

2018

Generalization of Social Skills Based on Instructional Setting

Monica St.Amand - Santos
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Social Psychology Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Monica St. Amand–Santos

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Kimberley Cox, Committee Chairperson, Psychology Faculty

Dr. John Agnew, Committee Member, Psychology Faculty

Dr. Georita Frierson, University Reviewer, Psychology Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2018

Abstract

Generalization of Social Skills Based on Instructional Setting

by

Monica St. Amand–Santos

MEd, Fitchburg State University, 2002

BA, Keene State College, 1997

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

November 2018

Abstract

Children with social skills deficits in verbal and nonverbal communication can face a variety of social challenges in many aspects of their lives. Given the increasing social needs of many students in today's classrooms, there is a need for increased social skills instruction and support in public schools. Inclusion opportunities in public schools can have a positive impact on the development of social skills and can increase peer understanding and empathy for students with special needs. Although there is research in the area of inclusion and its benefits, there is little known about the impact of the instructional setting on the ability of children to generalize social skills to other school settings. Based on social development theory and social learning theory, this quantitative study used secondary data ($N = 129$) from 2 primary schools in Connecticut to determine whether elementary age children are more likely to generalize social skills if they are taught social skills in the general education classroom setting compared to those who are taught social skills in the resource room setting or receive no instruction in social skills controlling for natural social skills growth. The result of an ANCOVA revealed that children who were taught social skills in the general education setting were more likely to generalize social skills across settings. The results of this study contribute to positive social change by helping inform school administrators and teachers about how to best support children with social deficits in reaching their academic and social potential. The findings may also help to create an environment that is more accepting of the varying needs of students and as a result can help to create a positive school climate and increase acceptance and friendships among elementary age students that can last into adulthood.

Generalization of Social Skills Based on Instructional Setting

by

Monica St. Amand-Santos

MEd, Fitchburg State University, 2002

BA, Keene State College, 1997

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

November 2018

Dedication

To my late husband who always encouraged me to continue my education and who was my biggest supporter in personal and professional practice. Without him, I would not have started this journey. To my family and friends for their continuous and ongoing support and patience.

Acknowledgments

I would like to acknowledge my family for their support throughout this process. Many thanks to Dr. Kimberley Cox, my dissertation chairperson for her continued support and encouragement. Lastly, I would like to extend thanks to the administrators and faculty of the study school districts for allowing data use to make this research possible.

Table of Contents

List of Tables	iv
List of Figures	iv
Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background	3
Social Skills Deficits.....	4
Instructional Methods	5
Impacts of Current Teaching Practice.....	9
Problem Statement	10
Purpose of the Study	12
Research Question and Hypotheses	12
Theoretical Framework.....	13
Nature of the Study	14
Definition of Terms.....	15
Assumptions.....	16
Scope and Delimitations	17
Limitations	18
Significance.....	18
Summary.....	20
Chapter 2: Literature Review.....	21
Introduction.....	21

Literature Search Strategy.....	23
Theoretical Foundation.....	23
Social Development Theory.....	23
Social Learning Theory.....	26
Review of the Literature.....	28
Social Skills Deficits.....	28
Detrimental Effects of Social Skills Deficits.....	31
Current Teaching Practices.....	34
Views on Inclusion.....	39
Inclusion Benefits.....	41
Summary and Conclusions.....	46
Chapter 3: Research Method.....	49
Introduction.....	49
Research Design and Rationale.....	50
Methodology.....	51
Population.....	52
Sampling and Sampling Procedures.....	53
Sampling Frame.....	54
Procedures for Obtaining Secondary Data.....	54
Instrumentation.....	55
Data Analysis Plan.....	59
Threats to Validity.....	61

Ethical Procedures	62
Summary	63
Chapter 4: Results	63
Introduction.....	65
Data Collection	67
Demographic Characteristics	68
Sample Population	69
Descriptive Statistics.....	70
Summary	77
Chapter 5: Discussion, Conclusions, and Recommendations	79
Introduction.....	79
Interpretation of the Findings.....	79
Limitations	85
Recommendations.....	86
Implications.....	88
Conclusion	91
References.....	93

List of Tables

Table 1. Average Number of Behavioral Referrals by Instructional Setting.....70

Table 2. Significance of Generalization After Social Skills Instruction..... 71

Table 3. Significance Between Social Skills Generalization and Instructional
Setting.....72

Table 4. Bootstrapped Display of Significant Generalization in Instructional Setting
2.....74

Table 5. Bootstrapped Comparison of Significant Generalization in Instructional Setting
2.....75

List of Figures

Figure 1. Linear slope between locations..... 76

Figure 2. Social skills growth by instructional setting 77

Chapter 1: Introduction to the Study

Introduction

There are an increasing number of children in today's schools with varying social-emotional needs. According to the Centers for Disease Control and Prevention (CDC; 2014), 1 in 68 children meet the diagnostic criteria for autism spectrum disorder (ASD) with other reports as high as 1 in 50 children. These children experience deficits in social and communication skills, which can lead to social isolation and challenges in establishing friendships (Radley et al., 2017). According to Corkum, Corbin, and Pike (2010), attention-deficit/hyperactivity disorder (ADHD), which is associated with social skills deficits, is among the most prevalent diagnoses in school-aged children. Children exposed to trauma or sexual abuse can also experience social skills deficits (Corkum et al., 2010). Social skills deficits can impede typical development and lead to depression and anxiety (Misurell, Springer, & Tryon, 2011; Thompson & Trice-Black, 2012).

Given the prominence of impairments in social skills for many children, social skills training is frequently implemented as an intervention. This training often takes place in a small group or individual format with like children (Radley et al., 2017). Although these interventions have been successful in social skills development for many children, these children continue to struggle with producing the skills learned in the instructional setting to a setting where these skills are expected to occur.

There are many supports implemented in today's schools that are meant to strengthen the academic and behavior skills of all students. These supports involve data-based, decision making strategies that are used to inform decisions about student

performance. Whole group behavior management is one approach that could improve student performance and effectively reduce problem behavior; this approach can also support multiple students in increasing their social skill development (Dugas, 2017). Whole group behavior management also facilitates peer interactions and reinforces prosocial behavior through whole group work (Chow & Gilmour, 2016).

