Running Head: SKILLSTREAMING

The Effect of Teaching "Following Directions" to High School Students with Mild Cognitive Disabilities

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Table of Contents

List of Tables

Appendices

Abstract

The purpose of this study was to evaluate the effectiveness of teaching following directions to high school students with mild cognitive disabilities when a social skills program was implemented into their daily routine. The study followed a quasi-experimental design in the form of a nonrandomized sample that consisted of a pre-test and post-test in the form of a 5 point Lickert scale. Twelve students in grades 9 to 12 from a mid-size urban public high school in a Midwestern state participated in the study. Findings revealed the majority of participants showed improvement in paying attention, asking questions, and asking for help. Due to the small sample size, the degree to which the findings can be generalized is limited.

The Effect of Teaching "Following Directions"

to High School Students with Mild Cognitive Disabilities

Chapter 1

Introduction

Individuals diagnosed with cognitive disabilities exhibit deficits in general intellectual functioning and significant limitations in at least two of the following adaptive skill areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety (DSM-IV-TR 2000). In this definition, general intellectual functioning refers to the ability to reason, plan, solve problems, think abstractly, learn quickly, and learn from past experience. An intelligence quotient (IQ) score, evaluated through standardized tests administered by trained professionals measures these characteristics. IQ scores of 70 or below indicate the possibility of a cognitive disability. Adaptive behavior, by this definition, involves conceptual, social, and practical skills learned by people in order to function in everyday life (www.thearc.org).

The effects of cognitive disabilities vary greatly. People identified as cognitively disabled evidence varying degrees of impairment in (a) social and communication skills, (b) academic skills, (c) and independence. Thus, children with a cognitive disability may also take longer to speak, walk, and take care of personal needs such as eating or dressing. Children with a cognitive disability may take longer to learn academic material. As adults, however, many will lead independent lives in the community without supports.

Our educational system contains a number of students with cognitive disabilities. Although prevalence numbers decreased between 1998 and 2002, 580,375 students ages

6 through 21 nationwide received services under the Individuals with Disabilities Education Act (IDEA), accounting for 88% of the population in the United States in 2002 (www.ed.gov/about/reports/annual/osep/2004/26th-vol-2-table-1.doc). Many students with mild cognitive disabilities integrate into the general education environment while others receive their education in self-contained special education classrooms or resource rooms. The US Department of Education reported that in 1998 nationwide, 81,417 students with cognitive disabilities ages 6 through 21 spent less than 21% of their time outside the general education classroom, 179,997 students spent 21-60%, and 310,402 spent more than 60% outside the general education classroom. Similarity, in 2002 nationwide, 63,592 students with cognitive disabilities ages 6 through 21 spent less than 21% of their time outside the general education classroom, 177,431 students spent 21-60%, and 305,599 spent more than 60% outside the general education classroom (2002 Tables 3-8t, 3-8u). Prevalence rates and the number of students served tend to somewhat decrease each year, however, the need for special education services remains consistent.

Social skill deficits highlight a defining aspect of cognitive disabilities. These skills remain crucial to social adjustment and normal daily functioning. They enable a person to obtain healthy social relationships, avoid interpersonal conflict, and cope with stressful situations. Generally, a broad spectrum of inappropriate or non-existent social skills accompanies a diagnosis of cognitive disabilities. As a result, cognitive disabilities have become associated with social skill deficits (Bielecki & Swender, 2004).

To address interpersonal skill deficits, educational programs for students with cognitive disabilities incorporate social skills training. Without this training, children with cognitive disabilities may fail to develop the skills necessary to form meaningful friendships. They may appear awkward when asked to interact with others, and may retreat into their own worlds (Agosta, Graetz, Mastropieri, & Scruggs, 2004).

The purpose of this study was to evaluate the effectiveness of teaching following directions to high school students with mild cognitive disabilities when a social skills program was implemented into their daily routine. This study addressed the question, "What influence does the social skills program, "*Skillstreaming for Adolsecents*," have on teaching following directions to high school students with mild cognitive disabilities?" This study will influence the instructional practice of special education teachers, regular education teachers, speech and language therapists, parents of students with mild cognitive disabilities, and the child with cognitive disabilities.

