ABSTRACT

SOCIAL COMPETENCE AND ACADEMIC ACHIEVEMENT IN AT-RISK ELEMENTARY SCHOOL STUDENTS: OUTCOMES FROM AN AFTER-SCHOOL PROGRAM

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This paper presents a discussion of what it means for children to be considered “at-risk” and how this might influence their social competence and academic achievement. One attempt to improve the social competence of at-risk students has been through participation in after school programs. The present study examined the effects of participating in an after school program for one year on the social competence and academic achievement of at-risk students, compared to at-risk students who did not participate in the program. Results indicated a positive correlation between the measure of social competence and the measures of academic achievement, which supported previous research that also has documented this relationship. However, no significant improvements were found in terms of social competence for either group. Possible explanations for lack of significant data and limitations of the study are discussed.
SOCIAL COMPETENCE AND ACADEMIC ACHIEVEMENT IN AT-RISK ELEMENTARY SCHOOL STUDENTS: OUTCOMES FROM AN AFTER-SCHOOL PROGRAM

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Introduction

There is a growing concern in the field of education for the future of at-risk youth. Many children are in danger of failing academically, which raises questions about how they will succeed as adults (Rak & Patterson, 1996). Most of these children are referred to as “at-risk,” but what does that term really mean? In the literature, there is no single definition of what it means for children to be “at-risk” given that most researchers operationalize the term to fit what they are studying (Granello, 2000). In the field of education, at-risk most commonly refers to those students “who are likely to leave school at any age without academic, social, and/or vocational skills necessary to lead a productive and fulfilled life” (Barr & Parrett, 2001, p.14). A more thorough discussion of what it means for children to be at-risk, and possible implications, will be presented.

Among the many concerns that parents and educators have for at-risk students is how they spend their time after school. As cited in Halpern (2000), approximately 60% of children between the ages of 6 and 13 have parents who are not home after school. This leaves children with a great deal of time to take care of themselves, which is an unsettling proposition given the dangerous neighborhoods in which some at-risk children live (Halpern, 2000; Shumow, Vandell, & Posner, 1999). As a means to provide children with a safe, productive environment, after-school programs have grown in popularity (Seligson, 1999). Gardner, Cartledge, Seidel, Woolsey, Schley, and Utley (2001) noted that after-school programs help keep children away from the dangers of urban streets, while offering academic benefits as well. Posner and Vandell (1994) found that after-school programs improved the school success of at-risk children. After-school programs often serve as academic remediation, which teaches skills that will help children succeed in school (Halpern, 2000).

Children from disadvantaged backgrounds have many factors in their life, which can lead to a variety of negative consequences. Having a place to go that provides adult role models, creative activities, safety, and peer interactions can help buffer many of the negative influences in their lives (Fagan, 2003). These programs are not just a way to keep them off the street, but a means to improve their chances for success.

Helping children academically is often a priority of after-school programs and the success of these programs is well documented in the literature (e.g. Fletcher & Padover, 2003; Gardner, et al., 2001; Halpern, 2000; Mason & Chuang, 2001; Pierce, Hamm, & Vandell, 1999).
However, the research on the effects of after-school programs for at-risk children is somewhat limited (Weisman & Gottfredson, 2001). Besides academic improvement, children may gain other benefits from after-school programs. It is also possible that after-school programs provide children with an opportunity to enhance their social functioning.

Throughout this paper there will be an emphasis placed on the importance of children, especially those at-risk, developing appropriate social skills, or social competence. This leads to the most common dilemma in this field of research. What exactly is social skills, social competence, and is there a difference between the two? This question is not easily answered and a thorough review of the research is likely to offer more confusion than clarification. One possible definition of social skills is that offered by Smith and Travis (2001) who define social skills as “observable behaviors that result in successful social interaction” (p.361). Whereas social skills are generally regarded as discrete behaviors, social competence is somewhat more complex. Vaughn, McIntosh, and Hogan (1990) suggested social competence consists of appropriate social cognition, effective social behaviors, no maladaptive behaviors, and positive relationships with others. In this sense, social skills are distinctly different from social competence.

There are those, though, who do not see the distinction between social skills and social competence as so straightforward. Schneider (2000) provided an excellent discussion of the various forms and contexts in which researchers use the terms social skills and social competence. He noted the inconsistencies in how researchers use the terms and how too much time has been devoted to forming a definition instead of conducting research. However, Schneider did note that Gresham’s (1986) model of social competence is probably the best framework as of yet. Gresham identified social competence in terms of two factors: social skills and adaptive functioning. Social skills consists of appropriate behavior, cooperation, expression of feelings, positive self-concept, and conversational skills. Adaptive behavior includes language development, academic functioning, physical development, and self-care skills. The present study used children’s self-report as a measure of their perceived social functioning, which is a very common means for assessing social skills (Englund, Levy, Hyson, & Sroufe, 2000). This essentially assesses the child's self-concept, which Gresham identified as part of social skills. Also, there was an investigation of how this perception of one's social skills relates to academic achievement, which is part of adaptive functioning. Because both aspects of
Gresham’s (1986) model of social competence will be addressed, the term social competence will be used in the present study to refer to what is being measured.

Rather than dwelling over how to define social competence, there is a more important question. Why should we be so concerned with whether or not at-risk students develop social competence and where do after-school programs fit into the picture? Research has shown that when at-risk students develop social competence, they may be shielded from many of the negative consequences that come with being at-risk, such as academic failure, drug use, and delinquency (Mason & Chuang, 2001; O’Donnell, Hawkins, Catalano, Abbott, and Day, 1995; Durlak, 1998). In other words, social competence can be considered a protective factor, which can be defined as “…individual or environmental safeguards that enhance a youngster’s ability to resist stressful life events and promote resilience” (Query & Hausafus, 1998, p. ix). The importance of at-risk children developing protective factors, such as social competence and ultimately resiliency, cannot be stressed enough, which is why it crucial to find ways to help this process. A review of how after-school programs can be a means for developing protective factors will be presented.

As mentioned previously, after-school programs can benefit children both academically and socially. It is not unreasonable to pair these two goals together, and both domains are often researched simultaneously (Malecki & Elliott, 2002). According to Welsh, Parke, Widaman, and O’Neil (2001) a reciprocal, or bidirectional, relationship exists between social competence and academic achievement, and more research needs to be done to fully understand how this relationships works. While this study aimed to contribute to the existing body of knowledge on this matter, it is necessary to emphasize that any findings from the data only refer to a correlational, rather than causal relationship in regards to social competence, academic achievement, and participation in an after school program.

Given the importance of helping at-risk students improve both academically and socially, the present study was designed to examine how after-school programs can help in these areas. Six hypotheses were proposed and are presented in detail following a review of the literature. The hope was for the results of this study to expand upon current research dealing with at-risk children, social competence, academic achievement, and after-school programs by further examining the relationship among these factors.
Literature Review

At-risk Children

A study of at-risk individuals is not possible without considering the characteristics that make them at-risk. There are many opinions about the factors that lead children to be labeled at-risk. In the literature, some of the most commonly identified risk factors are poverty, abuse, deprivation, family dysfunction, violence, illness, behavioral problems, low socioeconomic status, minority ethnic status, and low academic achievement among others (Barr & Parrett, 2001; Christiansen, Christiansen, & Howard, 1997; Marchesi, 1998; Martin & Martin, 2000; Nafpaktitis & Perlmutter, 1998; Rak & Patterson, 1996). Most of these factors are environmental in nature, but according to Honig (1984), children also become at-risk because of biological factors, such as low birth weight and congenital defects. Biology and environment interact to produce situations that could be detrimental to the child’s social and academic functioning. Considering race, ethnicity, culture, and class is also important when thinking about what it means to be at-risk because not all groups have the same values. For example, behaving in a “violent” manner may be acceptable or honorable to one group, but not another. These types of things are important to consider when interpreting research findings, however, an in-depth analysis of such group differences is beyond the scope of this study.

