students attend 5 classes 4 days/week. Typical class size is 10 students (range 6 to 22). The school serves students in grades 9 to 12, however due to skill and credit deficits, classes often include mixed grade levels. The

program curriculum parallels that of other public schools in the district. Classes include math, social studies, science, and language arts. Elective classes include ethnic foods, fitness, health, art, digital photography, leadership and marketing. Teachers use an informal and engaged instruction model and students are provided a structured and supervised daily schedule.

Enrollment in the program is based on parent or student choice. Students who attend are eligible to participate in extracurricular activities at their home school if they meet the standard eligibility requirements. Length of enrollment may vary. While many students graduate from the program, a student may attend the program for a period of time and then return to his or her home high school. Some students begin to age out due to continued credit deficits and some students stay for up to 5 or 6 years.

Provided services include a career counselor and the opportunity to attend a local technical skills center. Approximately 25% of students have an IEP. All students go through drug and alcohol assessments as part of the entry process. If recommended, a treatment component is provided. Services are available for teen parents and are coordinated with the onsite daycare. The daycare provides wrap around services for these students as well as collaboration with county health services, nutritional counseling and nursing consultation.

Staff characteristics: The principal distributed surveys to 17 staff members. Sixteen completed surveys were returned (94%, Male = 3, Female = 13). See Table 1 for staff characteristics.

A chi square goodness of fit test was used to compare responses from teachers and other staff participants across all questions. There was no significant difference between the percentage of teachers and other staff participants for reporting the number of students demonstrating difficulties across various skills except for “Demonstrating emotions appropriate

to the situation," X^2 (1, N = 16) = 4.00, p = 0.046. For teachers, 75% indicated that *most* students have difficulties whereas 75% of the other staff participants indicated that *some* have difficulties.

A chi square goodness of fit test was used to compare responses between all staff members by length of time at the program. Staff were divided into two groups: Group 1 (at the program for more than 10 years, n = 6) and Group 2 (at the program for 10 years or less, $n = 10$). There was no significant difference between group responses for any question. Staff participants were regrouped: Group A (at the program for more than 15 years, n = 3) and Group B (at the program for 15 years or less, n = 13). There was a significant difference between Group A and Group B for the number of students perceived as demonstrating difficulties responding appropriately to the feelings of others, X^2 (1, N = 16) = 4.747, p = .029. All teachers with more than 15 years experience at the program indicated that *most* students have difficulty with this skill whereas 9 (69.2%) teachers with 15 years or less experience indicated that *some* students had difficulties with this skill.

There was no significant difference for staff position or length of time at the programs for rating how well competency statements fit the students, or for indicating areas requiring more practice.

Five staff participants (31.3%) indicated no special education training. Chi square analysis was used to compare responses between staff who indicated having some form of training in special education and those who indicated no training in special education. Regarding areas within occupational therapy in which students may benefit from further support, compared to staff without special education training, staff with special education training were more likely to feel that support or instruction for cognitive skills, X^2 [1, N = 16] = 5.657, p = .017, and self efficacy skills, X^2 [1, N = 16] = 4.364, p = .037, would be beneficial to students. Among staff

with special education training there was no significant difference between teachers and other staff for any responses.

Student characteristics.

Of 27 students 18 years or older who were on campus during the day the survey was conducted, 17 chose to fill out the survey yielding a participation rate of 67%. Packets with the cover letter and consent forms were distributed during first period classes to approximately 70 students under the age of 18. Eight students returned the consent form by the deadline and 7 filled out the survey. One student who submitted a consent form was absent on the day of survey presentation. The participation rate for students under 18 was approximately 10%. A total of 24 students (10 male, 14 female) completed the survey. The mean age was 17.97 years (range = 15.91-19.16) with one student not indicating age. Due to credit deficiencies and program structure it was not relevant to report grade level. Some students have substance abuse issues; some are teen parents. Some students come who cannot handle the atmosphere or peer pressure experienced in the comprehensive high school. Some students have mental health or attention issues and the smaller environment is supportive of these needs.

Students were divided into two groups: Older (students 18 years old or more) and Younger (students under 18). Chi square analysis of responses was conducted and significant differences are noted below. Analysis by gender was also conducted and answers were generally similar with a few exceptions noted below. Upon analysis, one survey was found to have been complied with a page missing. Available data from the survey was included and data from the missing page was counted as missing data.

Staff and students selected 5 areas from a list that they believed pose the greatest challenge to the students and then sorted these from 1 to 5 where 1 was the least challenging and

5 was the most challenging. Students answered the question in one of two ways. Chi square analysis showed no difference for age for how students answered the question. Nine students answered as indicated and rated the selected 5 skills. Table 2 indicates the mean staff and student ratings for each area. According to staff members, the area posing the greatest challenge is stress management and the area posing the least challenge is leisure and play. Students reported that the most difficult area is time management and the least difficult is health and wellness. The other 15 students rated each individual skill on a scale from 1 to 5. Attention, time management, stress management, multitasking, memory and violence were reported by students as posing the greatest challenge.

Staff rated how well a series of competency statements regarding positive behaviors describe the students. Table 3 presents the number of staff who indicated that a statement was *usually* or *sometimes* true of the students. The statement reported as being true by the most staff was following daily routines (87.5%); the statement reported as being true by the fewest staff was remembering things they were supposed to do (6.7%). Each student rated how each of the same statements regarding positive behavior described them personally. Table 4 presents the number of students who indicated that a statement was *usually* or *sometimes* true. The statement reported as being true by the most students was 'I notice how others are feeling' (100%); the statement reported as being true by the fewest students was 'I remember to do things I was supposed to do' (12.5%). Chi square analysis revealed that older students were more likely to indicate *usually* or *sometimes* true compared to younger students for the statement 'I can always solve difficult problems if I try hard enough,' X^2 (2, N = 23) = 6.289, p = .043. Table 4 indicates skills for which chi square comparisons were significant between staff and student ratings. In

general students were more likely to rate the statements as *usually* or *sometimes* true whereas staff tended to indicate *sometimes* or *rarely* true.

For a list of skills, tasks and activities, staff used a 4 point Likert scale of *none* to *all* to indicate the number of students for which the item was difficult. Table 5 indicates the percentage of staff who indicated that *most* or *all* of the students have difficulty with the skills. The most frequently reported skill was managing time (66.7%) and the least frequently reported skill was personal hygiene (18.8%).