Chapter 2

Review of Literature

Social skill instruction refers to teaching specific social behaviors (e.g., greeting, eye contact, a handshake) that facilitate personal interaction. Teaching social skills can be as simple as a nod during a conversation or as complex as learning formal dinner etiquette. In classroom settings, interventions can either focus on teacher-approved behaviors (e.g., raising a hand, following directions, and staying seated) or peer interaction behaviors (e.g., problem solving, teamwork, and taking turns). Social skill training consists of four primary objectives: (1) promote skill acquisition, (2) enhance skill performance, (3) reduce or remove competing behaviors, and (4) facilitate generalization and maintenance (Gresham, Sugai, and Horner, 2001).

The rationale for social skills training was based on its importance for academic and vocational success as well as long-term adjustment (Kavale and Mostert, 2004). Social skill deficits may occur because a skill has not been learned and therefore cannot be performed (acquisition deficit), or because a competing deficit inhibits the performance of a particular social skill (performance deficit). These researchers posit three claims pertaining to social skills. The first involves the ability to interact successfully with peers and adults. The second asserts that students with high-incidence disabilities often display maladaptive behavior that negatively influences their relationships with other students and adults. The third maintains that failures in social relationships can result in poor interpersonal development, peer and adult rejection, as well as academic failure (Miller, Lane, & Wehby, 2005). With a similar viewpoint, Canney and Byrne (2006), argued that:

Adults with disabilities often have particular difficulties with functional language used in social settings. Whatever level of communication they have achieved, knowing how to use communication in a social context can remain a real difficulty. It is often the lack of these skills that draws attention to their disability which further impedes effective social relationships.

A study conducted by Miller, et al., (2005) included seven students (five males and two females) with significant behavioral difficulties who received special education services in a self-contained classroom. Their disabilities included three students identified with emotional or behavioral disability, one identified with a cognitive disability, one identified with a specific learning disability, one identified with other health impairment, and one identified with speech and language needs. One staff member with 28 years of experience teaching students with emotional and behavioral disorders observed that the lack of social skills on the part of the students led to strained relationships with the adults and peers in the classroom. She also indicated the absence of social skills led to acting out behaviors. Similarly, a study conducted by Agran, Sinclair, and Alper, (2005) revealed devalued perceptions of disability by society. Combined with a belief that individuals with disabilities are incapable of regulating their own behavior, it is not surprising that students with disabilities remain dependent on others to direct their behavior.

During the last two decades, the number of programs for social skill curricula designed for adolescents increased. Many of these programs were not designed specifically to teach occupational social skills, but employment experts identified many of the target skills as essential (Elksnin and Elksnin, 2001). Another study conducted by

Kamens, Dolyniuk, & Dinardo (2004) provides a social learning and work experience for students with developmental disabilities between 18-21 years old. For three weeks, high school students with developmental disabilities participated in a variety of jobs on a college campus and worked alongside college students. The high school students were exposed to a snack bar/cafeteria setting, office settings, a college library, bookstore, mailroom, and landscaping activities on a rotating basis. The experience resulted in benefits for the high school students. They practiced previously taught job skills that enabled them to be successful in future work placements and they practiced social skills that empowered them in future social situations. The researchers concluded that it is more efficient to train social skills within the normal work routines because skills can be learned in exactly the same circumstances in which they are needed (www.thememoryhole.org).

More research explains a variety of curricula designed specifically to teach occupationally relevant social skills (Elksnin and Elksnin, 2001). Many individuals with disabilities work competitively with performance levels comparable to individuals without disabilities. Nonetheless, a high percentage of individuals with disabilities fail in competitive employment placements. Many lose their jobs for social reasons, not because of their inability to perform work tasks. (www.thememoryhole.org). Kamens et al. (2004) reported that failure to maintain successful employment often relates to difficulty in developing social interpersonal skills. Some students require more direct instruction and opportunities to practice social skills in developmentally-appropriate settings. According to Elksnin and Elksnin (2001), the lack of social skills accounted for almost 90% of job loss for individuals with disabilities.

Work placement officers often reported atypical behavior by persons with disabilities on the job. Frequently, these reports described social deficiencies that concern employers. O'Reilly, Lancioni, Sigafoos, O'Donoghue, Lacey, & Edrisinha (2003), examined community adjustment of adults with intellectual disabilities and revealed that these individuals can become socially isolated over time because of social skill deficits. Two problems plagued social skill curricula developers.