Through the use of a positive reinforcement contingencies that are focused on desired behaviors instead of attending to challenging ones, students can strengthen their social skill use (Olive, 2010). This strategy is referred to as differential reinforcement of other behavior (DRO), and it has been proven effective in reducing problem behaviors (Shumate & Wills, 2010). DRO was not only found to increase socially desirable behaviors but also changed adult behavior for the better because the adults increased the amount of praise given more than being punitive (Rodriguez & Anderson, 2016). Positive teaching interventions and peer modeling can also greatly improve the social skills of students with social skill deficits (Lyons, Huber, Carter, Asmus, & Chen, 2016). This overall behavior change can lead to positive changes in overall school climate, stronger academic performances, and overall stronger social functioning (Mavropoulou & Sideridis, 2014).

In this study, I examined the ability of elementary school children with social skills deficits to generalize social skills when they either receive no specific social skills instruction in the general education classroom, social skills instruction in the resource room, or social skills instruction in the general education setting. The findings of this study could impact how social skills are taught in schools and bring about positive social

change for many children, families, and educators because it is known that the positive social experiences children have at school can help them to develop socially (see Albrecht, Mathur, Jones, & Alazemi, 2015). Social competencies and social behaviors are essential for all students to be successful in school and life (Garrote, 2017; Mariyam & Shabbir, 2013), so providing the appropriate instruction to students is crucial in helping them to develop into successful adults.

This chapter will include the rationale for conducting this study and an outline of the importance and the potential impact that the findings could have on how social skills are taught in the public school setting. I will provide a description of the students who struggle with social skills deficits and the impacts these deficits can have on them. The chapter will also include a discussion on instructional methods and current teaching practices as well as a discussion of why the study is needed.

Background

There are many students in today's schools who are identified as having social skills deficits (Cranston, 2017). Social skills deficits can be detrimental to a child's educational and social development (Webb, Miller & Pierce, 2004). These deficits can lead to significant behavioral challenges and other difficulties felt by children, families, and schools (Albrecht et al., 2015). Given the increasing number of students in today's schools who exhibit social skills deficits, it is important to look at how those deficits impact the child (Jahnukainen & Itkonen, 2016). It is also important to look at current teaching practices and how those practices can impact a child's ability to learn and use social skills effectively because ineffective teaching can potentially escalate problem

behaviors (Wolfberg, DeWitt, Young, & Nguyen, 2015). Garrote (2017) found that the experiences children have in school can influence their socio-emotional development.

Research has shown that social skills instruction can be effective in helping children develop social skills (Albrecht et al., 2015; Laugeson, Ellingsen, Sanderson, Tucci, & Bates, 2014). There are also known benefits to inclusion for all students (Battaglia & Radley, 2014; Ogelman & Secer, 2012). What is unknown is whether the setting in which social skills instruction takes place can impact the ability of a child to generalize social skills. This study was needed in order to gain information on how to better support children with social skills deficits and the results of which can have far reaching and long-lasting positive impacts on children. Social competencies and social behaviors are essential for all students to be successful in school and life (Garrote, 2017; Mariyam & Shabbir, 2013).

Social Skills Deficits

Children with social skills deficits, including those diagnosed with autism, often display difficulties with verbal and nonverbal communication resulting in negative social impacts, such as difficulty developing and maintaining friendships and participating in activities with nondisabled peers (LaMarca, 2008; Sansosti, 2010). According to the CDC (2016) and Sansosti (2010), there has been an increase in children diagnosed with autism in recent years, making it the fastest growing disability in the United States. Autism is diagnosed in 1% to 2% of children or 1 in 42 boys and 1 in 189 girls across cultures and socioeconomic groups (CDC, 2016). As a result, some schools are adapting to meet the needs of these children by teaching social skills. Unfortunately, most schools continue to

teach social skills in isolation within a special education classroom, resource room setting, or in separate facilities rather than in the general education setting (Camargo et al., 2014; Laugeson et al., 2014).

There are also many other children, some with ADHD, some with emotional and behavioral disorders, as well as those without diagnoses, who also struggle with social skills deficits leading to socially inappropriate or disruptive behavior (Morgan et al., 2016; Zach, Yazdi-Ugav, & Zeev, 2016). Rutherford, Mathur, and Quinn (1998) discussed social competence as being the social skills exhibited that increase an individual's social effectiveness. Children who display social competence can initiate and maintain positive social interactions, have friendships, and manage their social environment (Rutherford et al.). Skill limitations or deficits in social skills can result in low self-esteem, peer rejection, social maladjustment, mental health problems, and delinquency (Asher & Wheeler, 1985; Elliott & Gresham, 1993). Rutherford et al. found that children who display these maladaptive behaviors may not have learned the social skills necessary for appropriate social skills engagement resulting in school difficulties.

Instructional Methods

Many students, including those diagnosed with autism or ADHD, display deficits in social skills, which can impact varying aspects of their lives (LaMarca, 2008; Leaf, Dotson, Oppenheim-Leaf, Sherman, & Sheldon, 2011; Saylor & Leach, 2009). Students requiring social skills instruction are often taught through direct instruction, which provides a one-to-one or small group teaching format in which skills are broken down into smaller steps (Morgan et al., 2016). Direct instruction is also used in Applied

Behavior Analysis (ABA), which is commonly used to teach new skills to students with autism (Anderson & Romanczyk, 1999). Anderson and Romanczyk (1999) reported on the ability of students with autism to quickly gain social skills through ABA and its teaching methods, pointing out that ABA and direct instruction do not have to take place in isolation because they are also effective in the general education setting to support students in need of social skills instruction.

As an instruction method, cooperative learning has been found to increase achievement and socially appropriate behavior in addition to improving the attitudes and feelings of children (Rutherford et al., 1998). This form of teaching supports social skills use across settings while the process of developing group goals can help to create positive group dynamics and increase opportunities for positive social interactions (Popa, 2011). Cooperative learning could provide the reinforcement needed to support social skills development and skill generalization. Incorporating social skills into cooperative learning groups can also provide opportunities for children to experience common social problems and then use skills necessary to manage those problems as they naturally occur (Rutherford et al., 1998).

There are additional instructional methods and programs that have been effective in teaching social skills to children with autism. Anderson and Romanczyk (1999) found that effective instructional programs included clearly defined learning objectives, ongoing assessment, and intervention changes based on skill acquisition as well as a variety of teaching methods. The authors discussed the importance of providing a comprehensive approach to aid in rapid skill acquisition. Sansosti (2010) found that

response to intervention (RTI) is another means to provide instruction within the general education environment, though there have not been studies on the efficacy of this multitiered social skills approach within the public school setting.

Morgan et al. (2016) found that many schools use discussion, along with direct instruction, modeling, and role plays, for those students with emotional behavioral disorders to target social skill development. Though this has been somewhat effective, students being taught this way continue to have difficulty generalizing social skills to the natural environment due to these skills being taught in isolation (Morgan et al.). The authors believe the children miss a connection when taught in a separate setting, which can limit their ability to generalize the social skills learned.