Seventy-five percent of students indicated that they could usually or always find something they enjoyed doing during free time. Students rated the level of interest in each of 30 listed activities using a scale of strong, little, or no interest. Activities for which at least 35% of students indicated a strong interest were camping (37.5%), photography (37.5%), filmmaking (37.5%), carpentry (37.5%), watching television (41.7%), painting/drawing (50%), and using the internet (58.3%). Activities in which at least 50% of the students had participated at least 2 times in the last year included board games (58.3%), singing (58.3%), hairstyling (54.2%), cooking/backing (75%), photography (62.5%), swimming (58.3%), housecleaning (58.3%), reading (87.5%), exercising (75%), child care (54.2%), watching television (79.2%), and using the internet (91.7%).

Twelve students (50%) indicated feeling that they have a lot of control over their lives. Eight (33.3%) indicated feeling some control and 4 (16.7%) indicated feeling little control over their life. Eight students (33.3%) indicated it was easiest to have a conversation with someone their own age; 2 (8.3%) indicated someone younger; 6 (25%) indicated someone older; and 8 (33.4%) were undecided or the page was missing. Of 23 students who answered a question

pertaining to interest in learning about child development and parenting, 6 students (26%) were interested, 8 (34.8%) were not interested and 9 (39.1%) were undecided.

Occupational therapy needs within alternative education

A list of skills within the domain of occupational therapy was provided. Table 6 presents the percent of staff and students who indicated that they believed that further instruction or support for each skill would benefit the student(s). For staff, the most frequently reported skill was stress management (93.8%); the least frequently reported skill was memory (18.8%). For students the most frequently reported skills were stress management, memory, and money management (65.2%); the least frequently reported skill was parenting skills (4.3%). Older students were more likely to indicate they did not desire more practice in the area of self care, X^2 (1, N = 22) = 5.867, p = 0.015. Younger students were more likely to indicate desiring practice with money management, X^2 (1, N = 22) = 4.714, p = 0.030. Female students were more likely to indicate desiring help with self efficacy, X^2 (1, N = 16) = 4.874, p = 0.027, and money management, X^2 (1, N = 16) = 6.626, p = 0.010.

Students rated a list of 12 specific skills they may need to live independently on a 4 point Likert scale from *very easy* to *very hard*. Table 7 presents the number of students who found each statement *hard* or *very hard*. The skill most frequently rated as hard or very hard was maintaining balance in life (66.7%); the skill least frequently rated as hard or very hard was finding a job that matches abilities (4.2%). From the same list of skills rated very easy-very hard, students indicated whether or not they would like more practice with that skill (See Table 7). The most frequently reported skill was identifying jobs to match abilities (78.3%); the least frequently reported skill was identifying healthy food options (43.5%).

Ten of the same 12 specific skills were presented to the staff. Ninety-three to 100% of staff indicated that students would benefit from practice in all areas listed. Compared to students, staff more often indicated practice as beneficial. Chi square comparisons between staff and student responses were significant for all areas in which 100% of staff indicated practice as beneficial (See Table 7).

Discussion

The alternative program

The results of this study describe one alternative program and illustrate the uniqueness of the students and teachers therein. The characteristics of a curriculum that is designed to address academic deficits, a limited number of staff available for providing supportive services, and district demands to meet academic standards may impact the availability and delivery of additional supportive services to students in these programs. Scott et al. (2002) pointed out that every student needs and deserves balanced instruction in both academics and social skills. As the principal of the program studied discussed, meeting the academic as well as the other needs of the students is challenging and requires a fine balance. Meeting these additional needs is important for helping students not only to graduate, but to be successful in life. According to the literature, dropping out increases the risk of future hardship and limitations, and it negatively impacts students, families and communities (Christle, Jolivette, & Nelson, 2007; GAO, 2002). Case-Smith and Rogers (2005) stated, “Socially appropriate behavior is highly related to the student’s academic achievement and his or her ability to succeed in environments outside school (e.g., community, work)” (p. 802). Additionally, poor social behaviors and skills contribute to poor vocational outcomes and can interfere with leaning (Tobin & Sprague, 1999). Schools are designed to prepare students to be successful in life and society (Case-Smith & Rogers, 2005),

and the focus of alternative programs is to meet the social, emotional and academic needs of students (Aron & Zweig, 2003). At the same time, occupational therapy is prepared to address such needs (AOTA, 2009; 2008a) and to support students holistically to prevent potential negative outcomes.

Similarities in the responses among staff despite job position or length of time at the program indicate that the staff members generally had a similar understanding of the students and their needs. Teachers indicated a higher percentage of students as having difficulties with demonstrating emotions appropriate to the situation. It may be that teachers observe the students over longer periods of time and more consistently than other staff members, or that the nature of the classroom learning environment may be such that it challenges students to a point that difficulties with appropriate displays of emotions are made apparent. Three teachers who had been at the program for more than 15 years indicated a higher percentage of students as having difficulty with responding appropriately to the feelings of others. Being at the program for a longer period of time may have provided more experience by which to compare the students' patterns of behavior and abilities in this area, and may reflect observing broader changes in these qualities among students over time.

While research indicates that many teachers in alternative education programs do not have special education training (Foley & Pang, 2006), this study found that 68.8% of staff members at the program reported some level of training in special education. However, responses regarding what was challenging for students were generally similar whether or not staff had training in special education. This suggests that special education training may not necessarily impact one's ability to assess the needs and characteristics of the students or the perceived need for intervention. Staff members with special education training were more likely

to indicate that cognitive and self-efficacy skill support could benefit the students. Special education training may have increased staff member's familiarity with these concepts as well as their familiarity with the role of occupational therapy in the educational setting, particularly in addressing these areas. All staff members in this study had training to prepare them for working with at-risk students which may have impacted reports on student behavior. Although staff may not have training in special education, training or past experience to prepare for working with at-risk students may help to equip staff to effectively evaluate the needs of at-risk students. While it may be helpful for teachers to have special education training, current responsibilities may limit a teacher's ability to allocate time to address the additional needs of students. Staff in the current study discussed the recognized need for further support and reported that in the past staff members tried to provide additional support to the students. In addition to the other responsibilities of their jobs, such support was not feasible and has been discontinued (personal communication with staff, March 19, 2010).

Student Characteristics

In general, results from the surveys were consistent with the information gained during interviews and observation, and similar to those reported by Dirette and Kolak (2004), pointing to general consistencies among alternative education programs for skills that are challenging to students and similarities among geographic areas. While student and staff reports were similar, differences may have important implications for client-centered practice. For intervention to be successful in supporting positive outcomes for students in education and in life, students ideally need to "buy-in" to the benefits. Prioritizing skills based on student perspectives and helping students to see the benefits to be gained from practice may be key.