First, social development cannot be treated as sets of skills taught in isolation from other skills. Social behavior must be understood within the context of other behaviors (e.g., play, work, and language). The second problem lies in the relationship between the conditions under which a social skill is taught and the conditions in which it must be used (www.thememoryhole.org). Some students apply skills broadly after nearly any condition of learning, but these students usually do not fail in employment. People who lose their jobs for social reasons are usually those who need training under conditions that match the workplace (Leonardi, Roberts, & Wasoka, 2001).

Information about social skill strengths and deficits can be collected in a number of ways, including formal and informal behavioral observations, self-reports, and behavior rating scales. Gresham (2001) noted the most positive social skill training consisted of direct teaching using modeling, coaching, and positive reinforcement. Modeling becomes the most critical component. By modeling appropriate social behavior, students employ the ability not only to observe desired behavior, but also to practice the desired behavior in a setting without the fear of failure or social rejection (Goldstein and McGinnis, 1997).

Coaching was another key element in effective social skill training. Coaching uses verbal instruction instead of visual displays of desired social behavior. Three basic steps of coaching consisted of presenting rules, providing opportunities for practice, and providing specific feedback concerning the quality of the behavior. By coaching social skills, an instructor can incorporate a sequence of skills and demonstrate the impact on other students (Gresham, 2001).

When attempting to maintain any new skills, academic or social, positive feedback that expresses clear, consistent, behavior-specific praise becomes crucial (Goldstein and McGinnis, 1997). Gresham's (2001) study further indicated providing students with intermittent reinforcement in settings other than where the students received the training assists students to maintain and generalize the skills beyond the training sessions. Without effective reinforcement, the targeted skills were unlikely to be incorporated into the student's repertoire, and if acquired, are not likely to generalize to other settings, other people, and over time. Positive feedback remains an important tool for teaching and maintaining new social skills.

Many interventions have been used to teach following directions to students with mild cognitive disabilities (Kavale and Mostert, 2004). One approach is *Skillstreaming the Adolescent*, developed by Dr. Arnold P. Goldstein and Dr. Ellen McGinnis. *Skillstreaming the Adolescent* addresses the social skill needs of students who display aggression, immaturity, withdrawal, or other problem behaviors (Leonardi, Roberts, & Wasoka, 2001). *Skillstreaming the Adolescent* utilizes modeling, role playing, performance feedback, and homework to practice transfer using a student manual, collection of program forms, and a box of skill cards for use with students. Students develop competence in dealing with interpersonal conflicts and learn to use self-control (Goldstein and McGinnis, 1997). The curriculum contains 50 skill lessons and includes six skills groups: *beginning social skills, advanced social skills, dealing with feelings, alternatives to aggression, dealing with stress, and planning skills*. Summaries of each chapter include: (a) nature and impact of aggressive students and the goal of *Skillstreaming,* (b) program's history and development, (c) program implementation, (d) procedures for conducting a *Skillstreaming* group, (e) transcript of a group session demonstrating these procedures, (f) presents the 50 skills with their behavioral steps, (g) skill sequences and consequences, (h) motivation and resistance, (i) enhance generalization of skill performance, and (j) safety in the school setting,

A study conducted by Leonardi, et al. (2001) included 12 elementary students in a medium size city in rural Vermont. They were diagnosed with emotional behavioral disorders (EBD) or with high incidences of school disciplinary actions. From October through May, students received *Skillstreaming* instruction in 30 minute, twice weekly sessions. Each session followed the *Skillstreaming* process of explaining the skill, modeling the skill, practicing the skill, and encouraging the children to use the skill in general settings (Goldstein and McGinnis, 1997).

In the beginning, school staff taught basic skills. As the sessions progressed, certain results became clear. No suspensions occurred between October and May. Students' timeout sessions decreased, and the students knew the schedule and were eager to attend the skill training sessions. Other studies have shown that almost 60% of students with disabilities believed social skills training to be beneficial (Kavale and Mostert, 2004).

Prior research centered on the effectiveness of social skill instruction with elementary and middle school students, and students with EBD. Fewer studies focused on the impact of social skill programs with high school students diagnosed with mild cognitive disabilities. Thus, the purpose of this study is to explore the effectiveness of teaching following directions to high school students with mild cognitive disabilities when *Skillstreaming,* a social skill program, was implemented into their daily routine.

Chapter 3

Methodology

Setting

This study was conducted in a special education classroom at a public high school in a mid-size Midwestern city. The city had a population of approximately 16,300 people. The school district population consisted of approximately 4,326 students. The district contained five elementary schools, one middle school, and one high school. Additional programs offered by the school district included approximately six alternative school initiatives ranging from programs for credit deficient students to alternate placements for students with behavior and safety concerns.