Laugeson et al. (2014) also found that research on long-term change and the generalization of social skills was lacking and that this is due to intervention and instruction taking place outside of the school setting. The authors reviewed the PEERS Curriculum for School-Based Professionals, which was facilitated by teachers in the public school setting and provided social skills instruction at the middle school level. The authors found improvement in social responsiveness, social motivation, awareness, and social communication, thus providing evidence for efficacy of the programming in the classroom for middle school-aged students with high functioning autism.

Similar to other studies, Albrecht et al. (2015) agreed that through inclusion, children with disabilities can improve socially through observation of their typically developing peers, if the child is able. For some children, however, it may be necessary to work on social skills in a separate setting prior to inclusion and then use a gradual

progression from individual to group instruction as exposure alone may not be enough to gain social skills (Webb et al., 2004). It is important to focus on the individual's needs as behavioral strategies that are used in separate settings may also be appropriate for use in inclusion settings where they can be embedded into daily activities (Webb et al.).

School climate can also have a significant impact on student behavior and achievement, according to Albrecht et al. (2015). Positive social experiences at school can help students to develop socially (Webb et al., 2004). Without these experiences, skill deficits can result in peer rejection, social withdrawal, and social isolation (Webb et al.). Positive school climate and social skills development are beneficial to all students, not just those with social skills deficits. For example, Mavropoulou and Sideridis (2014) looked at a partial integration program for elementary-aged students and its impact on their peers and found that as a result of inclusion practice, typically developing peers displayed increased understanding and positive attitudes toward those with autism, creating a positive impact in the classroom and overall school climate.

Whitby, Ogilvie and Mancil (2012) found that there was an increasing number of students with Asperger's syndrome in today's public schools and discussed the benefits of providing both academic and social skills instruction within the general education classrooms. The authors found that teaching social skills within the classroom can provide a model for appropriate behavior that can be naturally reinforced, increasing the likelihood of the behavior continuing. Despite this, it has been found that children with social skills deficits are often taught in isolation, due to their behavioral needs, which

limits contact with peers and can escalate behavioral and social challenges (Wolfberg et al., 2015).

Whitby et al. (2012) determined that providing a framework to teachers would increase their success with providing instruction for social learning because these skills should not be taught in isolation given the benefit of collaboration and modeling in increasing generalization opportunity. The authors recommended that this framework include the student's individualized education plan, social skills instruction within the classroom, and prosocial modeling of behavior. In addition, collaboration between all members of the student's team was noted as being an important component in helping a child to develop as a social being and be able to use the skills taught in a socially appropriate and functional way.

Impacts of Current Teaching Practice

Teaching students with social skills deficits in a separate setting from the general education setting decreases opportunities for interaction with their peers, which can lead to social isolation and increased problem behaviors (Cappadocia, Weiss, & Pepler, 2012; Saylor & Leach, 2009). In seminal research, Rutherford et al. (1998) found that students may display negative behaviors potentially due to limited opportunities to learn appropriate social communication skills, including listening, social interactions, reciprocal communication, and social expression. If there are deficits in these skill areas, managing social situations will be challenging.

Teaching socially appropriate replacement behaviors is a proactive approach that can be effective in helping children to build a repertoire of appropriate social responses

that can replace problem behavior (Cooper, Heron & Howard, 2007). Teaching social skills in a separate setting can make using these skills or the generalization of social skills to other settings more challenging due to the lack of naturally occurring reinforcement that is more likely to occur in the general education setting (Morgan et al., 2016).

Although studies have shown effective instructional strategies for students with social skills deficits, these studies are typically completed outside of the general education setting. Before now, there was no evidence on the impact that instructional setting can have on a student's ability to generalize social skills learned.

Skill generalization is needed to replace social deficits with more socially accepted behavior (Brännström, Kaunitz, Andershed, South, & Smedslund, 2016). Children's use of social skills across instructional settings is imperative in helping them to develop friendships and work more effectively within a classroom environment (Lord & McGee, 2001). Incorporating the instruction of social skills in the general education classroom setting could provide opportunities for generalization as well as provide exposure to the varying populations of children in today's schools, benefiting all of those involved. The findings from this study could help to establish a new framework on which best teaching practices are built.

Problem Statement

Teaching students with social skills deficits in a separate setting from the general education setting can decrease their opportunity for peer interactions and increase problem behaviors (Cappadocia et al., 2012; Saylor & Leach, 2009). As previously discussed, this can lead to social isolation (Whitby et al., 2012) and socially inappropriate

or disruptive behavior (Morgan et al., 2016; Zach et al., 2016). There is evidence that social skills instruction can decrease a child's socially maladaptive behavior and allow for increased social opportunity (Brännström et al., 2016). The ability of a child to generalize social skills is necessary to replace problem behavior with socially accepted behavior (Brännström et al., 2016). There is a gap in the literature regarding generalization of social skills; it is unknown whether the instructional setting in which social skills are taught can increase a child's ability to generalize these skills to other instructional settings.

Teaching social skills is complex. Given the social psychology theories of Vygotsky (1978) and Bandura (1977), educating children with their peers could prove to be a great benefit to children and their peer groups because social skills can be modeled, practiced, and reinforced. Consequently, I predicted that students who are taught social skills in the general education setting would not only be more likely to exhibit skills learned but would also be more likely to generalize these skills across other instructional settings.

Children's use of social skills across instructional settings is imperative in helping them to develop friendships and work more effectively within a classroom environment (Lord & McGee, 2001). Incorporating the instruction of social skills in the general education classroom setting could provide opportunities for generalization as well as exposure to the varying populations of students in today's schools potentially benefiting all students (Battaglia & Radley, 2014). According to Whitby et al. (2012), social learning can be delayed without providing the peers models found in the general

education classroom, which highlights the need to rethink how educators provide instruction to students in need.

Purpose of the Study

The purpose of this quantitative study was to determine whether the instructional setting in which social skills are taught has an impact on the ability of elementary school students with social skills deficits to generalize these skills across instructional settings. Using secondary data, I analyzed the generalization of social skills of three groups of elementary school students with social skills deficits across two elementary schools for a minimum of one school quarter. The first group of elementary school students received standard classroom instructional methods in the general education classroom setting. The second group received social skills instruction by a certified teacher using strategies from positive behavior interventions and board-approved social skills curriculum in the general education classroom. The third group received instruction by a certified teacher using strategies from positive behavior interventions and approved curriculum in the resource room setting.