Similarities found between staff and student reports in this study may indicate that if past studies had looked at student perspectives, results would be similar to staff reports. It should be noted that staff were reporting on the student body as a whole versus reporting only on those students who completed surveys. Differences between the staff and students may be related to the nature of students who chose to participate. Questions arise as to whether the staff or students provide a more accurate assessment of the student's abilities and the direction for intervention.

Engaging in active leisure pursuits that are goal oriented and involve an appropriate level of challenge to the individual is more supportive of increased focused attention, motivation, quality of life and happiness compared to passive leisure pursuits which have been shown to negatively impact mental and physical well being, and work and social skills and values (Csikszentmihalyi, 1997; Farnworth, 1999). Students in the present study did engage primarily in more passive leisure pursuits, which is consistent with other studies investigating leisure pursuits of at-risk youth and juvenile offenders (Dirette and Kolak, 2004; Farnworth, 1999). However, the level of reported interest and engagement in the more active pursuits was higher and more varied than expected based on the literature. Unfortunately, in assessing participation in activities, the format of the survey question did not separate out activities engaged in by choice from those that were required; students were simply asked to indicate activities in which they had participated at least twice in the last year. The specific format of this alternative education program may have included or required more active opportunities such as exercising, cooking or volunteering. Therefore the reported level of participation may not be as helpful in assessing activity patterns as would be a question in which students reported only those activities engaged in by choice. Differences between male and female students for interest levels and

areas of participation, while beyond the scope of this study, may provide relevant information in designing client centered programs.

Occupational Therapy Needs

With the results of the present study being congruent with the body of documented literature, greater argument can be made for providing occupational therapy in alternative education programs and to at-risk youth. While the specific priorities within each program may be unique, general patterns of deficits provide a foundation on which to develop new services and to gain support. Occupational therapy desires to support the participation of all students in the educational environment and society in order for students to participate in the classroom and successfully transition to adult life (Hansen & Hinojosa, 2004). In particular, research has shown that holistic programs decrease drop out and support life transitions among students (D'Angelo & Zemanick, 2009; Flannery et al., 2008). Occupational therapists possess a blend of knowledge in both the mental health and educational arenas to be effective in supporting students so that learning may be optimized.

Students in alternative education programs were unsuccessful in the comprehensive high school environment and thus came to the alternative program. Environment is one contextual factor. For many students, despite this change in environment, problems persist. Occupational therapists are skilled at assessing the environment as well as other contextual factors and underlying components that may be presenting barriers to students (AOTA, 2008a). Occupational therapists may focus on the structure of the program or the sensory stimulation in a classroom, or they may address components such as social skills, communication skills and behavior regulation (AOTA, 2008a; Case-Smith & Rogers, 2005). Consistent with Dirette and Kolak (2004), results of the present study suggest that performance areas and client factors may

be preventing success, and intervention may need to focus on addressing these underlying deficits (Dirette & Kolak, 2004).

Evidence supports that addressing the mental health needs of students through occupational therapy activity-based interventions is effective in improving psychosocial and behavioral performance among youth to support skills such as on-task behavior and compliance with social norms (Jackson & Arbesman, 2005). Problem solving, organizational skills, and appropriate social interactions are necessary for success in the educational environment and may be addressed by the therapist. Additionally, occupational therapy focuses on persistence, attention, task completion, problem solving and interpersonal interactions (AOTA, 2008c; Case-Smith & Rogers, 2005). Specific areas that an occupational therapist may address for at-risk students in alternative education may include but are not limited to study skills, independence in self-care, problem solving skills, healthy habit and routine development, vocational interest development and prevocational training (AOTA, 2009; 2008c).

The *Framework-II* indicates that the *client* receiving services may be at one of three levels: persons, organization, or population (AOTA, 2008a). Thus intervention may be targeted to individual students and their families or teachers, or services may be implemented at a system level addressing the alternative education program or the population of students as a whole. Providing support to all students in alternative education is consistent with the goals of NCLB, RtI and AOTA, and may reduce negative costs to society, the students and their families. A statement paper on school mental health from AOTA supports the provision of occupational therapy as a preventative service to support any student who may be experiencing cognitive or functional difficulties in school (AOTA, 2009). This preventative approach is consistent with intervention models in the psychology literature where focus is on meeting the needs and

behavioral challenges of all students through collaborative intervention at the program level (Scott et al., 2002). Three levels of prevention are used to address school-wide support to all students, small groups or social skills instruction to identified individuals, or individualized and intensive intervention to specific students (Durlak, 1995; Scott et al., 2002).

Intervention must be individualized; thus in order for intervention to be tailored to the needs of the client, whether the client is an individual student or a program, skilled assessment and intervention planning by an occupational therapist who can adapt intervention to specific needs is essential (Jackson & Arbesman, 2005; Scott et al., 2002). A blanket program will not be as effective as one that is designed to address the particular needs of the student or program being addressed. In order to do this, the therapist must understand both the educational system and the alternative education program to know what is feasible as well as important (Case-Smith & Rogers, 2005).

Implications for Occupational Therapy

As can been seen, there are a variety of ways that occupational therapy can and should be involved in supporting the needs of at-risk students in alternative education programs. Staff members may not be aware of the role of occupational therapy in an educational or mental health setting. Particularly when staff members do not have special education training, occupational therapists should assume the role of educating and advocating for how their services can help to support the needs of students. Furthermore, addressing other barriers to service implementation and development may necessitate informing members of the community, legislatures, organizations, and specific programs of how the needs of students within alternative education programs fit within the domain of occupational therapy and how the skills of the therapist can be used to support greater participation and success for students.

While the surveys did not directly ask staff or students to prioritize areas for intervention, based on student and staff reports, programs should be designed that focus on the areas of behavior management, coping skills, time management, multitasking, and various other social skills. For students, budgeting and job skills also appear to be a priority. The literature supports that alternative education programming that connects academics to real life in order to put education in context is effective in connecting students to education (Tobin and Sprague, 1999). For students, job skills may be more easily seen as a priority due to the obvious connection to real life. As a results, by helping students to connect skills such as behavior regulation and time management to real life therapists may positively impact participation and success. Therapists are encouraged to use a team approach to holistic intervention in order to provide a blend of direct services, group intervention and consultation.

The provision of services in a school setting can occur along a continuum of intervention which may involve collaboration among multiple individuals including teachers, social workers, administrators, counselors, parents, paraeducators, communities and volunteers (AOTA, 2008c; Case-Smith & Rogers, 2005). Collaborative services can maximize program effectiveness to promote the success of all students, and have been shown to increase teachers' knowledge of occupational therapy and how occupational therapy could be a positive support to students (Sayers, 2008, Scott et al., 2002). In order to provide additional tools through which these individuals who are already working with students might further foster and support positive engagement and participation therapists may consult with teachers and staff to set up programs, strategies and modifications to support students; educate teachers and staff; and help teachers to problem solve and devise student goals. (Case-Smith & Rogers, 2005).