The high school contained approximately 1173 students; 49.7% were female and 50.3% were male. Of the 1173 students, approximately 180 students or 15.2% of the total student population were students with disabilities. Enrollment of students receiving special education services were as follows: cognitive disability 1.7%, emotional/behavioral disability 2.4%, specific learning disability 7.1%, speech and language impairment 0.4%, and other primary disability 2.0%. The primary ethnicity of the student body was 85.7% Caucasian. Hispanic students represented 8.2%, Asian students represented 4.3%, African American students represented 1.5%, and Native American students represented 0.3% of the student population. There were approximately 90 teachers, 23 paraprofessionals, five guidance counselors, and four administrators on staff.

Participants

This study focused on a nonrandomized sample of sixteen students in grades 9 to 12 diagnosed with a mild cognitive disability in accordance with state and federal guidelines. Eight high school students with mild cognitive disabilities participated in the control group and eight high school students with mild cognitive disabilities participated in the treatment group were represented as a purposive sample.

The control group consisted of five males and three females. The students were all Caucasian and between the ages of 15 and 19. This group contained one freshman, one sophomore, one junior, and five seniors.

The treatment group consisted of six males and two females, of which five were Caucasian, two Hispanic, and one Native American. Five were freshman and three were sophomores. The students ranged in age from 14 to 16. A letter was sent home to the parents of students in the treatment group informing them of the nature of the study (Appendix A). Participation in the study was voluntary.

Instrument

Developed by Arnold Goldstein and Ellen McGinnis in 1973, *Skillstreaming the Adolescent* was utilized to teach direction following skills to high school students with mild cognitive disabilities. *Skillstreaming the Adolescent* contained strategies for teaching prosocial skills to students who display immaturity, withdrawal, or other deficits in social skill behaviors. The social skill curriculum contained an instructional manual, a student manual, a collection of program forms, and skill cards. *Skillstreaming the Adolescent* utilized modeling, role playing, performance feedback, and skill transfer in the form of homework. The *Skillstreaming* curriculum contained 50 skill lessons and included six components: Beginning Social Skills, Advanced Social Skills, Dealing with Feelings, Alternatives to Aggression, Dealing with Stress, and Planning Skills. No reliability or validity data was available; however, many articles support the use of *Skillstreaming*.

Procedures

The study followed a quasi-experimental design in the form of a nonrandomized control group that consisted of a pre-test and post-test format. Baseline data consisted of each student completing the *Skillstreaming* pre-test administered in the form of a five point rating scale (Appendix B). Data from staff completing the *Skillstreaming* pre-test and post-test administered in the form of a five point rating scale was also considered (Appendix C). The treatment group received instruction on following directions from the *Skillstreaming* curriculum while the control group did not. The intervention lessons administered to the treatment group consisted of an in class task analysis, discussion, and role playing activity as well as an opportunity for skill transfer and generalization outside of school. After the intervention, both groups of students and staff completed a post-test administered in the form of a five point rating scale.

The study followed a timeline of three phases. Phase one involved the administration of the pre-test to both the control and treatment groups which was spread out over two class periods. Phase two involved the implementation of the social skill curriculum with the treatment group. Step one of the curriculum defined the skill that needed improvement. The opening activity was a brief, trainer-led group discussion of the skill to be taught. Step two involved modeling the skill that needed improvement. Step three established the skill in need of improvement. The fourth step selected role-players for the activity, while step five sets up the role-play. Step six involved conducting the role-play. Step seven provided performance feedback to the student, and finally, step eight assigned skill homework. Finally, phase three of the study consisted of administration of the post-test to both the control group and the treatment group over two class periods.

The study was administered between January and March of 2007, for approximately four to eight weeks. Sessions were conducted three times a week, in the cognitive disabilities English classroom, during the second and third periods of the school day, lasting 45 minutes per session.

Data Analysis

Data analysis involved comparing pre-test and post-test data collected from both the control and treatment groups before and after the administered intervention. All useful data was tabulated and analyzed through the use of tables.