Despite the various opinions that exist about what makes someone at-risk, there are many useful models available to help understand this concept. For example, Resnick and Burt (1996) proposed a comprehensive model that provides for the assessment of risk factors based on the following domains: socioeconomic status, family dysfunction, school performance, truancy, early sexual behavior, criminal involvement, pregnancy, mental illness, physical and sexual abuse. By using these characteristics as a framework for studying at-risk students, it provides a complete picture of the many sources of problem children have in their lives.

Consequences of At-risk Status. When a child is considered at-risk there are a variety of negative consequences that can result. Hovland and Smaby (1996) discussed the various troubles at-risk children with attention and behavior problems are likely to experience. They often have reduced academic and social learning, conduct problems, and social rejection from peers. Hovland and Smaby found that the learning of other students around those with attention and behavior problems was negatively affected as well. For example, the behavior problems of these children required a great deal of teacher attention, which took away from the amount of
time the teacher could help other students. However, they also found that effective use of behavior management interventions helped control behaviors, such as aggression, and reduced the effects on learning. Hovland and Smaby shed light on an important issue because the lives of people who interact with at-risk children can be impacted as well.

One area that has received a great deal of attention is the academic performance of at-risk students. Huffman and Speer (2000) discussed the increasing concern in American schools for the academic achievement of at-risk children. In addition to academic failure, they also reviewed literature on the importance of teaching children with developmentally appropriate practices (DAP). Classrooms that use DAP are structured in a way that allows for individual learning experiences according to the child’s personal and cultural characteristics. Social interactions and small-group activities are used to promote learning. Huffman and Speer wanted to show that low-income, urban minority kindergarten and first graders performed better when taught using DAP as opposed to developmentally inappropriate practices. Results indicated higher achievement in the DAP group, which shows the importance of teaching children in a manner that is right for them and will lead to greater success. This is especially important for at-risk students because the negative effects on their academic achievement can be reduced by using DAP.

Shumow, et al. (1999) examined the relationship between living in a low-income neighborhood and academic achievement for third, fourth, and fifth graders. They noted that neighborhoods and the individuals living within them create a social context that influences the children’s development. More importantly, the characteristics of the low-income neighborhood, such as crime and a high percentage of single-parent homes, serve as risk factors to this development. Shumow et al. found that neighborhood risk negatively predicted academic performance for the older children in the study. As mentioned previously, the idea that protective factors can help reduce some of the negative outcomes for at-risk children is critical. Shumow et al. acknowledged this fact and discussed how resiliency could serve to reduce the negative effects on children’s academic performance. In particular they focused on intra-individual, family, and community sources of resiliency. Results indicated that those students who were high in these domains evidenced better academic performance, further emphasizing the importance of protective factors to at-risk children.
Rak and Patterson (1996) also discussed the idea of fostering resilience in at-risk children. They suggested that the reason why many at-risk children do not have serious problems is because they exhibit protective factors. From their review of the literature Rak and Patterson noted the importance of social supports, such as teachers, counselors, clergy, and supervisors of after-school programs, to the development of resiliency. This is a common theme that can be found throughout the literature on at-risk children and adolescents. Werner (1992) followed at-risk individuals for a period of 32 years and found that many developed into productive and well-adjusted adults. Such positive outcomes were attributed to the participants becoming resilient as children. Other publications contain more information about this important longitudinal study of resiliency (see Werner, 1984; Werner, Berman, & French, 1971; Werner & Smith, 1977; Werner & Smith, 1982).

While the negative effects on academic achievement in at-risk students has been widely researched, less is known about the impact on their social functioning. It is especially important to understand the social functioning of this population because having appropriate social skills has been identified as an important protective factor (Mason & Chuang, 2001). A more thorough discussion of social skills as a protective factor will be provided in a subsequent section.

Simply because a student has been identified as at-risk does not mean that he or she will automatically have problems in school or in relationships with others. For example, Bempechat (1998) discussed the successes that at-risk children have in school. Many children are able to succeed with increased parental support and high levels of motivation. Bempechat also noted that focusing on at-risk students who fail in school is not as helpful as studying those who succeed. By looking at those who “beat the odds” we can learn ways to promote school success.

Bryant (2002) advocates taking a holistic approach when helping at-risk students because there is often more than one risk factor influencing their situation. This is the philosophy behind the Phoenix Alternative Program (Bryant), which has been successful in teaching at-risk students acceptable social skills and improving academic functioning. Essentially, this program provided an alternative learning environment for students who, for a variety of reasons, were not successful in the regular high school. This was an excellent example of at-risk students succeeding with extra help.
As mentioned previously, at-risk students may experience problems socially due to various factors in their lives. Examining childhood social development helps to understand why it is particularly relevant to a study of at-risk individuals.

**Social Functioning of Children**

Many articles in the current literature address the concern for the social development of children. There is often some confusion, though, as to what a research study is actually looking at given the various ways researchers define social skills/social competence (Granello, 2000). The terms social skills, social competence, social adjustment, social development, and social functioning are often used interchangeably. The key to reviewing an article is to look for the definition of what is being measured and interpret findings in terms of that, not the language used by the authors.

**Developing social competence.** One way children can learn social skills is through direct social skills training, usually done in a school setting. Smith and Travis (2001) discussed the purpose and effectiveness of social skill instruction with learning disabled and behaviorally disordered children. Most discussions of social skills training focus on disabled individuals, but this training can be used with anyone. Smith and Travis explained that most programs seek to reduce the amount of inappropriate behaviors displayed by children with social skill deficits, and teach them to replace those actions with behaviors that promote positive interaction with peers and adults. For example, Elksnin and Elksnin (1998) designed an excellent program to help teachers teach social skills in a very straightforward manner to students with learning and behavior problems. They identified steps that were crucial to the social skills training program. (1) Define the skill (2) Describe the skill (3) Provide a rationale (4) Describe situations in which to use the skill (5) Teach the skill using role-playing situations (6) Help students identify social rules. They emphasized that schools need to teach children to be prosocial, and this does not require total restructuring of the classroom curriculum because the skills can be taught throughout the day. See Elksnin and Elksnin (1998) for helpful worksheets and planning materials.

Despite the success of many programs, results should be interpreted with some caution. Simply because you tell someone to perform a certain skill does not mean he or she will learn it, let alone remember to keep doing it, or use it spontaneously. Disabled students in particular need help learning to use skills spontaneously (Wert & Neisworth, 2003; Zanolli & Daggett, 1998;
Zanoli, Daggett, & Adams, 1996). While this is an important area of research, the special needs population was not targeted for the current study.

Children generally make improvements during the course of social skill training programs, but there is substantial evidence that suggests the skills they are explicitly taught do not last. For example, in a meta-analysis of the literature, Gresham (1998) found that in the long-term, social skill instruction did not generalize across settings. Schneider (1992) also conducted a meta-analysis and found that social skill interventions appeared to be more effective with withdrawn children compared to aggressive children. However, this does not mean that social skill instruction should be abandoned altogether.

There are other ways for people to learn something without having to be directly instructed to do so. This is an important tenet of Bandura’s social learning theory. According to Bandura (1997), children learn in many ways, one of which is through the observation of others that leads to imitating, or modeling, their behaviors. By observing how people behave in certain situations and environments, children learn to self-regulate their own behaviors in similar situations. Bandura sees learning as a social process that involves the interaction of personal variables, the environment, and behaviors. This theory of learning is an excellent explanation of how people might learn social skills. Did someone necessarily have to tell you to say hello when answering the phone, or to shake hands when meeting a new person? In most cases, people learn these behaviors by picking up on the social cues around them and, modeling them when it is and is not appropriate to perform a certain behavior. However, many children may have difficulty attending to social cues, so in those cases, direct instruction may be needed. In addition, children may not have appropriate role models to observe, which could also explain why some children do not develop adequate social competence. This is especially true for at-risk children who may not live in a very positive environment.