Intervention through collaboration and consultation is not a concept unique to occupational therapy as it is becoming part of many integrated service programs, yet occupational therapists bring unique expertise to intervention because their training covers multiple areas that are challenging to students (AOTA, 2008c; Barnes & Turner, 2000; Meyers, Parsons, & Martin, 1979; Scott et al., 2002; Wolery & McWilliam, 1998). Sayers' (2008) critical appraisal of collaboration in school settings indicates that consultation is necessary if intervention is going to be generalized and effectual in the student's natural setting. The report further indicated that a blend of intervention models may be used to address the individual needs of the client.

In terms of designing, consulting and implementing programs, research supports that long-term social skills intervention offered in a structure that parallels the academic portion of the curriculum is more effective than programs of lesser duration or integration with the academic program (Walker, Stieber, and Bullis, 1997). This should be taken into consideration when implementing programs and strategies so that provided services are as consistent and integrated as possible.

As indicated by the results, there is a substantial need for mental health resources and resources to provide to the student's parents. Occupational therapists are equipped to address many of the issues that impact mental health and may also serve to consult and educate parents on effective intervention strategies to support their students. As indicated in a statement from AOTA (2008c) regarding the role of occupational therapy for mental health in children and youth:

> Occupational therapists evaluate all the components of social competence and determine how the child's motor and cognitive skills; ability to interpret sensory information; and

> the influence from home, school, and community environments have an impact on the child's ability to meet the demands of everyday life. (n.p)

Occupational therapy is unique in its comprehensive assessment and consideration of multiple external and internal factors that may impact a student's function and participation. As Dirette and Kolak (2004) similarly concluded, based on the needs of students and the training and philosophy of occupational therapy, therapists are posed to be effective in supporting these students and should consider how they might provide intervention services to support students in alternative education programs.

Limitations

This study examined the characteristics and needs at one specific alternative education program. The results reflected the perspectives of students and staff at this one program and are based primarily on self-report. The generalizability of the results is influenced by the particular geographic area, the program, the makeup of the staff and student bodies, and the sample size. Despite the intended protocol that would have enhanced the rigor of this study, the obstacles met with illustrate in part potential challenges of conducting research and possibly providing services in alternative education programs. It additionally illustrates the variability in program design and student populations. Changes were adopted to minimize disruption to the education program, and this is a consideration for future research and programming. Collaboration with the program early on is recommended to take into account this variability and the specific program characteristics.

The nature of the program and patterns of student attendance made it difficult to assess the exact number of students to whom participation in the study was made available. As teachers initially presented the study to the students and asked them to sign and return the consent form, it

is impossible to know to what extent the study was explained, if explanations were consistent, or if teachers presented the study within the time frame for conducting the study. Due to the manner in which packets were distributed to the students and the fact that unused packets were not returned, an exact response rate for the students could not be calculated.

The study was conducted the week before spring break, a time period of increased absences impacting the total number of students available to whom to present the study, as well as impacting the return of signed consent forms and being present during survey distribution. Due to time constraints the intended duration for presenting the study at the program was reduced to 5 days. Regarding the student survey, some of the questions appeared to be confusing. After observing the student's questions while completing the survey and their written responses, the language used in some of the questions was considered to be too technical.

The participation rate for the student surveys was much lower than was desired, possibly impacted by conducting the survey just before spring break and that an incentive was not attached to returning the consent form. The use of an incentive had been discussed with the principal initially but was deemed unnecessary at that time. The use of an incentive may have increased the participation rate. It is not possible to assess the degree to which the answers of students who chose to participate reflect the student body as a whole.

Future Research

Future research studies and program development is needed in the following areas:

1. Ascertain whether it is best to prioritize intervention based on staff or student perceptions when these perceptions differ.

2. Compare interest level to areas of actual participation to better understand the leisure patterns of at-risk youth and investigate which activities students in alternative programs engage in by choice.
3. Assess other barriers to service implementation with at-risk youth in alternative education programs such as a lack of understanding regarding the role of occupational therapy in meeting the needs of these students, and a lack of funding and resources.
4. Conduct qualitative research with students in alternative education to highlight priorities and gain student perspectives on what would make for effective intervention.
5. Design and implement occupational therapy based intervention in alternative education programs and document outcomes.
6. Examine specific behavioral problems and outcomes of intervention in alternative education.
7. Determine the best model for service delivery.
8. Consider potential modifications to classrooms to enhance learning and address specific student factors such as hyperactivity and deficits in appropriate classroom behavior.
9. Consult with teachers and staff in alternative education programs to provide resources and strategies to support the students.
10. Provide community resources and information to parents.

Through further study of the needs of at-risk youth in alternative education, the development of intervention programs, and the assessment of such programs, greater support may be made available for these students to promote meaningful participation in school and society.

Conclusion

This study examined staff and student perspectives regarding performance areas and skills within the domain of occupational therapy that are challenging for students attending an alternative education program. The findings were consistent with the literature and other geographic areas. Students reported deficits in the areas of time management, goal setting, behavior management and coping skills. Patterns in reported difficulties were similar among staff and students. Staff members were more likely to indicate a perceived benefit from further practice in difficult areas. The results support the need for occupational therapy services in alternative education and add depth to the established literature by providing insight into student self-awareness and perceived level of performance. As discussed, the needs and skills deficits in alternative education programs fit within the domain of occupational therapy. Occupational therapists have the skills and knowledge to support students across many performance areas and client factors to facilitate engagement in academic and social environments, better preparing students to be successful in life. It is recommended that services be designed and implemented to address the identified needs through a client-centered collaborative process with the staff and students in alternative education programs.

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Appendix A: Staff Survey

STAFF SURVEY

<u>Instructions</u>: Please read each question carefully and answer each question as honestly as possible. If a question makes you feel uncomfortable or if answering a particular question does not apply to you, you may skip the question.

<u>First, I would like to ask you some questions about yourself:</u>

Q1. Please indicate your gender (select 1):

- ☐ Male (a)
- ☐ Female (b)

Q2. What is your job title at this program? _____

Q3. If you are involved in the classroom, please write-in the class or classes with which you are involved and specify the grade level:

_____

_____

_____

Q4. Please indicate the number of years and/or months you have worked at this program:

(a)._____years

(b) _____months

Q5. Please indicate your degree and education by selecting all that apply. Write-in the area of study where applicable:

- ☐ High School (a)
- ☐ Certificate_____ (b)
- ☐ Associates_____ (c)
- ☐ BS_____ (d)
- ☐ MS_____ (e)
- ☐ PhD_____ (f)
- ☐ Other_____ (g)

Q6. Do you have any training in special education?