Chapter 4

Results

Introduction

Skillstreaming the Adolsecent is a social skills program utilized to teach social skills to high school students with mild cognitive disabilities. The purpose of this study explored the effectiveness of teaching following directions to high school students with mild cognitive disabilities. Prior research centered on the effectiveness of social skill instruction with elementary and middle school students, and students with EBD. Fewer studies focused on the impact of social skill programs with high school students diagnosed with mild cognitive disabilities. Descriptive statistics were used to classify, organize, and summarize the numerical data. Analyses were conducted to determine the frequency of responses of the control, treatment, and teacher pre-tests and post-tests. Microsoft Excel was used to input the data found and created graphs to visually represent the data.

A review of the demographic data indicated the control group consisted of five males and three females, all of which were Caucasian and between the ages of 15 and 19. The treatment group consisted of six males and two females, of which five were Caucasian, two Hispanic, and one Native American. Five were freshman and three were sophomores. The students ranged in age from 14-16. Due to student transfers in and out of the district and students out of the building on vocational work experiences, the control and treatment group demographics changed during the implementation of the social skills program. The control group consisted of five males and one female, all of which were Caucasian and between the ages of 15 and 18. The treatment group consisted of four males and three females, of which five were Caucasian, one Hispanic, and one Native American. The students ranged in age from 14-16. The instruction took place over the course of six weeks. Sessions were conducted three times a week, in the cognitive disabilities English classroom, during the third period of the school day, lasting 45 minutes per session.

Student Data Analysis

Four survey questions pertained to following directions. The first question highlighted paying attention to someone who is talking and attempting to understand what was said. The second question asked how often students ask questions when they wanted to know something. Question three asked how often students ask for help when having difficulty, and question four asked how often students carry out instructions from other people quickly and correctly. Each survey question was asked to both the teacher and the students.

Results from the control group show consistency in their responses. The majority of the students in the control group completed the pre-tests and post-tests with similar responses. Most of the students consistently answered the pre-test and post-test questions with “Sometimes,” “Often,” and the occasional “Almost Always.” One student answered “Seldom” when asked how often the student requests assistance. Students in the control group are likely to pay attention to someone who is talking, ask questions when more information is needed, and request assistance when needed.

Overall data collected from the treatment group indicated improvement. Regarding question one, pre-test results indicated the majority of students answered “Almost Always” or “Sometimes.” Post-test results indicated the majority of students answered either “Often” or “Almost Always” when asked how often they listen to someone who is talking. Pre-test data regarding question two indicated the majority of students felt they “Almost Always” asked questions when wanting to know something. Post-test data indicated the majority of students felt they “Sometimes” asked questions when wanting to know something. The pre-test treatment group’s response to the third question revealed the majority of students answered “Almost Never” or “Almost Always” on this particular survey question. Post-test data indicated the majority of students answered “Sometimes” or “Almost Always.” Regarding the fourth question, treatment group pre-test data indicated a varying degree of answers, with no strong consensus. Post-test results indicated more students felt they “Sometimes” carried out instructions from other people quickly and correctly.

Table 1.

Treatment group analysis of pre-test and post-test results

	Almost Never	Seldom	Sometimes	Often	Almost Always
Listening to others					
Pre-test	14%	0%	29%	14%	43%
Post-test	0%	0%	14%	43%	43%
Asking questions					
Pre-test	14%	0%	14%	14%	57%
Post-test	0%	29%	43%	14%	14%
Asking for help					
Pre-test	29%	0%	14%	14%	43%
Post-test	14%	0%	29%	14%	43%
Carrying out instructions					
Pre-test	14%	29%	14%	29%	14%
Post-test	14%	0%	43%	14%	29%

Teacher Data Analysis

Overall results from the teacher pre-test and post-test revealed improvement among the participants. Results from question one regarding the teacher pre-test indicated 57% of students "Seldom" pay attention to someone who is talking and 43% "Sometimes" pay attention to someone who is talking. Post-test results from the teacher survey indicated improvement where 71% of students "Sometimes" pay attention and 29% "Often" pay attention to someone who is talking. Regarding question two, teacher pre-test results indicated the majority of students "Seldom" ask questions when more information in needed. Post-test results indicated improvement as all students asked for help either "Sometimes" or "Often." Results from question three of the teacher pre-test indicated the majority of students "Seldom" ask for assistance when they are having difficulty while the post-test survey indicated the majority "Sometimes" ask for assistance when they are having difficulty. Question four of the teacher pre-test revealed students "Seldom" paid attention to instructions well enough to carry them out. Post-test data revealed the majority of students "Often" paid attention to instructions well enough to carry them out.

Table 2.