DiSalvo and Oswald (2002) provided an example of how autistic children were able to improve their social functioning by modeling behaviors of socially competent peers. Their approach was based on social learning theory, but also combined some aspects of direct instruction by having the peers explicitly teach social skills to the children with autism. As Bandura (1977) noted, children can learn from models, but only if they attend to and understand the actions of the model. Therefore, when dealing with children who are disabled it may not be enough for them to just observe their peers. As for at-risk students, they too can observe others,
but if they do not understand what they are watching, possibly due to lack of appropriate models in the past, then they too might require more explicit instruction. While DiSalvo and Oswald did not study at-risk children, their findings suggested that peer interventions were an excellent way to help autistic children develop social skills and that this method could be generalized to other groups.

The idea of learning through observation of others relies on one’s social interactions and relationships. People can learn a variety of behaviors, both positive and negative, by observing those around them (Bandura, 1997). For children and adolescents, this influence comes mostly from their peer group.

*Peer Interactions.* The importance of peer interactions to the social-emotional development of children cannot be stressed enough. According to Schneider (2000), “successful peer relations during childhood is linked with general psychological well-being throughout life” (p.18). Schneider’s book *Friends and Enemies: Peer Relations in Childhood*, provides a wealth of information and an excellent review of the literature regarding peer relationships of children, the development of social competence, and how this impacts school success.

Lindsey (2002) studied friendship and peer acceptance in preschool children. He maintained that having a friendship with someone is different than simply being accepted, and that more research is needed to determine how this difference impacts the development of social competence. In this study, preschool children were asked to name three children in their class they would like to play with, rate how much they liked each person, and were rated by their teachers in terms of peer acceptance, aggression, and social skills. Results indicated that those children who had at least one mutual friend were better liked by their peers and were considered more competent by their teacher, compared to those with no mutual friends. In addition, similar results were obtained from a two-year follow up. Lindsey concluded that mutual friendship is an important factor in the development of social competence for preschool children.

While Lindsey (2002) showed the importance of peer interactions for young children, the role the peer group plays in social development may become more influential as children approach adolescence. Englund, et al. (2000) studied social competence of adolescents in a group setting. They suggested that developing social competence becomes more complex in adolescence because there are a variety of new issues, such as forming intimate relationships, which were not present in childhood. Englund et al. chose to examine social competence in a
group setting because the skills necessary to maintain relationships in groups may be different than with individuals. By observing various behaviors in a group of adolescents asked to perform a variety of tasks, they concluded that learning to work cooperatively, taking on the perspective of others, problem solving and negotiating conflict are skills necessary to function within a group.

Social Competence as a Protective Factor. In the present study, the social functioning of at-risk children was the main focus. These children have many variables in their lives that may serve to hinder the development of appropriate social skills. However, it is crucial that these children learn social skills because they can serve as a protective factor against the negative consequences of being at-risk (Mason & Chuang, 2001). As defined previously, protective factors are “…individual or environmental safeguards that enhance a youngster’s ability to resist stressful life events and promote resilience” (Query & Hausafus, 1998, p. ix). While developing resiliency is critical for at-risk children, developing social competence may be just as important. In fact, increased social competency may contribute to the development of resiliency (Schneider, 2000), which makes social competence an even more valuable protective factor.

Many things that exist in their life influence the social functioning of at-risk students. For example, Ladd, Hart, Wadsworth, and Golter (1988) found that coming from a lower socioeconomic background was associated with higher levels of social withdrawal in young children. Ladd et al. speculated that this is because low SES parents lack the resources to facilitate opportunities for peer interactions for their children. This further emphasized the importance of peer interactions for the development of social skills, especially with at-risk children.

O’Donnell et al. (1995) also examined the social skills of low-income children in a school-based prevention program. They acknowledged the negative consequences facing these students, mainly in school, and called for the need for more preventative measures to be taken to thwart some of these consequences. In particular, they stressed the importance of enhancing the social development of low-income children. In a six-year study, O’Donnell et al. monitored the effects of a social development program on school failure, drug abuse, and delinquency. Results indicated that those in the program, as compared to a control group, showed more commitment to school, lower rates of substance use in the girls, and increased social skills in the boys. Once
again emphasizing that increased social skill development can serve as a protective factor against many of the negative outcomes associated with being at-risk.

**How to improve social skills.** Once it is determined that a particular child, or group of children are in need of social skill improvement, there are many interventions that can be used. The direct method of teaching social skills discussed previously is a popular method with disabled children and those with a marked social skill deficit. For example, Matson, Coe, and Smith (1991) implemented a social skills training program with developmentally delayed 4 and 5-year-old children. The goal was to increase socially appropriate behaviors, such as greetings and asking to see a toy, and also to decrease inappropriate behaviors, such as tantrums. Their two-phase intervention combined modeling, positive reinforcement, and role playing to teach the children how to use appropriate behaviors. Results showed that after the six-session program, the inappropriate behaviors of the developmentally disabled children were significantly decreased while positive social interactions significantly increased. Even though this intervention was demonstrated with developmentally delayed children, the design could be generalized to other populations as well.

Many educators and parents do not like the idea of taking time out of the school day, and presumably time away from academic learning, to teach social skills to children (Elksnin & Elksnin 1998; Malecki & Elliott, 2002). Recently, there has been a movement in education to integrate a social skills curriculum into the general curriculum, so that academic learning time is not jeopardized (Elksnin & Elksnin, 1998; Korinek & Popp, 1997; Williams & Reisberg, 2003). Williams and Reisberg acknowledged the problem that general education teachers face when trying to help students who have social skill deficits. According to the authors, the curriculum for teaching social skills exists, as does the procedures for integrating and infusing multiple curriculums, but the problem is bringing the two together. They suggested using a *curriculum matrix* for infusing social skills into the daily lessons. This method involves pairing different components of the lesson with a specific social skill and then introducing the skill when teaching that piece of the lesson. Skills should be logically and appropriately infused into relevant lessons, allowing for different skills to be presented at different times. In addition to this, students should be differentially reinforced when they display the behaviors at any time during the day. Williams & Reisberg claimed this model is more effective than setting aside a specific
time for social skills training because the skills are taught within the context of the academic lesson.

Korinek and Popp (1997) also proposed a method for combining social skills with academic instruction. They noted that many students are capable of developing positive social behaviors on their own, but many do not. Additionally, they assert that teaching social skills is more than just telling students what they need to do, it is making sure they are able to use these skills effectively. Korinek and Popp provided a detailed plan that involved three steps: (1) Target an academic or social skill (2) Match the social and academic skills (3) Weave social skills into the general curriculum. They suggested that general and special educators co-plan and possibly co-teach these integrated lessons. Also, teaching social skills does not have to be the primary objective of the lessons. It is also possible to have an academic skill, such as applying scientific methods, be the primary target and a social skill taught to complement it. This method of teaching social skills is especially effective for special needs students, because when they are taught in a separate classroom they often have difficulty generalizing such skills to other environments.

While the preceding interventions are school-based, there are many effective ways to intervene outside of school. Given the importance of peer interactions to social development, it is important to encourage children to participate in activities outside of school that allow them to interact with their peers (Mahoney, Cairns, & Farmer, 2003). As Zsolnai (2002) stated, “the more time children spend among their peers and friends, the more opportunities they have to practice their social roles and to acquire appropriate social behaviour” (p.319). With that in mind, extracurricular activities are an excellent way for children to see their peers outside of school. While such activities may not directly seek to teach children social skills, evidence from the literature indicates the many benefits they provide to children. For example, Mahoney, et al. found that participation in extracurricular activities was a significant contributor to long-term educational success and interpersonal competence. Those students who had low interpersonal competence to begin with showed the most marked improvements.