Research Question and Hypotheses

I developed the following research question and hypotheses to guide this study:

Research Question: What is the difference in a child's ability to generalize social skills across instructional settings when they are taught social skills in the general education setting compared to the resource room setting and the general education setting with standard classroom instructional methods?

*H*₀: Students do not display an increased ability to generalize social skills across instructional settings when taught in the general education setting using social skills instruction compared to resource room and standard classroom instruction.

*H*₁: Students display an increased ability to generalize social skills across instructional settings when taught in the general education setting using social skills instruction compared to resource room and standard classroom instruction.

Theoretical Framework

The social development theory and social learning theory comprised the theoretical framework for this study. Vygotsky (1978) established social development theory, consisting of three major themes, the first of which is that the social interaction and social learning of children is a critical part of their cognitive development. The belief is that a child first learns a skill through their social interactions before adding it to their repertoire (Leonardo & Manning, 2017). The second theme is the more knowledgeable other, in which a person learns new skills through the observation of another person (Churcher, Downs, & Tewksbury, 2014). The third theme is the zone of proximal development, which involves the close physical proximity that is necessary between an adult and a child in order for the child to acquire new skills (John-Steiner & Mahn, 1996).

Similar to Vygotsky (1978), Bandura's (1973) social learning theory is based on the theory that behavior is learned through experience or observation. Bandura believed that through observation and modeling, new behaviors are formed; these behaviors are

initially learned by an infant observing their parents and then continue to develop through observation of peers. Bandura focused on the feedback or reinforcement received during the development of a new behavior, which will greatly impact the future occurrences of that behavior (Anderson & Kras, 2007). Social learning theory further emphasizes modeling, repetition, and reinforcement (Tedeschi & Felson, 1994).

Both social development theory (Vygotsky, 1978) and social learning theory (Bandura, 1973) provide information about the importance of a child's interaction with others to acquire and use new skills. The theories demonstrate the impact this interaction and observation can have on learning as well as the meaning children apply to what is already known, which can impact skill use. These theories provide a foundation for continued research on inclusion practice and the potential benefits that teaching social skills in the general education setting can have on the ability of a child to learn and generalize these skills. A more detailed explanation of these theories will be included in Chapter 2.

Nature of the Study

I chose the quantitative design for this study based on the availability and accessibility of secondary school data. The schools were also selected based on the planned development of an inclusive social skills program, and a continuation of resource room supports. The secondary data from the schools were selected based on the social emotional needs of the students and their limited exposure to social skills instruction prior to the start of data collection.

I obtained secondary data from two Connecticut elementary schools in two

different school districts. School personnel were responsible for the data collection and storage. These data pertained to students who were taught social skills in their general education classrooms or in a resource room, and those who were taught in the general education classroom with no instruction in social skills. I analyzed these data to determine whether there was greater generalization of social skills to other school settings for those students who were taught social skills in general education classrooms. Secondary data were beneficial in this case because the instruction in the naturalistic environment was being studied as well as the impact of the instructional settings on the generalization of social skills. Permission to use the secondary data was granted by the district superintendent and special services administrator using Walden University's permission to use secondary data form.

Definition of Terms

For the purposes of this study, the following terms are defined:

Autism spectrum disorder (ASD): A developmental disability impacting verbal and nonverbal communication (Visser et al., 2013) and social interaction that has an adverse effect on a child's educational performance (Paul, McKeachie, Johnstone, Owens, & Stanfield, 2015).

General education classroom: The classroom that is assigned to all students. This class is led by a general education teacher using an approved and grade-specific curriculum.

General education teacher: A teacher holding a state certification in a specific grade area and whose primary teaching responsibility involves teaching in a general education classroom setting.

Resource room: Also known as a self-contained classroom. This classroom is led by a special education teacher. Students with disabilities are educated in this environment, which is separate from their typically developing peers.

Special education teacher: Teacher holding a certification in special education and who provides special education services to students with disabilities.

Social skills behavior: Behavior that is typically displayed by a social group. This behavior could include a number of variables, such as attending to a speaker, maintaining and/or initiating a conversation, eye contact, space awareness, and the reading of nonverbal cues (Anderson & Romanczyk, 1999).

Specialized or direct instruction: Individualized instruction involving one-to-one or small groups of children (Dagseven, 2011). This method involves the use of differentiated materials that meet the varying needs of the students. Teaching is often broken into smaller steps to make goals more attainable.

Assumptions

In this study, I assumed that the development of the schools' social skills programs would continue to be a priority and that through secondary data obtained from these schools the research question would be answered. Another assumption was that teachers who provided the pre- and postdata answered truthfully and to the best of their ability. I also assumed that the social skills instruction provided by teachers to their

students was based on the approved social skills curriculum. Another assumption was that the data were entered accurately by the individual designated and trained by the school. Last, I assumed that these data were a representative sample of the population, and therefore, the results of this study can be used to inform social skills development in public schools. These assumptions were necessary in the context of this study because I analyzed secondary data to determine the impact of the instructional setting on the ability of elementary age children to generalize social skills.

Scope and Delimitations

The purpose of this quantitative study was to determine whether the instructional setting in which social skills are taught has an impact on the ability of elementary school students with social skills deficits to generalize these skills across instructional settings. This study included students from two Connecticut schools in different districts who were in the development phase of delivering social skills instruction in their respective general education classroom settings. I analyzed secondary data from the classroom and resource room settings to determine social skill development and generalization. It was not feasible to include additional schools due to the use of varying instructional methods already used in those settings and the location and availability of those data sets.

According to the theories of Bandura (1977) and Vygotsky (1978), children learn through observation and reinforcement. For this reason, I excluded high school populations due to their potential prior exposure to social skills instruction or natural social development. Given the varying population of students included in this study, I

assumed it to be a representative sample and that the results could generalize to a broader population of elementary school children in public schools.

Limitations

Although the instructional settings were separated by the schools, it cannot be ruled out that additional learning occurred outside of the predetermined settings through naturalistic means, and as a result, I considered the potential for natural social skills development a covariate in this study. The schools are located in two rural towns, which may limit the generalizability of the findings to larger urban districts. In addition, teachers were responsible for data collection from their students, so the data could contain inaccuracies or biases from misinterpretation to overcompensating for their students. Due to the amount of data, these biases should not have impacted the findings. The use of secondary data does not allow for correction or clarification of the responses on the instruments that were used for data collection; however, the instructions were reviewed by the school psychologist or school behaviorist prior to the start of data collection.