- ☐ No (a)
- ☐ Yes If yes, please indicate the source of training (select all that apply)
  - ☐ 1-3 Continuing Education Courses (b)
  - ☐ 4 or more Continuing Education Courses (c)
  - ☐ Certificate_____ (d)
  - ☐ Degree_____ (e)
  - ☐ Other_____ (f)

Q7. Please indicate any specific training you have had to prepare you for working with at-risk students (select all that apply). Write-in the nature of that training if applicable:

- ☐ On-site training when you took this job (a)
- ☐ Volunteer experience_____ (b)
- ☐ Previous employment_____ (c)
- ☐ Degree_____ (d)
- ☐ Certificate_____ (e)
- ☐ Other_____ (f)
- ☐ None (g)

<u>The following questions ask about the characteristics and behaviors of the students in general</u>:

Q8. On a scale from 1-4, please indicate the extent to which the following skills, tasks, activities and strategies are difficult for the students in general. Circle (1) if none of the students have difficulties, (2) if some of the students have difficulties, (3) if most of the students have difficulties, (4) if all of the students have difficulties.

		None- - - - - - All			
a.	Respond appropriately to the feelings of others	1	2	3	4
b.	Control their anger	1	2	3	4
c.	Persist with a task despite frustrations	1	2	3	4
d.	Demonstrate emotions appropriate to the situation	1	2	3	4

Questions continue on next page

		None- - - - - - All			
e.	Identify and use strategies to cope with stress.	1	2	3	4
f.	Sequence steps to complete school projects	1	2	3	4
g.	Meet due dates and deadlines	1	2	3	4
h.	Perform multiple tasks at the same time	1	2	3	4
i.	Initiate conversation with peers	1	2	3	4
j.	Seek help when needed	1	2	3	4
k.	Use appropriate non-verbal communication during interactions	1	2	3	4
l.	Follow routines to support positive performance	1	2	3	4
m.	Maintain personal hygiene and grooming	1	2	3	4
n.	Communicate appropriately with teachers and staff regarding assignments	1	2	3	4
o.	Maintain own health	1	2	3	4
p.	Arrange transportation as needed to meet obligations.	1	2	3	4
q.	Manage personal finances	1	2	3	4
r.	Actively engage in classroom activities	1	2	3	4
s.	Engage in active, positive leisure pursuits	1	2	3	4
t.	Identify and select work opportunities based on assets, limitations, likes and dislikes relative to work	1	2	3	4
u.	Manage time and complete work	1	2	3	4

Q9. From the list below, please select the 5 areas that you believe pose the greatest challenges for the students. Rank these areas with the numbers 1, 2, 3, 4, 5 with 1 posing the least challenge and 5 posing the greatest challenge.

(a) ___Stress Management
(b) ___Multitasking
(c) ___Cognitive skills
(d) ___Behavior Regulation
(e) ___Self-Care
(f) ___Job Skills
(g) ___Health and Wellness
(h) ___Leisure and Play
(i) ___Attention
(j) ___Violence
(k) ___Memory
(l) ___Learning
(m) ___Communication skills
(n) ___Time Management
(o) ___Social Skills
(p) ___Other_____
(q) ___Other_____
(r) ___Other_____

Q10. Occupational therapists often help people with the following skills. From the list below please indicate which areas, if any, you feel that students would benefit from receiving further support or instruction (Select all that apply).

(a) ☐ Stress Management
(b) ☐ Multitasking
(c) ☐ Cognitive skills
(d) ☐ Behavior Regulation
(e) ☐ Self-Care Skills
(f) ☐ Parenting Skills
(g) ☐ Job Skills
(h) ☐ Health and Wellness
(i) ☐ Leisure and Play
(j) ☐ Attention
(k) ☐ Violence
(l) ☐ Memory
(m) ☐ Learning
(n) ☐ Communication skills
(o) ☐ Time Management
(p) ☐ Social Skills
(q) ☐ Self-efficacy
(r) ☐ Following Routines
(s) ☐ Problem Solving
(t) ☐ Goal Setting
(u) ☐ Money Management
(v) ☐ Nutrition
(w) ☐ Other_____
(x) ☐ Other_____
(y) ☐ None

Q11. For each of the following statements, please indicate how true this statement describes the students in this program in general. Circle (1) if the statement is usually true, (2) if the statement is sometimes true, (3) if the statement is rarely true, (4) if the statement is never true.

	Usually True 1	Sometimes True 2	Rarely True 3	Never True 4
a. The students can always solve difficult problems if they try hard enough.	1	2	3	4
b. It is easy for the students to stick to their aims and accomplish their goals.	1	2	3	4
c. The stude~~nts can~~ remain calm when facing difficulties because they can rely on their coping abilities.	1	2	3	4
d. When faced with a problem, the students can find several solutions.	1	2	3	4
e. The students notice how others are feeling.	1	2	3	4
f. The students control their anger in an appropriate way.	1	2	3	4
g. The students continue on a task even when they are frustrated.	1	2	3	4
h. The students turn in assignments on time.	1	2	3	4
i. The students follow daily routines.	1	2	3	4
j. The students forget to do things they were supposed to remember to do.	1	2	3	4
k. It is easy for the students to set personal goals.	1	2	3	4

Q12. The following table presents many skills that students may need in order to live independently. For each skill or set of skills listed circle YES if you think the students in general would benefit from practicing this skill. Circle NO if you do not think students would benefit from additional practice of this skill.

	Students would benefit from practicing this skill	
a. Identify jobs to apply for based on likes, dislikes, and interests	**YES**	**NO**
b. Identify jobs that match personal abilities.	**YES**	**NO**
c. Prepare a resume, apply for a job, go to an interview, and discuss job benefits with an employer.	**YES**	**NO**

Questions continue on next page

d.	Identify when help is needed and how to get help.	**YES**	**NO**
e.	Manage time to complete work and assignments to meet deadlines.	**YES**	**NO**
f.	Able to maintain balance in life between work, school, leisure and self-care activities.	**YES**	**NO**
g.	Set up and maintain a monthly budget.	**YES**	**NO**
h.	Know how to find and rent an affordable house/apartment.	**YES**	**NO**
i.	Set up a bank account.	**YES**	**NO**
j.	Take care of an apartment.	**YES**	**NO**

Comments:_____

_____

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Thank you!
Please enclose your finished survey and your signed consent form in the provided envelope and deposit it in the collection box

Appendix B: Student Survey

STUDENT SURVEY

<u>Instructions</u>: Please read each question carefully and answer each question as honestly as possible. Read all the possible answers first before you mark your choice(s). If a question makes you feel uncomfortable, you may skip the question.