Teacher analysis of pre-test and post-test results

	Almost Never	Seldom	Sometimes	Often	Almost Always
Listening to others					
Pre-test	0%	57%	43%	0%	0%
Post-test	0%	0%	71%	29%	0%
Asking questions					
Pre-test	29%	57%	14%	0%	0%
Post-test	0%	43%	57%	0%	0%
Asking for help					
Pre-test	0%	57%	29%	14%	0%
Post-test	0%	0%	57%	29%	14%
Carrying out instructions					
Pre-test	0%	71%	29%	0%	0%
Post-test	0%	29%	71%	0%	0%

Summary

Student data revealed that overall the majority of participants improved toward following directions through the use of *Skillstreaming the Adolescent.* Most felt they improved on a particular skill such as listening to someone who is talking to them or felt they obtained a more realistic view of how often and accurately they used a certain skill. Teacher data indicated most participants improved toward following directions through the use of *Skillstreaming the Adolescent.* Results indicated most students improved on skills such as listening to someone who is talking to them, requesting assistance when needed, and carrying out instructions quickly and correctly. Many students also obtained a more realistic view of how often and accurately they used a certain skill.

Chapter 5

Discussion

Introduction

This study explored the effectiveness of teaching following directions to high school students with mild cognitive disabilities when a social skills program was implemented into their daily routine. The quasi-experimental study in the form of non-randomized control and treatment groups consisted of a pre-test and post-test format administered in the form of a five point rating scale. Each survey question was asked to both the teacher and students. The treatment group received instruction on following directions from the *Skillstreaming* curriculum while the control group did not. Overall the student and teacher results indicated the majority of students' following direction skills improved over the course of implementing *Skillstreaming the Adolescent*. The teacher and student results both revealed that students felt they paid more attention to someone who is talking, asked more questions when assistance is needed, asked for help when needed, and improved on carrying out quick and correct instructions.

According to research by Gresham (2001) the most positive social skill training consisted of direct teaching using modeling, coaching, and positive reinforcement. By modeling appropriate social behavior, students employ the ability not only to observe desired behavior, but also to practice the desired behavior in a setting without the fear of failure or social rejection (Goldstein and McGinnis, 1997). By coaching social skills, an instructor can incorporate a sequence of skills and demonstrate the impact on other students (Gresham, 2001). Goldstein and McGinnis (1997) conclude positive feedback that expresses clear, consistent, behavior-specific praise becomes crucial when attempting to maintain any new skills. Gresham's (2001) study further indicated providing students with intermittent reinforcement in settings other than where the students received the training assists students to maintain and generalize the skills beyond the training sessions.

Prior studies have demonstrated the success rate of *Skillstreaming* with students with emotional/behavioral disabilities (Leonardi, Roberts & Wasoka, 2001). Many interventions have been used to teach following directions to students with mild cognitive disabilities (Kavale and Mostert, 2004). The findings in this study support the success rate of *Skillstreaming* with students with mild cognitive disabilities. Kavale and Mostert (2004) report other studies have shown that almost 60% of students with disabilities believed social skills training to be beneficial.

Interpretation of Results

Several possible explanations exist as to why the students who participated in the *Skillstreaming* program displayed improved direction following skills. One possibility is that students were encouraged to evaluate their own social skills before and after the *Skillstreaming* implementation through a pre-test and post-test. This encouraged each student to take a closer look at specific skills and honestly assess their performance. Another possibility is that because the students enjoy role-playing activities, they felt motivated to participate in the activities and lessons. One final factor as to why the students who participated in the *Skillstreaming* program displayed improved direction following skills is that once students saw the appropriate way to perform the skill, they felt confident enough to practice the skill outside of the classroom.

Limitations

This study should be viewed as a starting point for future research as few studies have analyzed the success rate of *Skillstreaming* with high school students with mild cognitive disabilities. The study allowed the researcher to acquire information about a group of students' attitudes and opinions about their particular direction following skills and observe the progress students made while the program was implemented. This study was limited due to the small sample size (n=7). It is difficult to generalize the findings of this study to a more diverse population with such a small sample size. Although the results of the study suggest improvement in direction following skills, the student data was self-reported by students allowing for personal emotions to affect the reliability of the results, which becomes another limitation. In addition, the pre-test and post-test format consisted of a survey in the form of a five point Lickert scale, which allowed students to choose the neutral answer rather than a more definite answer. Frequent selection of the neutral answer does not provide accurate results. This study was also limited because of the lack of diversity amongst the participants (83% Caucasian, 8% Hispanic, and 8% Native American).