Another very valuable way for children to interact with their peers outside of school in a safe environment is through after school programs. The success of these programs, and the benefits to at-risk students, has been documented in the literature.
After School Programs

Educators, parents, community members and researchers alike want to find ways to enhance the experiences and opportunities available to students. Along with this is the desire to help all students, not just those at-risk, succeed in school and to keep them safe (Weisman & Gottfredson, 2001). One increasingly popular strategy to help students outside of the traditional school setting is the use of after school programs (Seligson, 1999). As cited in Weisman and Gottfredson, 7.5 million students between the ages of 5-14 are left unsupervised after school. They also noted that time left unsupervised may lead children to commit delinquent acts, use drugs, drop out of school, and engage in a variety of other negative behaviors. Providing children with a safe environment after school may encourage them to seek more constructive activities, which is why after school programs are so important. Well-known national organizations, such as 4-H, Boys and Girls Club, and the YMCA have been successful at attracting and helping troubled or delinquent youth (Weisman & Gottfredson). Also, Witt and Crompton (1996) edited a comprehensive book that lists recreational type programs that have proven to help at-risk youth. The book is an excellent resource for those interested in learning about a variety of successful programs in and out of the United States.

While many programs are successful, it takes a great deal of time and effort to develop a program that works. Fletcher and Padover (2003) listed three goals that after school programs should have (1) Providing a safe, positive environment for children and youth during the hours they are most at risk (2) Raising student academic performance and strengthening social skills (3) Building community partnerships that strengthen program quality and improve prospects for sustainability. Creating a program that incorporates all of these goals successfully can be a very challenging task. Quinn and Kahne (2001) found that people developing after school programs have so many factors to consider that their efforts to coordinate all of them sometimes hinders the success of the program itself. Weisman and Gottfredson (2001) also noted that program planners have to deal with the fact that many at-risk students do drop out of these programs, which means the programs are not necessarily serving those that most need the help. Finding ways to keep students in these programs is another factor that needs to be addressed. However, this should not deter people from implementing after school programs because they can serve as an excellent resource for children.
After school programs are often designed to help students either socially or academically. This is especially important when working with children who are at-risk, or have some type of special need. Current research documents the many benefits that after school programs can have for all children; especially those who are considered at-risk.

Gardner, et al. (2001) implemented and evaluated an after school program for at-risk youth in collaboration with The Ohio State University, a public school, and a local church. They noted that when working with urban, at-risk youth it is especially important for the community to be involved in after school programs. At-risk children in urban settings are also more susceptible to the dangers that exist in urban settings (Halpern, 1992, 1999; Posner & Vandell, 1994; Shelley, 1984) and community members can help protect children from these dangers. Low-income neighborhoods often lack resources and activities for children, which is another reason why after school programs are needed in these areas (Halpern, 2000; Hofferth, 1995; Little & Wynn, 1989). Gardner, et al. aimed to improve academic functioning of a group of urban students, help them develop appropriate social skills, and protect them from the dangers of the streets. They employed a peer-mediated style program and post-test results indicated that the participants did indeed improve both socially and academically.

As discussed earlier, the importance of protective factors for at-risk children cannot be emphasized enough. The idea of helping these children build resiliency is often considered in the planning of after school programs (Pierce & Shields, 1998; Rak & Patterson, 1996). Children who are resilient are more flexible and likely to succeed despite difficult and limiting situations at home and school (Barr & Parrett, 2001). Pierce and Shields developed a community-based after school program aimed at developing resiliency in at-risk youth in an urban setting. They compared students who participated in their program (Be A Star) to those who participated in a more traditional after school program. The Be A Star program aimed to (1) improve decision making skills and interpersonal competence (2) improve cultural awareness, and (3) increase unfavorable attitudes toward alcohol and drug use. In addition to these components, Pierce and Shields added support groups for parents and collaboration with community members. Results indicated that those who were in the Be A Star program scored better on twelve out of sixteen domains, such as self-concept and locus of control. This study demonstrates that children can be taught to be resilient, which is something they may not learn without direct instruction.
When children are home alone after school they are forced to take care of themselves if there is no alternative, such as an after school program. However, Halpern (2000) noted that if after school programs are too regimented children may actually prefer being at home where they can do whatever they please. Posner and Vandell (1994) found that children who participated in a formal after-school program displayed better academic achievement and social adjustment compared to students in other types of after-school care, such as daycare and maternal care. The children greatly benefited from having structured activities in which they could interact with adults and their peers. Given that there is such a fine line between what is too structured and what is not structured enough, it is important for program planners to find a balance between giving children the freedom of choice and providing a safe, constructive environment.

*Arts-based Programs.* Programs that incorporate recreational and creativity-based aspects have proven successful at providing children with fun activities, while still teaching them valuable skills. Quinn and Kahne (2001) stressed the importance of children participating in art programs, whether in or out of school. They noted that participating in the arts can be very beneficial to children and cited numerous studies that suggest a relationship between the arts and increased academic achievement (see Anderson, 1998; Catterall, 1998b; Chapman, 1998a; Darby & Catterall, 1994; Fiske, 1999; Heath & Roach 1998; Luftig, 2000). Quinn and Kahne implemented an after-school arts program in an urban school district that was somewhat successful, but was severely hindered by the lack of communication between the artists and the school staff. While the students did not show significant changes in their standardized test scores, this is a prime example of the challenges of designing a program that seeks to help students in more than one area.

Aside from helping students academically, arts-based programs can help students socially as well. Mason and Chuang (2001) designed a completely arts-based after-school program to improve adaptive functioning and reduce problem behaviors of low-income urban children. They hypothesized that those in the program would show more improvement than those in a control group. The program consisted of drama and dance activities led by African American artists and results from the study supported their research hypotheses. Mason and Chuang concluded that arts-based after school programs can be successful at enhancing children’s social skills, which can be “a very robust protective factor for behavioral problems” (p.52). How
children are affected socially must be considered when looking at the effects of after school programs.

The few studies in the research literature that focus on arts-based programs typically focus on urban school children. However, children in other locations also have needs that can be met by these types of after school programs. Campbell (2001) started the After-School Art (ASA) program aimed at helping rural school children whom often experience “urban” problems. Rural school districts frequently experience financial problems, have poor facilities, and may not have access to sports, art, music, and a variety of other resources. There is often a lack of things for children to do after school in rural areas, similar to urban neighborhoods, which is why after school programs can be beneficial in both locations. Campbell advocates arts-based after school programs, not only because this may be the only exposure children have to the arts, but because it is positively correlated with social and academic student achievement. Campbell identified four components that were central to the success of the ASA program: (1) the program must have a community-based focus (2) must make use of an existing resource base (3) must exhibit sensitivity and awareness of community issues, and (4) the program must be participant directed. The ASA program was successful at providing children with a chance to escape rural poverty through their own artistic expression, and it can also be used in an urban setting.

Research has shown after school programs to be successful in helping children socially, academically, and exposing them to a variety of experiences. Another important benefit of such programs is providing them the opportunity to interact with their peers. As mentioned previously, as children grow older it becomes increasingly important for them to feel like they belong or identify with their peers (Englund, et al., 2000). While many after-school programs seek to help children either academically or socially, it may be beneficial for program planners to consider integrating social and academic components. The two domains are more related than one might think and there is a substantial body of literature that supports the idea of linking academic and social variables together.