<u>First, I would like to ask you some questions about yourself:</u>

Q13. Please write your birth date (month/day/year): _____/_____/_____

Q14. What is your gender? Check one box:

- ☐ Male (a)
- ☐ Female (b)

Q15. What grade are you in? Check one box:

- ☐ 9th (a)
- ☐ 10th (b)
- ☐ 11th (c)
- ☐ 12th (d)
- ☐ Other (please describe) _ _____ (f)

<u>Next, I would like to ask you some questions about things that you like to do:</u>

Q16. For the following statement, check the box next to the answer that BEST describes you (Check one box):

When I have time to do whatever I want, I can find things to do that I enjoy doing.

- ☐ I can do this (a)
- ☐ I can usually do this (b)
- ☐ I can sometimes do this (c)
- ☐ I can never do this (d)

Q17. For each of the following activities, please tell me how interested you are in doing each one. Circle (1) if you have a strong interest in doing this activity. Circle (2) if you have some interest in doing this activity and circle (3) if you have no interest in this activity:

(a)	Camping/Hiking	1	2	3	(q)	Gardening	1	2	3
(b)	Board games	1	2	3	(r)	Sewing/Knitting	1	2	3
(c)	Singing	1	2	3	(s)	Car repair	1	2	3
(d)	Hairstyling	1	2	3	(t)	Writing/Poetry	1	2	3
(e)	Bicycling	1	2	3	(u)	Dancing	1	2	3
(f)	Rock climbing	1	2	3	(v)	Swimming	1	2	3
(g)	Attending plays	1	2	3	(w)	Housecleaning	1	2	3
(h)	Home repairs	1	2	3	(x)	Pottery	1	2	3
(i)	Wood working	1	2	3	(y)	Football	1	2	3
(j)	Cooking/Baking	1	2	3	(z)	Reading	1	2	3
(k)	Sports	1	2	3	(aa)	Volunteering	1	2	3
(l)	Photography	1	2	3	(ab)	Exercising	1	2	3
(m)	Filmmaking	1	2	3	(ac)	Child care	1	2	3
(n)	Painting/Drawing	1	2	3	(ad)	Watching TV	1	2	3
(o)	Carpentry	1	2	3	(ae)	Other_____	1	2	3
(p)	Internet	1	2	3	(af)	Other_____	1	2	3

Q18. Here is a list of different activities. Please mark the box for each activity that you participated in at least 2 times in the last year. (Check all that apply):

(a) ☐ Camping/Hiking	(k) ☐ Sports	(u) ☐ Swimming
(b) ☐ Board games	(l) ☐ Photography	(v) ☐ Housecleaning
I ☐ Singing	(m) ☐ Filmmaking	(w) ☐ Pottery
(d) ☐ Hairstyling	(n) ☐ Painting/Drawing	(x) ☐ Football
(e) ☐ Bicycling	(o) ☐ Carpentry	(y) ☐ Reading
(f) ☐ Rock climbing	(p) ☐ Gardening	(z) ☐ Volunteering
(g) ☐ Attending plays	(q) ☐ Sewing/Knitting	(aa) ☐ Exercising
(h) ☐ Home repairs	I ☐ Car repair	(ab) ☐ Child care
(i) ☐ Wood working	(s) ☐ Writing/Poetry	(ac) ☐ Watching TV
(j) ☐ Cooking/Baking	(t) ☐ Dancing	(ad) ☐ Internet

The next questions are about different skills and activities that people often do.

Q19. Check the box for the sentence that best describes the level of control you feel you have over your life (Check one box):

- ☐ I have a lot of control over my life (a)
- ☐ I have some control over my life (b)
- ☐ I have very little control over my life (c)
- ☐ I have no control over my life (d)

Q20. Here are some statements about different skills. For each one, tell me how true this sentence is about YOU. Circle (1) if the statement is usually true for you. Circle (2) if the statement is sometimes true for you. Circle (3) if the statement is rarely true for you. Circle (4) if the statement is never true for you.

	Usually True 1	Sometimes True 2	Rarely True 3	Never True 4
(a.) I can always solve difficult problems if I try hard enough.	1	2	3	4
(b.) It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4
(c.) I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4
(d.) When I am faced with a problem, I can find several solutions.	1	2	3	4
(e.) I notice how others are feeling.	1	2	3	4
(f.) I control my anger in an appropriate way.	1	2	3	4
(g.) I continue on a task even when I am frustrated.	1	2	3	4
(h.) I turn in assignments on time.	1	2	3	4
(i.) I follow a routine every morning to get ready for the day.	1	2	3	4
(j.) I forget to do things I was supposed to remember to do.	1	2	3	4
(k.) It is easy for me to set goals for myself.	1	2	3	4

Q21. The following table presents some skills that you may need to live on your own. For each statement select the number that indicates how easy or hard you feel that skill or set of skills would be for you. Circle (1) if the skill is very easy for you. Circle (2) if the skill is easy for you. Circle (3) if the skill is hard for you. Circle (4) if the skill is very hard for you.

		Very Easy 1	Easy 2	Hard 3	Very Hard 4
(a.)	I can identify jobs I would like to apply for based on my likes, dislikes, and interests.	1	2	3	4
(b.)	I can identify jobs that I could do and that match my abilities.	1	2	3	4
(c.)	I can prepare a resume, apply for a job, go to an interview, and discuss job benefits with an employer.	1	2	3	4
(d.)	I can manage my time to complete work and assignments to meet deadlines.	1	2	3	4
(e.)	I can identify when I need help and know how to get the help I need.	1	2	3	4
(f.)	I feel that I am able to maintain balance in my life between work, school, leisure and self-care.	1	2	3	4
(g.)	I can set up and maintain a monthly budget.	1	2	3	4
(h.)	I know how to find and rent a house/apartment that I can afford.	1	2	3	4
(i.)	I can set up a bank account	1	2	3	4
(j.)	I can take care of an apartment	1	2	3	4
(k.)	I can identify healthy food options at restaurants or the grocery store	1	2	3	4
(l.)	I can prepare healthy meals for myself	1	2	3	4

Q10. The following table presents the same skills that you may need to live on your own. This time, please tell me if you would like to practice this skill. Circle YES if you would like to practice this skill. Circle NO if you do not want to practice this skill.