Significance

As with similar studies, Humphrey and Lewis (2008) found an increasing number of students with autism in the public school setting, and these students reported negative experiences with inclusion. The authors discussed the potential feeling of social isolation and social anxiety that these children may feel because of ineffective inclusion practices. In addition, they found that educational practices may contribute to or even act as barriers to student learning and impact students' ability to participate. On the other hand, effective

instruction of social skills in the general education classroom setting could provide the exposure needed for generalization and without these experiences social skills can be delayed (Whitby et al., 2012). These researchers emphasized the importance of effective instruction and the inclusion of all students.

Further research around best practice can aide in providing effective social skills instruction and inclusion strategies that would not only help these students but could create positive behavior change in their peers as well (Lord and McGee, 2001). The findings from this research study can inform teaching practice to better support students in the classroom setting, which can allow students the opportunity to practice the skills necessary to become more successful in school and in the community. As a result, these findings can be highly impactful and can change how schools are currently educating students with social skills deficits.

The information provided from this study could create positive social change through informed teaching practice, and in turn, increase a child's opportunity for success. Providing research on best teaching practice can impact a student's ability to perform in the classroom and result in increased academic achievement (Rutherford et al., 1998). Informing teaching practice can create additional positive social change implications throughout a child's environment because the classroom can provide a rich social opportunity in which children can better develop as social beings (Tutt, Powell, & Thornton, 2006).

Summary

With this study, I provided an original contribution by addressing the ability of elementary school children with social skills deficits to generalize social skills based on the setting where the instruction of these skills takes place. Past studies have shown the benefits of learning through observations or peer models and that participating in the general education classroom setting can help establish friendships and increase success for students with social skills deficits (Albrecht et al., 2015). Students with and without disabilities can develop social, communication, and problem-solving skills as well as gain an increased ability to get along with others because of inclusion (Albrecht et al.). These findings demonstrate a benefit of the inclusion model for schools and creation of positive social change for school and the community (Albrecht et al.).

As schools continue to look for ways to increase prosocial behavior, the findings from this study could promote positive social change by identifying the most effective way to teach social skills that may increase a child's ability to generalize the skills they learn in the classroom. This generalization may increase overall student success, help them to learn more about each other, and aid them in working together with increased understanding and empathy. In the following chapter, I will review the literature on inclusion, instruction, and social skills as well as the problems associated with social skills deficits and the potential of such deficits to cause long-term, detrimental impacts.

Chapter 2: Literature Review

Introduction

Teaching students with social skills deficits in a separate setting from the general education classroom setting can decrease their opportunity for peer interactions and limit their exposure to models who may be beneficial to their social growth (Radley et al., 2017). Radley et al. (2017) found that this separation of instructional setting can lead to social isolation and increased problem behaviors. There is evidence that social skills instruction can decrease a child's socially maladaptive behavior and allow for increased social opportunity (Hui Shyuan Ng, Schulze, Rudrud, & Leaf, 2016). Teaching social skills is complex. Given Vygotsky's (1978) social development theory and Bandura's (1977) social learning theory, educating children with their peers could be of great benefit to children with social skills deficits and their peer groups (Albrecht et al., 2015).

The purpose of this quantitative study was to determine whether the instructional setting in which social skills are taught has an impact on the ability of elementary school students with social skills deficits to generalize these skills across instructional settings. I analyzed secondary data on the generalization of social skills from three groups of students with social skills deficits across two elementary schools for a minimum of one school quarter. One group of students received standard classroom instructional methods in the general education classroom setting. The second group received social skills instruction by a certified teacher using strategies from positive behavior interventions and board-approved social skills curriculum in the general education classroom setting. The third group received instruction by a certified teacher using strategies from positive

behavior interventions and approved social skills curriculum in the resource room setting.

All data from the general education setting were completed by December 2017.

There are several complex skills required to engage in social interactions (Mariyam & Shabbir, 2013). Such skills include interpreting and reacting to social cues as well as understanding how your behavior or social cues impact those around you (Freeman, 2015). Students with disabilities and social skills deficits are often educated in the general education setting and face varying social demands causing several challenges that can limit friendships as well as impact academic performance (Radley et al., 2017). Given the increasing number of influences faced by children in America today, it is more important than ever to provide them with social support in the classroom setting (Jenson, 2010).

The inclusion of students with social skills deficits in the general education classroom has many known benefits for students with social skills deficits (Whalon, Conroy, Martinez, & Werch, 2015). Despite this, inclusion practices are often inconsistent at best (Radley et al., 2017). There is little known about the benefits of teaching social skills in the inclusion setting versus teaching social skills in a separate setting on a child's ability to generalize social skills. Vygotsky's (1978) social development theory and Bandura's (1977) social learning theory established a foundation for understanding the benefits of providing children with appropriate social models to aid in their social development.

In this review of the literature, I intend to show the detrimental effects social skills deficits can have on children. I will also discuss the importance of social skills

instruction on the ability of children to gain the skills necessary to be successful both socially and academically. A review of the research on current teaching practices as well as the benefits of inclusion and theories of social psychology will help to provide a framework for this study and will be used to demonstrate the importance of this research.

Literature Search Strategy

I sought peer-reviewed literature on social skills instruction and deficits using the following educational, psychological, and human services databases: Education Source, ERIC, SocINDEX with Full Text, PsycINFO, PsycARTICLES, Taylor & Francis, and SAGE Premier 2017. Key word search terms included combinations of the following: *children, childhood social skills deficits, classroom management, cooperative learning, dependence, social skills, social skills deficits, generalization, autism, ADHD, education, inclusion, social learning, interventions, and instruction*. In addition, the social psychological theories of Bandura (1973) and Vygotsky (1978) were also searched across all databases including one book reference. The timeframe of my initial literature search was unlimited prior to limiting it to research published in the last 5 to 10 years.

Theoretical Foundation

Social Development Theory

Vygotsky (1978) established social development theory and is often regarded as the father of social constructivism. Social development theory describes learning as the development of an individual through social interactions with more capable models, including peers and teachers (Leonardo & Manning, 2017). This theory is focused primarily on how children learn and develop (Balakrishnan & Narvaez, 2016). Vygotsky

believed that children learn through their social interactions, and once they engage cooperatively, they can then exhibit the skill across settings.

Social development theory is represented by three major themes. The first of which is that the social interactions and social learning of children is a critical part of their cognitive development (Petty, 2009). The belief is that children first learn a skill through their social interactions before adding it to their repertoire. It was theorized that through the environment and interaction with others, an individual develops meaning and, therefore, incorporates this new learning into future social situations (Vygotsky, 1978).