The Link Between Social Competence and Academic Achievement

As evidenced in the literature, there is a concern for the social functioning and academic achievement of school children, especially those considered at-risk. There appears to be a relationship between social competence and academics, which is why the two are often studied
in conjunction. A number of researchers have found support for this relationship in children of all ages and from different countries (DiPerna & Elliott, 1999; Feshbach & Feshbach, 1987; Green, Forehand, Beck, & Vosk, 1980; Gresham & Elliott, 1990, Lambert & Nicholl, 1977; Malecki & Elliott, 2002; Wentzel, 1991, 1993; Zsolnai, 2002). The following are examples from the literature that demonstrate the variety of research conducted in this area.

Welsh, et al. (2001) documented and hypothesized as to why social competence and academic achievement are correlated. Taking into account results of previous research, Welsh et al. argued that the relationship is reciprocal in nature and sought to investigate this in a longitudinal study. They hypothesized that a bidirectional relationship between social competence and academic achievement would be found in a group of school-age children, when the two were studied in conjunction. Social acceptance, prosocial and aggressive behaviors were assessed by teachers and peers, along with measures of academic achievement. Welsh et al. did indeed find a reciprocal relationship between measures of social competence and academic achievement from one school year to the next. Academic achievement was found to have significant influence over social competence, with low academic achievement relating to negative social competence and high academic achievement relating to positive social competence. There was also a significant link in the other direction, with social competence influencing academic achievement. However, this relationship was not found at every grade level, so this reciprocal relationship may not be consistent in all situations. The findings from this study are very influential in that they provide support for the idea that helping children in one domain can also help them in another. Therefore, it would not be unreasonable to design a plan to help students improve academically and to also expect to see improvements socially.

This idea of a reciprocal relationship between social competence and academic achievement is the foundation for studying these two concepts. Chen, Ruben, and Li (1997) suggested that academic success and social competence are interdependent, therefore, academic achievement may be facilitated by social development and vice versa. Given this reciprocal relationship and the fact that peer interactions are so important to social development, it is not surprising that positive peer interactions have also been linked with better academic performance. For example, Diehl, Lemerise, Caverly, Ramsay, and Roberts (1998) found that in 7-8 year olds, school performance was positively correlated with peer acceptance and whether or not they had friends. Azmitia (1988) also found that young children performed better on tasks
when working with peers as opposed to independently. This idea of children working together and learning through collaboration is the main reason for the development of cooperative learning and Montessori school designs (Schneider, 2000).

Malecki and Elliott (2002) also found strong support for a predictive relationship between social skills and academic achievement. They acknowledged the fact that educators and parents are concerned with the social functioning of students, but are still hesitant to take time out of the school day to teach social behaviors. The perception is that academics and social behaviors are two separate entities and that schools are not responsible for the social development of children (Schneider, 2000).

However, Malecki and Elliott (2002) found evidence to the contrary. Participants were 139 third and fourth graders who were assessed at the beginning of the school year and again at the end using the Social Skills Rating System (Gresham & Elliott, 1990) and a measure of academic achievement. Results showed that social skills were positive predictors of academic achievement and that problem behaviors were negative predictors of academic achievement. However, social skills were a more significant predictor. The concept of social competence as a predictor for academic achievement has many implications, particularly for assessment. For example, Wentzel (1991) suggested that social competence is in fact a more accurate indicator of achievement that measures of intelligence.

As mentioned previously, both the academic performance and social functioning of at-risk students are a major concern. Becker and Luthar (2002) described how the link between these domains relates to disadvantaged students. They acknowledged that there is a significant achievement gap between these students and others, which is why it is important to consider factors that help/hinder academic success. Specifically, they discussed social-emotional factors that act as both risk and protective factors. Becker and Luthar integrated findings from previous research to develop a framework for better understanding this link. They concluded that academic and school attachment, teacher support, peer values, and mental health were critical to academic performance. Other researchers have also documented the importance of social factors to the academic functioning of at-risk students (Elmore, 1992; Lee & Smith, 1999; Luthar, 1999; Weinstein, 2002).

While there is an abundance of research on at-risk students, social skills, academic achievement, and after school programs, research is needed that examines all of these factors.
together. Given the problems at-risk students have both academically and socially, we need to find more ways to help them, one of which could be after school programs.

The Current Study

The current study was designed to further investigate how after-school programs affect the social and academic functioning of at-risk students. As shown, previous programs have been successful in helping students in both areas. However, the two domains are not always considered at the same time when planning the goals of after-school programs for at-risk students. The present after-school program had both academic and arts-based components that provided many opportunities for the children to interact with their peers, which is important for both social and academic improvement. In light of previous research, the following six hypotheses were proposed: (1) The students in the experimental and control groups will not be different in terms of cognitive ability as measured by the Cognitive Abilities Test (COGAT) administered to all students (2) There will be a statistically significant positive correlation between the SSRS-S scores and the math proficiency scores for both pretest and posttest data (3) There will be a statistically significant positive correlation between the Social Skills Rating System (SSRS) scores and the reading proficiency scores for both pretest and posttest data (4) There will be a statistically significant difference in the SSRS-S scores for the experimental group when comparing pre and posttest scores. Also, there will be a significant difference in the SSRS-S posttest scores between the experimental and control groups (5) There will be a significant improvement in the math scores for the experimental group when comparing pre and posttest scores. Also, there will be a significant difference in the posttest math scores between the experimental and control group (6) There will be a significant improvement in the reading scores for the experimental group when comparing pre and posttest scores. Also, there will be a significant difference in the posttest reading scores between the experimental and control group. The hope was for the results of this study to expand upon current research concerning at-risk children, social competence, academic achievement, and after-school programs by finding a relationship among all of these factors. In turn, those findings could help educators, parents, and community members who are interested in designing after-school programs to help at-risk students.
Method

Participants

Participants were 163 students in grades 3-6 from two schools in an urban district in Ohio. Both of these schools have been labeled “at-risk” by the state in terms of economic disadvantage and academic failure on standardized tests. The schools were targeted because the student body was labeled at-risk as a whole. Approximately 98% of the students in these schools received free or reduced lunch and Title I academic help. The racial makeup of the two schools was approximately 20% black, 5% Hispanic and 75% white. The students who participated in this study were considered to be at great-risk for academic failure. For example, for the previous school year, the passing rate in these schools on the state proficiency tests was 38.3% for reading and 32% for math. The school system as a whole was considered to be below acceptable standards for proficiency test achievement and also had a low high school graduation rate.

For this study, students were recruited on the basis of their participation or non-participation (for a control group) in a federally funded after school program conducted by the school system. Participation in the study was voluntary and required parental consent (see Appendix A). Involvement in the after school program was open to all students in the school, but not all parents chose to enroll their child.

Conditions

For the purposes of this study, the students were divided into two groups. One included those students participating in the program (experimental group) and the second was a control group of students not involved in any aspect of the program. In the pretest phase 163 students participated, 72 experimental and 91 control.

The following description of the after school program was obtained through interviews with program coordinators and program documentation. The after school program was a collaboration of arts, education, and community-based social services to help children in low-achieving schools improve their reading and math skills. Parents were also included in the program and additional services, such as English as a Second Language Classes, were also available. Children who attended either school were eligible to participate in the after-school programming that took place at their school. The program coordinated with other community agencies to provide the students with a variety of learning activities. The goals of the program
were to improve life skills and academics. While improving social competence was not a predetermined goal of the program, previous literature showed that it is possible for children to learn from others when they have the opportunity to interact with others and model their behavior (Bandura, 1977).