Strengths

The researcher notes two strengths in this study. First, it required input from a source close to the students in the form of a teacher survey. This allowed impartial responses to be considered in the results as well as the students' responses. The second strength is the significance of social skill training for students with cognitive disabilities. The rationale for social skills training was based on its importance for academic and vocational success as well as long-term adjustment (Kavale and Mostert, 2004). Canney and Byrne (2006), argue that it is often the lack of social skills that draws attention to their disability which further impedes effective social relationships.

Implications and Recommendations

The following implications and recommendations suggest possible improvements in practice and areas for further research. These findings should be interpreted cautiously because of the small sample size and number of selections on the Lickert scale. Replicating this study with a larger sample size and modified four point Lickert scale would further explain the benefits that can ensue from the use of *Skillstreaming*. The current study has provided data to suggest that implementation of a social skills program is effective in improving the social skills of students with mild cognitive disabilities. The study also implies that providing daily lessons on appropriate social skill behavior increases the benefits of the intervention. A recommendation would be to offer a social skills class for students with mild cognitive disabilities where various social skills are taught and practiced using a variety of activities. A high percentage of individuals with disabilities fail in competitive employment placements, not because of their inability to perform work tasks, but because of social reasons (www.thememoryhole.org). Without social skills training, children with cognitive disabilities may fail to develop the skills necessary to form meaningful friendships and successful job experiences (Agosta, Graetz, Mastropieri, & Scruggs, 2004).

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Appendix A

PARENTAL LETTER OF NOTIFICATION AND CONSENT

Dear Parent:

I am currently a graduate student at the University of Wisconsin-Oshkosh. I am conducting a research study to evaluate the effectiveness teaching the social skill "following directions" to your child.

I am inviting your child's participation, which will involve approximately 8 weeks. Your child's participation in this study is voluntary. If you choose not to have your child participate or to withdraw your child from the study at any time, there will be no penalty, meaning it will not affect your child's grade. Likewise, if your child chooses not to participate or to withdraw from the study at any time, there will be no penalty.

The possible benefit of your child's participation is increased social skills specifically in the area of following directions.

If you have any questions concerning the research study or your child's participation in this study, please call Heather Ewoldt at (920) 967-1800 ext. 4516.

Sincerely,

Heather Ewoldt

By signing below, you are giving consent for your child ______________ to participate in the above study.

Parent Signature	Printed Name	Date
Student Signature	Printed Name	Date

If you have any questions about you or your child's rights as a participant in this research, or if you feel you or your child have been placed at risk, you can contact Linda Freed, Chair of the UW-Oshkosh Institutional Review Board at (920) 424-3215.

Appendix B

Student Skillstreaming Checklist

Name: ____________________ Date: ____________

INSTRUCTIONS: Based on your observations in various situations, rate your use of the following skills.

Circle 1 if you *almost never* use the skill.

Circle 2 if you *seldom* use the skill.

Circle 3 if you *sometimes* use the skill.

Circle 4 if you *often* use the skill.

Circle 5 if you *almost always* use the skill.

	almost never	seldom	sometimes	often	almost always
1. Do I listen to someone who is talking to me?	1	2	3	4	5
2. Do I start conversations with other people?	1	2	3	4	5
3. Do I talk with other people about things that interest both of us?	1	2	3	4	5
4. Do I ask questions when I need or want to know something?	1	2	3	4	5
5. Do I say thank you when someone does something for me?	1	2	3	4	5
6. Do I introduce myself to new people?	1	2	3	4	5
7. Do I introduce people who haven't met before to each other?	1	2	3	4	5
8. Do I tell other people when I like how they are or something they have done?	1	2	3	4	5
9. Do I ask for help when I am having difficulty doing something?	1	2	3	4	5
10. Do I try to join in when others are doing something I'd like to be part of?	1	2	3	4	5

	almost never	seldom	sometimes	often	almost always
11. Do I clearly explain to others how and why they should do something?	1	2	3	4	5
12. Do I carry out instructions from other people quickly and correctly?	1	2	3	4	5
13. Do I apologize to others when I have done something wrong?	1	2	3	4	5
14. Do I try to convince others that my ideas are better than theirs?	1	2	3	4	5
15. Do I recognize the feelings I have at different times?	1	2	3	4	5
16. Do I let others know what I am feeling and do it in a good way?	1	2	3	4	5
17. Do I understand what other people are feeling?	1	2	3	4	5
18. Do I try to understand, and not get angry, when someone else is angry?	1	2	3	4	5
19. Do I let others know when I care about them?	1	2	3	4	5
20. Do I know what makes me afraid and do things so that I don't stay that way?	1	2	3	4	5
21. Do I say and do nice things for myself when I have earned it?	1	2	3	4	5
22. Do I understand when permission is needed to do something and ask the right person for it?	1	2	3	4	5
23. Do I offer to share what I have with others?	1	2	3	4	5
24. Do I help others who might need or want help?	1	2	3	4	5
25. Do I try to make both of us satisfied with the result when someone and I disagree?	1	2	3	4	5