The second theme in social development theory is the more knowledgeable other, in which a person learns new skills through the observation of another person (John-Steiner & Mahn, 1996). When learning a new activity, children depend on others who have had experience with these skills to be successful themselves (John-Steiner & Mahn). Vygotsky (1978) believed that children develop higher mental functions through their interactions with more knowledgeable peers and adults, including language, problem solving, attending, and memory schemas. Without these social interactions, the cognitive growth of a child can be limited (Churcher, Downs, & Tewksbury, 2014).

The third theme is the zone of proximal development, which involves the close physical proximity a child needs to have with another to acquire new skills (John-Steiner & Mahn). Social development theory provides information about the importance of a child's interaction with others. This proximity has an impact on learning and the meaning children apply to what is already known (John-Steiner & Mahn, 1996). Vygotsky (1978)

defined this as the difference in what a child can learn independently versus what they can learn with guidance from an adult or knowledgeable peer.

Overall, Vygotsky (1978) believed that children gain experience in social settings, this experience is internalized, and then becomes part of their repertoire. Therefore, the acquisition of new skills is dependent on their exposure to their peer group and social situations. In addition to exposure, there is a significant amount of assistance and collaboration from knowledgeable individuals in initial skill acquisition, before being able to use the skill independently (Doolittle, 1995). There is also an emphasis on the meaningfulness of how skills are taught and the importance of active engagement (Doolittle). It is this active engagement and collaborative work with a more knowledgeable other that promotes development (Vygotsky, 1978).

Petty (2009) used Vygotsky's theory in an explanation of guided participation as a means to help children develop social skills. This teaching practice was defined as one in which teachers support preschool children in communication development and group participation (Petty). The author found that while there is a focus on the academic side of development, there is not as much attention given to a child's social development. When used in a classroom setting, the teacher is seen as the more knowledgeable other, helping a child to develop at the appropriate level and pace (Petty).

Akhmetova, Chelnokova, and Morozova (2017) used Vygotsky's theory in their argument for inclusion practice. The authors noted the impact of the environment on child development and the implications that Vygotsky's theories have had on current educational models and educational rights. They emphasized the importance of social

interaction between children with social skills deficits and those who are typically developing for mastery of skills and mental development. The authors believed inclusion to be the model of choice to promote a child's social and academic growth and development.

Social Learning Theory

Like Vygotsky, Bandura's (1977) social learning theory is based on the theory that behavior is learned through experience or observation. Initially called the theory of observational learning, Bandura's research established that children, when given a model of behavior that was reinforced, would reliably reproduce that behavior (Joseph, Kane, Nacci, & Tedeschi, 1977). This theory establishes a relationship between stimulus and reinforcement on the development of a new behavior and also provides evidence that the feedback or reinforcement received during the development of a new behavior will greatly impact the future occurrences of that behavior (Anderson & Kras, 2007). Bandura's social development theory places an emphasis on modeling, repetition, and reinforcement in the development of a new behavior (Tedeschi & Felson, 1994).

Bandura's (1977) social learning theory was said to be one of the first theories of socialization. Though commonly associated with aggression, it emphasizes the importance of observation and modeling of behavior, which is how the researcher believed behavior was learned (Tedeschi & Felson, 1994). After a behavior is observed, the individual learns to perform a behavior that can then be used later in response to a similar stimulus. Although environmental and cognitive factors are considered, Bandura suggested that learning occurs through a four-part process: attention, retention, motor

reproduction, and motivation. Bandura believed that people can learn through observing others as well as through the consequences of their behavior. Bandura believed that while a person can learn through observation, they may not perform what they have learned until a later time, requiring the cognitive ability to retain and apply this behavior. In addition, it was said to be the anticipation of reinforcement that influenced what was observed over what was ignored (Kretchmar, 2017).

Observational learning leads to more effective use of behavior, with less error, and this initial exposure serves as a guide for future use (Stroot, 2001). This includes group behavior, which children who are instructed outside of the classroom are lacking. When in a group, a child can watch others demonstrate behaviors that allow them to participate in a group and be included. The new learner, after observing these behaviors, can then imitate them and become accepted into the group previously observed.

Weyns et al. (2017) found that, from the social learning theory perspective, children can also learn socially inappropriate behaviors from their teachers. The authors found that teachers who were more punitive and who focused on negative behavior could increase that negative behavior. The children in these cases found that negative behaviors were successful in gaining social attention and interaction. The skills learned in the classroom were then found to carry over into other social situations. The researchers found the opposite, however, when teachers used praise and reinforced positive behavior. Those students were more likely to engage in positive social interactions with their peers. The results of their study provides additional evidence for the strength of social learning.

Social development theory (Vygotsky, 1978) and Bandura's (1977) social learning theory provide a foundation for continued research on inclusion practice and social skills instruction as well as support for cooperative learning in the inclusion setting. Westerman, Stout, and Hargreaves (2012) used social development theory and social learning theory in their research on horseback riding and the observation of a model or more knowledgeable other in training new riders. This approach led to greater results than teaching without models.

Given the research, the theories of Vygotsky (1978) and Bandura (1977) provide a good framework from which to answer the research question of this study: What is the difference in a child's ability to generalize social skills across instructional settings when they are taught social skills in the general education setting compared to the resource room setting, and when they are taught in the general education setting with standard classroom instructional methods? I hypothesized that there will be greater social gains made by children who receive instruction in the general education setting and that once these skills are demonstrated in the appropriate setting, they will be used in appropriate social context. These skills will continue to be reinforced and help promote positive social development.

Review of the Literature

Social Skills Deficits

There are many social expectations for children when they begin school from asking for help, to playing a game with peers (Mariyam & Shabbir, 2013). For children to be successful, they are required to engage in effective and appropriate peer interactions

(Gagnon et al., 2014). Social skills such as, communication, cause and effect, empathy, emotional regulation, engagement, and attention are used throughout a child's day in both structured and unstructured times (Hebert-Myers, Guttentag, Swank, Smith, & Landry, 2006). Social skills are what allow individuals to interact with others in the environment therefore, having a deficit in social skills may then cause behavior problems and anxiety manifesting in aggression or defiance (Mariyam & Shabbir, 2013).

Social skills allow individuals to function socially, make friends and understand those around us (Freeman, 2015). The skill set is complex, involved, and highly impactful on an individual's relationships, activities and employment (Hebert-Myers et al., 2006). Having social skills deficits can impact peer relationships as well as academic functioning, behavior, attendance, and mental well-being because of resulting anxiety or depression (Mariyam & Shabbir, 2013). Mariyam and Shabbir also found that there are many reasons why an individual might have social skills difficulties one being that they have not yet learned the skills, or they may not be able to use the skills in the appropriate context. Additional reasons could include disabilities, or socio-economic status.