**Materials**

For this study, the students’ scores on state standardized tests served as a measure of academic achievement. Students in fourth and sixth grade took the Ohio Proficiency test and students in third and fifth grade took the Off-grade Ohio Proficiency test. All of the tests consisted of a math section and a reading section. On the math portion there were eleven subtests, but not every grade took all eleven subtests. The subtests were patterns and functions, problem solving, number relations, geometry, algebra, measurement, estimation, data analysis, concept understanding, knowledge and skills, and application. For the reading portion there are four subtests—constructs meaning in fiction, extends meaning in fiction, constructs meaning in nonfiction, and extends meaning in nonfiction. Results are reported as standard scores, and for each grade the students have to perform above a certain standard score to pass. For the purposes of the current study, two scores were used (1) the students’ composite math score and (2) the students’ composite reading score. Test scores for each participant were collected both before the program began (Spring 2003) and again one year later (Spring 2004).

In addition to collecting the proficiency data, scores on the Cognitive Abilities Test (COGAT) administered to all students in the district were also collected. The COGAT yields a composite score as an indicator of the child’s overall cognitive ability as measured by that test. These scores served as a covariate in data analyses so that any differences detected by the analyses could not be attributed to a difference in cognitive ability between students in the two groups.

Perceived social competence was measured using the *Social Skills Rating System (SSRS)* (Gresham & Elliott, 1990). According to Gresham and Elliott, the *SSRS* was designed to document the perceived frequency and importance of behaviors influencing the student’s development of social competence and adaptive functioning. This system used student (not available at the preschool level), teacher, and parent report forms to assess the domains of social skills, problem behaviors, and academic competence. All three forms included the social skills domain under which there are five subscales: cooperation, assertion, responsibility, empathy, and
self-control. Both the parent and the teacher forms assess the problem behaviors domain, which has three subscales: externalizing problems, internalizing problems, and hyperactivity. Only the teacher form at the elementary and secondary levels contains the academic competence domain. The secondary, parent, and teacher forms also contain an Importance scale, where the respondent also rates the importance (0 = not important, 1 = important, 2 = critical) of the behavior in question, in addition to rating the frequency. According to Gresham and Elliott (1990), problem behaviors and academic competence are studied in conjunction with social skills because problem behaviors often interfere with social skill development and low achieving students often have social skill deficits. The SSRS has been used extensively in social skills research (Barron-McKeagney, Woody, & D’Souza, 2001; Bates, Luster, & Vandenbelt, 2003; Malecki & Elliott, 2002; Pedersen, Worrell, & French, 2001; Weisman & Gottfredson, 2001) and has proven to be a useful tool for screening, classification, and intervention planning.

For the current study, only the elementary form (SSRS-S), designed for use with children in grades 3-6, was used. The elementary form consisted of 34 items rated on a 3-point Likert scale (0 = never, 1 = sometimes, 2 = very often) that the students answer in regard to the frequency of their own behaviors (see Appendix B). Only the social skills domain is assessed on this form. According to Gresham and Elliott (1990), standard scores between 86 and 114 are considered average for the overall measure of social skills on the student form. While utilizing the entire SSRS system provides more complete information, the focus of this particular study was the self-perception of the children.

The SSRS has proven to be a reliable and valid instrument. Internal consistency is reported as follows: Social Skills =.83-.94, Academic Competence =.95, and Problem Behaviors =.73-.88. Test-retest reliability for the elementary form is reported as .68-.85 for Social Skills, .65-.84 for Problem Behaviors, and .93 for Academic Competence. Gresham and Elliott (1990) provided documentation for criterion-related, content and construct validity, which were found to be strong. Norming for the SSRS was conducted with a diverse group of 4,170 students. The group included students from eighteen states across the United States representing mostly Whites, Blacks, and Hispanics. Special education students were also included in the norming sample.
Procedure

The after-school program itself was made possible by a grant given to a team in the school district who implemented the program. The researcher was not involved in designing and implementing the program, but collected and analyzed the SSRS, COGAT and proficiency data. A pre/posttest design was used to collect the data. In the pretest phase, the following data were collected: the SSRS-S, proficiency scores from spring 2003 and students’ most recent COGAT scores. The central board office for the school district provided the students’ proficiency and COGAT scores. The SSRS-S was administered to the students in their classrooms by the classroom teacher before they began the after school program. The scale given to the children was typed exactly from the original protocol (see Appendix B). Teachers were provided with a script and instructions to read to the students during test administration (see Appendix C). The after school program is scheduled to last five years, but posttest data for this study was collected one year later using the same procedures as the pretest phase.

Results

Due to transient nature of people in this district, data was not available for all students in both phases of the study. In the pretest phase, 163 students completed the SSRS-S, but complete data was not available for all students because many were in a different district during the spring of 2003, or their scores simply could not be located. In the posttest phase, 121 students completed the SSRS-S and spring 2004 proficiency data was available for all students except for four. The following results were based on all available data.

Hypothesis 1: The students in both groups will not be significantly different in terms of cognitive ability as measured by the COGAT (N=108) administered to all students by the district.

According to an Analysis of Covariance (ANCOVA) there were no significant differences between the students in the experimental group and control group in terms of cognitive abilities. This test was done so that if any differences were found between the two groups it could be assumed that it was not due to one having a higher or lower cognitive ability.

Hypothesis 2: There will be a statistically significant positive correlation between the SSRS-S scores and the math proficiency scores for both pretest and posttest data.

A Pearson correlation revealed a significant positive correlation between pretest SSRS-S scores and scores for math achievement (r=.34, p<.01), as shown in Table One. For the posttest
data there was also a significant positive correlation between the SSRS-S and math scores ($r = .22$, $p < .01$), as shown in Table Two.

### Table 1. Pearson Correlations for Pretest SSRS-S, Math and Reading Scores

<table>
<thead>
<tr>
<th></th>
<th>Math 2003</th>
<th>Read 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSRS-S</td>
<td>.34**</td>
<td>.43**</td>
</tr>
<tr>
<td>N=163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 03</td>
<td>.54**</td>
<td>1</td>
</tr>
<tr>
<td>Math 03</td>
<td>1</td>
<td>.54**</td>
</tr>
</tbody>
</table>

** = $p < .01$

### Table 2. Pearson Correlations for Posttest SSRS-S, Math and Reading Scores

<table>
<thead>
<tr>
<th></th>
<th>Math 2004</th>
<th>Read 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSRS-S</td>
<td>.22*</td>
<td>.16</td>
</tr>
<tr>
<td>N= 121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read 04</td>
<td>.05</td>
<td>1</td>
</tr>
<tr>
<td>Math 04</td>
<td>1</td>
<td>.05</td>
</tr>
</tbody>
</table>

* = $p < .05$

**Hypothesis 3:** There will be a statistically significant positive correlation between the SSRS-S scores and the reading proficiency scores for both pretest and posttest data.

A Pearson correlation revealed a significant positive correlation between pretest SSRS-S scores and scores for reading achievement ($r = .43$, $p < .01$), however, there were no significant
positive correlations for the posttest scores, which can be seen in Tables One and Two. The data also revealed a significant positive correlation between the math and reading pretest proficiency scores \(r=.54, p<.01\), as seen in Table One.

**Hypothesis 4:** There will be a statistically significant difference in the SSRS-S scores for the experimental group when comparing pre and posttest scores. Also, there will be a significant difference in the SSRS-S posttest scores between the experimental and control groups.

A repeated measure Analysis of Covariance (ANCOVA) with COGAT scores as the covariate revealed no significant differences in the SSRS-S scores for the experimental group after participating in the after school program for one year. As shown in Table Three, the mean SSRS-S score for this group was higher in the pretest (97.2) compared to the posttest (93.2). A higher score indicates a higher degree of perceived social competence (maximum score = 160). There were no significant differences on the SSRS-S for the control group and the mean score for this group was slightly higher in the pretest (102.8) compared to the posttest (100.0). No significant differences were found between the experimental and control groups for SSRS-S posttest scores. The control group had a higher SSRS-S mean compared to the experimental group.