Appendix C

Teacher/Staff Skillstreaming Checklist

Student: ________________________________ Class/age: ________________

Teacher/staff: ____________________________ Date: ________________

INSTRUCTIONS: Listed below you will find a number of skills that youngsters are more or less proficient in using. This checklist will help you evaluate how well each youngster uses the various skills. For each youngster, rate his or her use of each skill, based on your observations of the youngster's behavior in various situations.

Circle 1 if the youngster is *almost never* good at using the skill.
Circle 2 if the youngster is *seldom* good at using the skill.
Circle 3 if the youngster is *sometimes* good at using the skill.
Circle 4 if the youngster is *often* good at using the skill.
Circle 5 if the youngster is *almost always* good at using the skill.

Please rate the youngster on all skills listed. If you know of a situation in which the youngster has particular difficulty in using the skill well, please note it briefly in the space marked "Problem situation."

	almost never	seldom	sometimes	often	almost always
1. **Listening:** Does the youngster pay attention to someone who is talking and make an effort to understand what is being said? Problem situation:	1	2	3	4	5
2. **Starting a Conversation:** Does the youngster talk to others about light topics and then lead into more serious topics? Problem situation:	1	2	3	4	5
3. **Having a Conversation:** Does the youngster talk to others about things of interest to both of them? Problem situation:	1	2	3	4	5

	almost never	seldom	sometimes	often	almost always
4. **Asking a Question:** Does the youngster decide what information is needed and ask the right person for that information?	1	2	3	4	5
5. **Saying Thank You:** Does the youngster let others know that he/she is grateful for favors, etc.?	1	2	3	4	5
6. **Introducing Yourself:** Does the youngster become acquainted with new people on his/her own initiative?	1	2	3	4	5
7. **Introducing Other People:** Does the youngster help others become acquainted with one another?	1	2	3	4	5
8. **Giving a Compliment:** Does the youngster tell others that he/she likes something about them or their activities?	1	2	3	4	5
9. **Asking for Help:** Does the youngster request assistance when he/she is having difficulty?	1	2	3	4	5

4. **Asking a Question:** Does the youngster decide what information is needed and ask the right person for that information? 1 2 3 4 5

   Problem situation:

5. **Saying Thank You:** Does the youngster let others know that he/she is grateful for favors, etc.? 1 2 3 4 5

   Problem situation:

6. **Introducing Yourself:** Does the youngster become acquainted with new people on his/her own initiative? 1 2 3 4 5

   Problem situation:

7. **Introducing Other People:** Does the youngster help others become acquainted with one another? 1 2 3 4 5

   Problem situation:

8. **Giving a Compliment:** Does the youngster tell others that he/she likes something about them or their activities? 1 2 3 4 5

   Problem situation:

9. **Asking for Help:** Does the youngster request assistance when he/she is having difficulty? 1 2 3 4 5

   Problem situation:

	almost never	seldom	sometimes	often	almost always
10. **Joining In:** Does the youngster decide on the best way to become part of an ongoing activity or group? Problem situation:	1	2	3	4	5
11. **Giving Instructions:** Does the youngster clearly explain to others how they are to do a specific task? Problem situation:	1	2	3	4	5
12. **Following Instructions:** Does the youngster pay attention to instructions, give his/her reactions, and carry the instructions out adequately? Problem situation:	1	2	3	4	5
13. **Apologizing:** Does the youngster tell others that he/she is sorry after doing something wrong? Problem situation:	1	2	3	4	5
14. **Convincing Others:** Does the youngster attempt to persuade others that his/her ideas are better and will be more useful than those of the other person? Problem situation:	1	2	3	4	5
15. **Knowing Your Feelings:** Does the youngster try to recognize which emotions he/she has at different times? Problem situation:	1	2	3	4	5