According to Tutt, et al. (2006), social skills deficits can act as barriers to children who are diagnosed with autism both socially and educationally. The authors found that students with high functioning autism typically have average or above average intelligence. Despite this, students who were more successful in the classroom were those who had more proficient social skills, thus showing the importance of social skills on the ability of students to be able to perform academically.

Social communication conventions, such as socially appropriate and reciprocal conversation and the interpretation of nonverbal communication are imperative in social interactions and may be extremely difficult for students on the autism spectrum (Woods, Mahdavi, & Ryan, 2013). Children with autism can also display varied communication and behavioral issues due to environmental conditions or changes (Celia, Freysteinson, & Frye, 2016). Although many children experience social skills deficits, according to Zuckerman, Lindly, and Sinche (2016) children diagnosed with autism are most frequently associated with having these social skills deficits making this population an important one to consider when planning social skills instruction.

Although the population of children with autism continues to rise, ADHD continues to be the most prevalent disorder found in children worldwide (Semrud-Clikeman & Schafer, 2000). Semrud-Clikeman and Schafer found that children diagnosed with ADHD as well as those with learning disabilities also experienced deficits in social competence and display social skill deficits that can lead to strained relationships with their peers and challenges in school. Similarly, Wilkes-Gillan, Bundy, Cordier, and Lincoln (2014) noted that children with ADHD are known to present with social deficits. The authors found that these children have not been successful with traditional methods of social skills instruction because they are taught in isolation. In contrast, the authors discovered that with parent involvement in play, children were better able to generalize social skills, providing evidence that instruction in the natural setting could promote generalization of social skills.

Semrud-Clikeman and Schafer (2000) discussed social competence as being a foundational skill. The authors describe social competence as having an impact on behaviors in a variety of ways including; being able to adapt to their environment, learn, understand, and work with others. As with much of the research below, the research by Semrud-Clikeman and Schafer shows the importance of this skill set and the impact social skills deficits can have on an individual.

Detrimental Effects of Social Skills Deficits

Children's ability to interact with their peers is important in their academic, social and emotional development and in turn, their success in school (Tutt et al., 2006). Exhibiting these appropriate social interactions can be difficult for many students with social skill deficits (Cordier & Lincoln, 2014). Deficits in interactions, conversational exchanges, initiating, and engagement are the common reasons why children who struggle with social skills have difficulty with developing and maintaining peer relationships, making inclusion a challenge (Radley et al., 2017). With inclusion becoming a more common practice, and it was found that when in the general education setting, and when compared to their general education peers, social skills deficits may become more obvious resulting in peer isolation (Mariyam & Shabbir, 2013). To meet the needs of learners with social skills deficits, teachers should focus on social skills in addition to academics given the importance of peer interactions within this setting (Watkins et al., 2015).

Social skills deficits can have an emotional impact on children. These deficits can cause increased anxiety and depression and can negatively influence social competence

(Semrud-Clikeman & Schafer, 2000). Deficits in social skills can also result in an increased chance of peer rejection and bullying due to limited understanding on the part of the peer group (Cappadocia et al., 2012). If social skills are improved, these issues, along with other emotional risks can be avoided and can also aide in a child's academic development (Rosenberg, Congdon, Schwartz, & Kamps, 2015). Cantrill et al. (2015) discuss some of the many challenges faced by those with social skills deficits. The authors found that these children may exhibit impaired play skills, perspective taking, reading social cues, being able to self-regulate and form friendships. Cantrill et al. also found that the challenges resulting from social skills deficits can continue into adulthood having additional impacts on families and the community.

Asher and Wheeler (1985) found that a socially competent person can initiate and maintain positive social interactions, develop friendships, collaborate, and display effective coping strategies. Social skills deficits were found to be a major predictor of low self-esteem, peer rejection, social maladjustment, mental health problems, and delinquency (Asher & Wheeler, 1985; Elliott & Gresham, 1993). Tedeschi and Felson (1994) found that adolescents who have not learned social skills were found to exhibit aggressive, antisocial, or delinquent behavior, and may experience peer rejection, loneliness, or social isolation. These deficits increased behavior problems and challenges in school and the community (Tedeschi & Felson).

A review of the research on social skills suggests that social communication skills are critical for the success of delinquent youth (Hansen, St. Lawrence, & Christoff, 1988; Mathur & Rutherford, 1994). These authors found that many students who exhibit

delinquent behavior or conduct disorders have not had the opportunity to learn appropriate social communication skills, such as listening, initiating social contacts, asking, and responding to questions, or expressing one's point of view without offending others. Due to these skill deficits, these individuals often fail to manage social situations effectively and appropriately, pointing to the importance of social skills instruction in developing positive relationships and discouraging antisocial behavior (Jenson, 2010).

Similarly, Albrecht et al. (2015) found that students with behavioral problems displayed deficits in social skills. These deficits were said to cause students to experience a variety of hardships that included; rejection of their peer groups, social withdrawal, isolation and difficulties with forming or maintaining relationships (Albrecht et al.). In addition, Hebert-Myers et al. (2006) found that children with social skills deficits can display a variety of negative and impulsive skills such as aggression and anger. Maich, Hall, van Rhijn, and Quinlan, (2015) pointed out the importance of social competencies and social behaviors, stating that they are essential for all students to be successful in school and into adulthood.

Wolfberg et al. (2015) discussed the challenges that some children can have with play and social engagement. For children with autism, the authors listed stereotypy, rigidity, social, emotional, and relationship development as having an adverse impact on their social development. Similar to Whalon et al. (2015), the authors discussed the importance of peer interactions and play in a child's social development. Despite the importance of socialization, the authors found that these children are often excluded due

to the factors involved in their disability, which can cause additional social and emotional problems (Wolfberg et al., 2015).

Current Teaching Practices

Many public schools have adopted the practice of inclusion of children with disabilities in the general education setting (Radley et al., 2017). With increasing numbers of students diagnosed with ASD, these students are also commonly included as schools follow Individuals with Disabilities Education Improvement Act (IDEA) of 2004 and No Child Left Behind Act of 2001 requiring that all children are taught in the least restrictive environment thus receiving free and appropriate public education. In addition to students with autism, authors Jahnukainen and Itkonen (2016) found that the number of students in special education continues to grow. With this growth, teachers are having to accommodate their classrooms for a number of behavioral issues without adequate resources or guidance. Puckett, Mathur, and Zamora (2017) found deficits in social and communication skills to be among the most challenging for students who exhibit behavioral difficulties due to their inability to successfully participate in the classroom.