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental</strong> Group</td>
<td>97.2</td>
<td>93.2</td>
</tr>
<tr>
<td>N = 72</td>
<td></td>
<td>N = 57</td>
</tr>
<tr>
<td><strong>Control</strong> Group</td>
<td>102.8</td>
<td>100.0</td>
</tr>
<tr>
<td>N = 91</td>
<td></td>
<td>N = 64</td>
</tr>
</tbody>
</table>

Table 3. Mean SSRS-S Scores for Experimental and Control Groups
Hypothesis 5: There will be a significant improvement in the math scores for the experimental group when comparing pre and posttest scores. Also, there will be a significant difference in the posttest math scores between the experimental and control group.

An ANCOVA revealed no significant differences between the math pretest scores and the math posttest scores for both the experimental and control groups, which can be seen in Table Four. The mean for students in the experimental group increased slightly from 203.8 to 209.9. The mean for the control group also increased from 204.5 to 215.5. Contrary to the hypothesis, the control group showed greater improvement than the experimental group. However, none of these differences were significant.

Table 4. Mean Math Proficiency Scores for Experimental and Control Groups

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>203.8</td>
<td>209.9</td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>204.5</td>
<td>215.5</td>
</tr>
</tbody>
</table>

Hypothesis 6: There will be a significant improvement in the reading scores for the experimental group when comparing pre and posttest scores. Also, there will be a significant difference in the posttest reading scores between the experimental and control group.

An ANCOVA revealed no significant differences between the reading pretest scores and the reading posttest scores for both the experimental and control groups, which can be seen in Table Five. For reading the experimental group increased slightly from 211.1 to 214.3. The control group remained approximately the same from pre to posttest with 214.0 and 213.9. None of these differences were significant.
<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experimental Group</strong></td>
<td>211.1</td>
<td>214.3</td>
</tr>
<tr>
<td><strong>Control Group</strong></td>
<td>214.0</td>
<td>213.9</td>
</tr>
</tbody>
</table>

**Additional Analyses.** While no further predictions were made, the data set also provided information about the two groups in terms of gender. An ANCOVA found no significant differences in either of the groups when gender was a factor, but the following trends were found.

Females in the control group tended to have the highest average on the SSRS-S with a mean of 106.7 in the pretest and 104.3 in the posttest. All groups experienced a slight decrease in the SSRS-S scores from pre to posttest except for the experiment group males. Similar trends were found in the proficiency scores when gender was a factor. Control group females had the highest average in math both pretest (200.7) and posttest (206.9). They also had the highest pretest average in reading (218.6). Again, no significant differences were found among the groups for proficiency scores when gender was a factor.

**Discussion**

The data from the current study provided partial support for the six original hypotheses. Using the COGAT scores as a measure of covariance did in fact support the prediction that even though the students were in two different groups, they did not differ in terms of cognitive abilities. By doing this it allowed for any differences to be attributed to other factors rather than the students’ cognitive abilities.

A statistically significant positive correlation was found between the SSRS-S scores and the math and reading proficiency scores for all cases, except for the reading posttest scores. The relationship found between the measure of social competence and the measures of academic achievement supports previous research that has also documented this relationship (DiPerna & Elliott, 1999; Feshbach & Feshbach, 1987; Green, Forehand, Beck, & Vosk, 1980; Gresham &
Elliott, 1990, Lambert & Nicholl, 1977; Malecki & Elliott, 2002; Wentzel, 1991, 1993; Zsolnai, 2002). Whether or not one variable could be considered predictive of the other was not examined, but it would be a reasonable speculation given the reciprocal relationship between the two domains (Welsh et al., 2001) and a possible area of future research.

While the data did not show a statistically significant improvement for the experimental group on the SSRS-S, some interesting trends were revealed. First, the mean SSRS-S score for the experimental group was slightly higher in the pretest (97.2) compared to the posttest (93.2). The same was also true for the control group with a higher mean in the pretest (102.8) compared to the posttest (100.0). For posttest scores the control group had a higher SSRS-S mean (100.0) compared to the experimental group (93.2). These findings somewhat contradict the original hypotheses in that the mean SSRS-S scores actually went down for both groups and in the end the control group, who did not participate in the program, had a higher mean. Again, the decrease was slight and none of the differences were statistically significant. Previous research has documented the success of after school programs in helping at-risk children both socially and academically (Gardner, et al., 2001; Halpern, 1992, 1999, 2000; Pierce & Shields, 1998; Posner & Vandell, 1994). While the findings of the current study did not further support such research, it does not mean that after school programs do not benefit at-risk children in many ways. There were many limitations to this study that may help to understand why the results were not as predicted.

The nature of this research made it very difficult to conduct the study as planned. When dealing with at-risk populations, previous research has shown that a high rate of attrition is common when these individuals participate in some type of program (Weisman & Gottfredson, 2001). While approximately 73% of the students in the present study participated in both phases of data collection, many students did move out of the district, or were not in the district the previous school year so their test scores could not be located. Having missing data can greatly reduce the power of statistical analyses. Also, according to the after school program coordinators, those students who were in the program did not participate consistently. Even though a student was in the experimental group he or she did not necessarily receive the full benefits of the program. This could possibly account for the lack of support for the original hypotheses in which differences were predicted between the experimental and control groups.
It is also possible that great improvements were not found on the SSRS-S because the children had relatively high scores to begin with. According to Gresham and Elliott (1990), standard scores between 86 and 114 are considered average for the overall measure of social skills on the student form. Pretest means for both the experimental and control groups fell into this range, so there was not a lot of room for growth in such a short time period. Even though this did not support the original hypotheses, the fact that the children may have already had adequate social competency is encouraging. The children who participated in this study were at-risk students living in low-income neighborhoods lacking resources. They have found ways to achieve in this environment and despite less than desirable conditions, have developed social competency (as measured by the SSRS). Previous research noted the importance of social competency as a protective factor (Mason & Chuang, 2001; Schneider, 2000); therefore, it is good that these children scored high on a measure of social competence. This is not to say that the after school program will not benefit these students in the future, but even those who did not have access to the program showed adequate social competence.

Another limitation to this study was the method of data collection. The SSRS is a valid and reliable tool for measuring social competence, however, the current study only utilized the student self-report form. It was not possible, due to limitations and constraints imposed by the school district, to also administer the teacher and parent forms, but having that data would have provided greater insight into what skills the students actually have and how they use them. If this study were to be expanded, using all three forms could prove beneficial. Another limitation is that the SSRS-S might not have measured the skills the children were learning in the program. The measure may not have been sensitive enough and targeting social skill development was not part of the after school program design. This would be an important point to remember in future planning, whatever skill you want to improve needs to be directly targeted.

It is also important to note that rating forms are not the only way to collect social competency data. The limitation with self-report is that it only measures the child’s reality, not necessarily what is true. Interviews and observations are an excellent way to collect qualitative data to gain a broader understanding of the many aspects of social competence. The current study was unable to use these alternative measures of data collection due to restrictions and procedures that were already in place by the coordinators of the after school program.
The current study also provided interesting insight as to how gender plays a role in terms of social competence and academic achievement. The control group females had the highest scores on both academic and social measures. No predictions were made about gender, but this data suggests a relationship between gender, social competence, and academic achievement that would be a rich area for future research. However, if this line of data analyses were pursued, it would be useful to consider possible gender bias in reporting.

As shown in the current literature, the construct of social competence is very complex and multifaceted (Granello, 2000; Schneider, 2000). Perhaps it would have been more appropriate to narrow the scope of the research and focus on one aspect of social competence, such as a discrete social skill. However, this is not to say that studying the entire phenomenon of social competence is not possible or a valid area of research. Previous studies have had great success in studying social competence, especially with at-risk children (Ladd et al., 1988; Mason & Chuang, 2001; O’Donnell et al., 1995)). It is a difficult type of research, which requires a great deal of planning and can be hard to coordinate. Collecting and locating data can also be difficult when working with this population, as it was in the current study, so it is not always the case of studying the wrong construct.