I want to practice how to …		
(a.) …identify jobs based on my likes, dislikes, and interests	**YES**	**NO**
(b.) … identify jobs that I could do and that match my abilities.	**YES**	**NO**
(c.) … prepare a resume, apply for a job, go to an interview, and discuss job benefits with an employer.	**YES**	**NO**
(d.) …manage my time to complete work and assignments to meet deadlines.	**YES**	**NO**
(e.) … identify when I need help and know how to get the help I need.	**YES**	**NO**
(f.) … maintain balance in my life between work, school, leisure, and self-care.	**YES**	**NO**
(g.) … set up and maintain a monthly budget.	**YES**	**NO**
(h.) … find and rent a house/apartment that I can afford.	**YES**	**NO**
(i.) … set up a bank account	**YES**	**NO**
(j.) … take care of an apartment	**YES**	**NO**
(k.) … identify healthy food options at restaurants or the grocery store	**YES**	**NO**
(l.) … prepare healthy meals for myself	**YES**	**NO**

Q11. Are you interested in learning about child development and parenting skills? (Check one box)

- ☐ Yes (a)
- ☐ No (b)
- ☐ Undecided or Unsure (c)

Q12. In your opinion, who is easier to have a conversation with? (Check one box)

- ☐ Someone younger than you (a)
- ☐ Someone your same age (b)
- ☐ Someone older than you (c)
- ☐ Undecided or Neutral (d)

Questions continue on the next page

Q13. From the list below, please mark the 5 areas that are most challenging for you. Rank these areas with the numbers 1, 2, 3, 4, 5 where 1 is the least challenging and 5 is the most challenging.

(a) ___Stress Management
(b) ___Multitasking
(c) ___Cognitive skills
(d) ___Behavior Regulation
(e) ___Self-Care
(f) ___Job Skills
(g) ___Health and Wellness
(h) ___Leisure and Play
(i) ___Attention
(j) ___Violence
(k) ___Memory
(l) ___Learning
(m) ___Communication skills
(n) ___Time Management
(o) ___Social Skills
(p) ___Other_____
(q) ___Other_____
(r) ___Other_____

Q14. Here is a list of skills that an occupational therapist might help people with. If you were to receive instruction or practice in the following areas, which ones do you think would help you? (Check all that apply).

(a) ☐ Stress Management
(b) ☐ Multitasking
(c) ☐ Cognitive skills
(d) ☐ Behavior Regulation
(e) ☐ Self-Care Skills
(f) ☐ Parenting Skills
(g) ☐ Job Skills
(h) ☐ Health and Wellness
(i) ☐ Leisure and Play
(j) ☐ Attention
(k) ☐ Violence
(l) ☐ Memory
(m) ☐ Learning
(n) ☐ Communication skills
(o) ☐ Time Management
(p) ☐ Social Skills
(q) ☐ Self-efficacy
(r) ☐ Following Routines
(s) ☐ Problem Solving
(t) ☐ Goal Setting
(u) ☐ Money Management
(v) ☐ Nutrition
(w) ☐ Other_____
(x) ☐ Other_____
(y) ☐ None

Comments:_____
_____
_____
_____

Thank you.
Please put your finished survey in the envelope and turn it in.

Table 1

Staff Characteristics

Job Title	Gender	Years at Program	Education	Special Education Training	Preparation to work with at-risk youth
Teacher	Male	2.20	BS, Special Education	Certificate	Previous Employment
Teacher	Male	9.75	BS, MFA	1-3 CE course	Workshops
Teacher	Male	18.00	BS	None	Previous Employment, Volunteer experience, On-site training
Teacher	Female	2.23	BS, MS	1-3 CE course	Previous Employment
Teacher	Female	8.00	MA	None	Volunteer experience, On-site training
Teacher	Female	8.58	MS	4+ CE courses	On-site training
Teacher	Female	22.00	BS, MS	None	Certificate, Previous Employment, On-site training
Teacher	Female	28.58	BA, BMC, Music Therapy	Certificate, degree	Certificate, Degree, Previous Employment
Paraeducator	Female	12.42	High School	None	On-site training
Paraeducator	Female	15.00	BS	4+ CE courses	Previous Employment, On-site training

Bookkeeper, Detention	Female	3.00	Associates	4+ CE courses	Previous Employment
Health Tech	Female	3.00	High School	4+ CE courses	Degree, On-site training
Nurse	Female	5.00	BS, MS, nurse practitioner	4+ CE courses, degree	Degree, Previous Employment
Office manager	Female	5.67	High School	Began Masters	Certificate, On-site training
Secretary (counseling dept.)	Female	10.00	2 years college	1-3 CE courses	Previous Employment, Volunteer experience, On-site training
Security specialist	Female	11.00	High School	None	Previous Employment,

Note. CE = Continuing Education, BS = Bachelors of Science, BMC = Bachelors of Mass Communication, BA = Bachelors of Art, MFA = Masters of Fine Art, MS = Masters of Science, MA = Masters of Art

Table 2

Areas Posing the Greatest Challenge to Students by Staff and Student Report

Area posing challenge to students	Mean of staff ratings	Number of staff selecting area (n = 16)	Number of staff rating area ≥ 3	Mean of student ratings	Number of students selecting area (n = 9)	Number of students rating area ≥ 3
Stress Management	2.75	12	9 (56%)	1.44[a]	4	3 (33.3%)
Behavior Regulation	2.06	10	7 (43.8%)	1.00	2	2 (22.2%)
Attention	1.81	11	6 (37.5%)	1.22	4	2 (22.2%)
Health and Wellness	1.69	8	6 (37.5%)	0.00	0	0
Time Management	1.50	7	5 (31.25%)	1.67[a]	5	3 (33.3%)
Social skills	1.25	5	5 (31.25%)	1.44[a]	4	3 (33.3%)
Learning	1.25	6	4 (25%)	0.56	2	1 (11.1%)
Job Skills	1.13	8	4 (25%)	1.56[a]	3	3 (33.3%)
Communication Skills	1.06	6	3 (18.9%)	1.33	5	2 (22.2%)
Violence	0.88	8	3 (18.9%)	0.11	1	1 (11.1%)
Multitasking	0.56	3	2 (18.9%)	1.44[a]	5	3 (33.3%)
Self Care	0.44	3	1 (6.3%)	0.78	3	1 (11.1%)
Cognitive Skills	0.44	3	1 (6.3%)	0.11	1	0
Memory	0.25	1	1 (6.3%)	1.33	3	2 (22.2%)
Leisure and Play	0.06	1	1 (6.3%)	0.44	2	1 (11.1%)

Note: Staff and students selected five areas perceived to pose the greatest challenge to students and then ranked these five areas 1-5 with 1 posing the least challenge and 5 posing the most challenge. The mean for each area is indicated. A higher number corresponds to a combination of more participants selecting that area and higher ratings in that area.