The current study did provide valuable data and insight into the nature of the relationship between social competence and academic achievement, even though there was a lack of support for many of the original hypotheses. If there had been more time this study could have been altered or expanded, but since that was not possible the following suggestions are offered for future research: (1) explore other options for measuring social competence besides the SSRS, (2) collect data from teachers and parents, (3) observe and measure students actually using the social skills they report to possess, and (4) conduct this type of research with other populations, such as special education students.
References


Dear Parent or Guardian:

My name is Kristina Spayde and I am a graduate student at Miami University. I am conducting research about how children get along with others and how this affects them academically. This is important to study because we will be able to help kids more if we understand how their social relationships affect their academics. I am requesting your permission for your son/daughter to participate in my study and to obtain his or her state proficiency and COGAT scores collected by the school.

This study involves your child completing a short questionnaire about how they get along with others. The questionnaire will be given in small groups and may be read to students if they wish. The whole process should take approximately 20 minutes. I will be looking at the students’ scores on the state proficiency and COGAT tests as well. This data is being collected as part of an after school program, designed by the Hamilton City School district, that is occurring in your child’s school. The students will complete the questionnaire before the program starts and again one-year later to look for improvements. We are interested in your child’s responses whether or not he or she is part of this after school program.

Results and information about your child will be kept confidential and will not be shared with anyone else. Participation is completely voluntary and the students may choose to stop at any time. Also, choosing not to participate in this study will not affect the student’s participation in the after school program (for those who are in the program). If you have any questions about this study please feel free to contact me by phone at (513) 523-5331 or e-mail at kmspayde@hotmail.com. You may also contact my advisor, Richard Luftig at (513) 529-6636. For any questions about your child’s rights as a participant, please contact the Office for the Advancement of Scholarship and Teaching at (513) 529-3734 or humansubjects@muohio.edu. Please return the bottom portion of this sheet to ______________ by ___________.

Sincerely,

Kristina Spayde

________________________________________________________________________

Yes, I give my son/daughter, ____________________ permission to participate in Kristina Spayde’s study.

Parent/Guardian Signature________________________  Date____________________
Appendix B

Social Skills Rating System (SSRS)—Student Form
Gresham & Elliot (1990)

Student Information

Name________________________     Grade_____     Boy_____       Girl______
Age_____     Birth date_________     Teacher_____________________________

******************************************************************
This paper lists a lot of things that students your age may do. Please read each sentence and think about yourself. Then decide how often you do the behavior described.

If you never do this behavior, circle the 0
If you sometimes do this behavior, circle the 1
If you very often do this behavior, circle the 2

Here are two examples:

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Never</th>
<th>Sometimes</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>I start conversations with classmates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I keep my desk clean and neat</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This student very often starts conversations with classmates. This student keeps his or her desk clean and neat sometimes.

If you change an answer, be sure to erase completely. Please answer all questions. When you are finished, wait for further directions from your teacher.

Be sure to ask question if you do not know what to do. There are no right or wrong answers, just your feelings of how often you do these things.

Begin working when told to do so.
<table>
<thead>
<tr>
<th></th>
<th>How Often?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>---</td>
<td>----------</td>
</tr>
<tr>
<td>1. I make friends easily</td>
<td>0</td>
</tr>
<tr>
<td>2. I smile, wave, or nod at others</td>
<td>0</td>
</tr>
<tr>
<td>3. I ask before using other people’s things</td>
<td>0</td>
</tr>
<tr>
<td>4. I ignore classmates who are clowning around in class</td>
<td>0</td>
</tr>
<tr>
<td>5. I feel sorry for others when bad things happen to them</td>
<td>0</td>
</tr>
<tr>
<td>6. I tell others when I am upset with them</td>
<td>0</td>
</tr>
<tr>
<td>7. I disagree with adults without fighting or arguing</td>
<td>0</td>
</tr>
<tr>
<td>8. I keep my desk clean and neat</td>
<td>0</td>
</tr>
<tr>
<td>9. I am active in school activities such as sports or clubs</td>
<td>0</td>
</tr>
<tr>
<td>10. I do my homework on time</td>
<td>0</td>
</tr>
<tr>
<td>11. I tell new people my name without being asked to tell it</td>
<td>0</td>
</tr>
<tr>
<td>12. I control my temper when people are angry with me</td>
<td>0</td>
</tr>
<tr>
<td>13. I politely question rules that may be unfair</td>
<td>0</td>
</tr>
<tr>
<td>14. I let friends know I like them by telling them or showing them</td>
<td>0</td>
</tr>
<tr>
<td>15. I listen to adults when they are talking with me</td>
<td>0</td>
</tr>
<tr>
<td>16. I show that I like compliments or praise from friends</td>
<td>0</td>
</tr>
<tr>
<td>17. I listen to my friends when they talk about problems they are having</td>
<td>0</td>
</tr>
<tr>
<td>18. I avoid doing things with others that may get me in trouble with adults</td>
<td>0</td>
</tr>
<tr>
<td>19. I end fights with my parents calmly</td>
<td>0</td>
</tr>
<tr>
<td>20. I say nice things to others when they have done something well</td>
<td>0</td>
</tr>
<tr>
<td>21. I listen to the teacher when a lesson is being taught</td>
<td>0</td>
</tr>
<tr>
<td>22. I finish classroom work on time</td>
<td>0</td>
</tr>
<tr>
<td>23. I start talks with class members</td>
<td>0</td>
</tr>
<tr>
<td>24. I tell adults when they have done something for me that I like</td>
<td>0</td>
</tr>
<tr>
<td>25. I follow the teacher’s directions</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>26. I try to understand how my friends feel when they are angry, upset, or sad</td>
<td>0</td>
</tr>
<tr>
<td>27. I ask friends for help with my problems</td>
<td>0</td>
</tr>
<tr>
<td>28. I ignore other children when they tease me or call me names</td>
<td>0</td>
</tr>
<tr>
<td>29. I accept people who are different</td>
<td>0</td>
</tr>
<tr>
<td>30. I use my free time in a good way</td>
<td>0</td>
</tr>
<tr>
<td>31. I ask classmates to join in an activity or game</td>
<td>0</td>
</tr>
<tr>
<td>32. I use a nice tone of voice in classroom discussions</td>
<td>0</td>
</tr>
<tr>
<td>33. I ask adults for help when other children try to hit me or push me around</td>
<td>0</td>
</tr>
<tr>
<td>34. I talk things over with classmates when there is a problem or an argument</td>
<td>0</td>
</tr>
</tbody>
</table>

**Stop. Please check to be sure that all items have been marked.**
Appendix C

Procedure for Administering the SSRS

Please follow the steps below when administering the SSRS to your class. I will be in the building during the testing to answer any questions you may have and to offer assistance. Thanks for your cooperation---Kristina Spayde (Miami Graduate Student)

1.) Handout the questionnaire to all students in the class who have a signed release form

2.) Instruct students to fill out the Student Information section of the questionnaire (name, grade, etc.)

3.) Read the instructions on how to answer the questionnaire items and do sample exercises with the whole group

4.) Read instructions that follow the sample exercises. Tell students that you will be reading each item and they should raise their hand if they need help with an item. It is okay to provide any assistance the students may need in order to complete the questionnaire.

5.) Read each item to the group, making sure not to move too quickly.

6.) When the students are finished (generally takes about 20 minutes) ask if they have any questions and have them turn in the questionnaires. I will then come to collect the completed forms.

Thank you for your help!!