[a] Five areas rated by students with the highest means.

Table 3

Statements Describing the Students' Skills and Behaviors by Staff Report

Statement about the students	Number of staff reporting statement as *usually* or *sometimes* true of students
The students remember to do things they were supposed to remember to do.	1 (6.7%)[a]
The students can remain calm when facing difficulties because they can rely on their coping abilities.	6 (40%)[a]
The students continue on a task even when they are frustrated.	6 (40%)
It is easy for the students to set personal goals.	6 (40%)
It is easy for the students to stick to their aims and accomplish their goals.	7 (43.7%)
The students control their anger in an appropriate way.	9 (56.3%)
The students turn in assignments on time.	9 (56.3%)
When faced with a problem, the students can find several solutions.	10 (62.5%)
The students can always solve difficult problems if they try hard enough.	13 (81.3%)
The students notice how others are feeling.	14 (87.5%)
The students follow daily routines.	14 (87.5%)

Note: Due to skipped questions, n = 16 unless noted.

[a] $n = 15$.

Table 4

Statements Describing Students by Student Report

Statement	Number of students selecting *usually* or *sometimes* true
I remember to do things I was supposed to remember to do.	3 (12.5%)
I turn in assignments on time.	13 (54.2%)
I continue on a task even when I am frustrated.	15 (62.5%)
It is easy for me to set goals for myself.	16 (66.6%)
It is easy for me to stick to my aims and accomplish my goals.	18 (75.0%)
I control my anger in an appropriate way.	19 (79.2%)
When I am faced with a problem, I can find several solutions.	19 (79.2%)
I can remain calm when facing difficulties because I can rely on my coping abilities.	21 (87.5%)*
I follow a routine every morning to get ready for the day.	22 (91.6%)
I can always solve difficult problems if I try hard enough.	22 (91.7%)*
I notice how others are feeling.	23 (100%)[a]*

Note: n = 24 unless noted. Significant chi square comparisons to staff reports (See Table 3) are indicated.

[a] $n = 23$

* $p < .05$

Table 5

Students' Difficulties with Various Tasks, Activities, and Skills by Staff Report

Task, activity or skill	% of staff indicating *most* or all students have difficulty
Manage time and complete work	66.7[a]
Sequence steps to complete school projects	60.0[a]
Follow routines to support positive performance	60.0[a]
Engage in active, positive leisure pursuits	57.1[b]
Persist with a task despite frustrations	56.3
Meet due dates and deadlines	56.3
Manage personal finances	53.3[a]
Identify and select work opportunities based on assets, limitations, likes and dislikes relative to work	50.0[b]
Demonstrate emotions appropriate to the situation	50
Identify and use strategies to cope with stress.	46.7[a]
Actively engage in classroom activities	46.7[a]
Respond appropriately to the feelings of others	43.8
Perform multiple tasks at the same time	43.8
Seek help when needed	43.8
Control their anger	37.5
Use appropriate non-verbal communication during interactions	37.5
Communicate appropriately with teachers and staff regarding assignments	33.3[a]
Arrange transportation as needed to meet obligations.	33.3[a]

Maintain own health	31.25
Initiate conversation with peers	25.0
Maintain personal hygiene and grooming	18.8

Note: n = 16 unless noted. Staff used a 4 point scale of *none* to *all* to rate the number of students presenting difficulties.

[a] n = 15. [b] n = 14.

Table 6

Skills for Occupational Therapy Intervention by Staff and Student Report

Skill	% of staff (*n* = 16)	% of students (*n* = 23)
Stress Management	93.8	65.2[a]
Behavior Regulation	87.5	30.4
Communication skills	81.3	43.5
Time Management	81.3	47.8
Problem Solving	81.3	52.2[a]
Job Skills	75.0	60.9[a]
Goal Setting	75.0	43.5
Health and Wellness	68.8	26.1
Social Skills	68.8	21.7
Learning	62.5	30.4
Attention	56.3	43.5
Money Management	50.0	65.2[a]
Nutrition	50.0	13.0
Cognitive skills	43.8	21.7
Violence	43.8	17.4
Self-Care Skills	37.5	8.7
Self-efficacy	37.5	31.1
Multitasking	31.3	47.8
Parenting Skills	31.3	4.3

Following Routines	31.3	65.2[a]
Leisure and Play	25.0	13.0
Memory	18.8	26.1

[a] Five areas most frequently reported by students.

Table 7

Skills Needed for Independence and Perceived Difficulty by Student Report

Skill	% of students rating skill as hard-very hard	% of students wanting practice
I feel that I am able to maintain balance in my life between work, school, leisure and self-care.	16 (66.7%)	15 (65.2%)[a*]
I can set up and maintain a monthly budget.	14 (58.3%)	17 (73.9%)[a*]
I know how to find and rent a house/apartment that I can afford.	10 (43.56%)[a]	16 (69.6%)[a]
I can manage my time to complete work and assignments to meet deadlines.	10 (41.6%)	16 (69.6%)[a*]
I can prepare a resume, apply for a job, go to an interview, and discuss job benefits with an employer.	6 (25.0%)	15 (65.2%)[a*]
I can set up a bank account	6 (25.0%)	11 (47.8%)[a*]
I can take care of an apartment	5 (20.8%)	14 (60.9%)[a*]
I can identify when I need help and know how to get the help I need.	4 (17.4%)[1]	14 (60.9%)[a*]
I can identify healthy food options at restaurants or the grocery store	2 (8.4%)	10 (43.5%)[a]
I can prepare healthy meals for myself	2 (8.4%)	14 (60.9%)[a]
I can identify jobs I would like to apply for based on my likes, dislikes, and interests.	1 (4.2%)	17 (73.9%)[a]
I can identify jobs that I could do and that match my abilities.	1 (4.2%)	18 (78.3%)[a*]

Note: n = 24 unless noted. Percentage of students wanting practice was compared to percent of

staff members perceiving practice as beneficial. Significant chi square differences are indicated.

[a] $n = 23$

* $p < .05$

Acknowledgements

I would like to acknowledge and thank the principal, staff and students at the Program. Their collaboration, participation and support have been deeply felt and highly encouraging throughout this process. I would like to thank Yvonne Swinth for serving as my committee chairperson, for her assistance with this study and for her continual encouragement. Her guidance and support has been greatly appreciated. I would like to thank Renee Watling for serving as the reader for this study. Her experience and insight greatly enhanced the development and implementation of this project. I would like to thank George Tomlin for guiding me through the initial research process and providing continual support and direction. I would like to thank the individuals who reviewed the initial drafts of the survey materials and offered constructive feedback and encouragement.