According to Camargo et al. (2014), statistics show that most students are educated in the general education setting, with an increasing number of children diagnosed with autism every year. Jahnukainen and Itkonen (2016) also found the increasing trend of inclusion practice based on need, policies, as well as funding in today's schools. Given these statistics, schools have sought several different instructional practices to help with social skill development and have had some success with behaviorally-based interventions (Albrecht et al., 2015). What was still unknown is the

efficacy of such practice in the ability of children to generalize these skills across settings.

Laugeson et al. (2014) identified concerns with ineffective social skills intervention strategies that could result in the inability of children to generalize the skills they have learned. The authors believe that teaching skills in isolation or in specialized settings is an issue because of the absence of peer models. Stichter et al. (2006) found that the environments and interactions that children have with peers and adults can greatly impact what they learn both socially and academically. Laugeson et al. found that when effective social skills programs were used, students showed significant improvement in a variety of social skills areas. These findings provide information on the benefits of teaching using evidence-based programs within the natural environment but stop short of analyzing the ability of children to generalize social skills learned.

Albrecht et al. (2015) discussed the need for social skills instruction for all students that could be done using the tiered interventions and response to intervention strategies that many schools already use. Tiered interventions can provide help to all students, promote inclusion education and possibly decrease the number of special education students' due to earlier interventions (Jahnukainen & Itkonen, 2016). Tiered interventions can provide social and behavioral supports based on student need. According to Albrecht et al., schools reported that after implementing these programs, problem behavior decreased, demonstrating program efficacy in teaching prosocial behavior. Not only did these interventions help to decrease disruptive behavior in the classroom, but there was also increased student attendance and a decrease in the amount

of time students were out of classroom. Due to these changes, it was found that teachers spent less time filling out behavior referrals, and less time handling disruptions in class, and could spend more time actively engaged with their students (Albrecht et al.).

However, Prasse et al. (2012) found that most teachers do not yet have the knowledge or skill set to manage the tiered approach.

Sansosti (2010) discussed the rise in the number of children who are diagnosed with autism each year, calling it the fastest growing disability in the United States. These children have difficulty engaging in social behaviors and with increasing numbers, the public schools will be impacted. Instructional practices must be adjusted to meet this increasing need. Effective social skills interventions are necessary to support student need. RTI is one of these interventions (Hurlbut & Tunks, 2016). This instructional strategy has been identified for use within the regular education environment to address skill deficits in students with autism (Hammond, Campbell & Ruble, 2013). RTI uses research-based interventions through the tier system described above. The tiers provide supplemental instruction and movement through the tiers are based on data collection and progress monitoring (Sansosti, 2010). RTI and tiered interventions, though used with success, have not been studied for generalization of skill use.

Generalization of skills is a key concept in the field of ABA; Skinner & Daly, 2010). According to Anderson and Romanczyk (1999), direct teaching through varying strategies and behavior techniques can help students develop social skills. ABA and incidental teaching are two strategies that can be used to help students gain skills quickly within the inclusion setting. Inclusion opportunities can help children to improve socially

through observation of their peers (Tedeschi & Felson, 1994). Teaching strategies that were previously used in separate settings can also be used in the general education setting to support inclusion by targeting specific skills that can be embedded in to classroom activities. In addition, Webb et al. (2004) looked at how “priming” students could help with social skills development. Priming involves the direct teaching of skills immediately prior to skill use, giving students the tools they may need in social situations they will encounter. This is said to develop social competence and increase understanding of social information (Webb et al.). The authors also found that use of modeling, coaching and role playing as well as structured groups, when conducted weekly, were beneficial in increasing social development but do not discuss skill generalization.

Maich et al. (2015) found social skills to be a foundation on which children develop peer relationships. The authors referred to social skills in child development as being one on the five foundational domains, and define social skills as including interacting with others, making friends, helping, and displaying empathy. The authors also found that children with autism may require direct instruction to acquire these social skills. Using peers in the teaching process has been shown to help create positive social opportunities and increase social skill development (Rosenberg et al., 2015). The research conducted by Maich et al. (2015) showed positive changes in the social skills of the campers with an ASD when all campers were taught how to interact with each other using a peer-mediation. The authors found that there was an improvement in social skills exhibited by campers with an ASD, in addition to a decrease in socialization between the

campers and adults. These findings are promising due to the high level of support that had been seen between campers and counselors, which can limit inclusion opportunities.

Radley et al. (2017) found that social skills instruction was typically taught outside of the general education setting through specialized or direct instruction and only included those with social skills deficits. The authors also found that although some children have made social skills gains in pull out groups, their ability to generalize these skills has not been effective. Camargo et al. (2014), on the other hand, found similar improvements based on behavior-based interventions that were provided in the inclusion setting. Given the requirement of evidence-based instruction use in schools, providing additional research to support this claim and to provide evidence of generalization of social skills, could change how public schools provide instruction to students with social skills deficits. Camargo et al. also found that teachers may not have all the information they need to be able to provide effective social or behavioral interventions within the general education setting. This research may be able to assist educators in making data-based decisions regarding interventions for improving social interaction skills within the general education setting and can also provide administrators with guidance on what training is needed to ensure best practice.

According to Whalon et al. (2015), there has been increasing research in social skills deficits, and the severity of consequences these impacts have on the lives of children, as well as, the importance of teaching social skills. The authors found that developing a framework to help develop these skills has been limited and that many interventions continue to teach social skills in isolation. Children start school having a

variety of backgrounds, experiences, and abilities. Hall and DiPerna (2017) found that the differences children have can impact academic achievement, graduation rates, and even employment, and that providing explicit social skills instruction could improve school performance.

Views on Inclusion

Though inclusion is a common practice in many schools today, Goodall (2014) found that teachers continue to have difficulty with accepting this practice and identifying students experiencing social skills deficits as being successful learners in the general education setting. Teachers viewed students with autism as making relatively low progress in academic areas and saw the general education setting as being more for socialization than academics, not pushing academic goals, resulting in less progress than their peers. As a result, teachers may view these students as more of a challenge (Goodall). The author found that some teachers were also reported to feel that they don't have the support, resources or specialists' necessary to be successful in teaching these students. This may be due in part, to a lack of understanding, and increased teaching demands which can limit the learning opportunities for these students (Wilkins & Nietfeld, 2004). David and Kuyini (2012) found that teachers' self-efficacy was a strong predictor in classroom practice and noted the importance of inclusion practice as a means of developing social skills. Teachers have the ability to provide an environment that can foster a sense of community and friendship. These studies demonstrate the importance of teacher training and on-going support.

Beaumont, Rotolone, and Sofronoff (2015) discussed inclusion as being a challenge for public school's due to problem behaviors exhibited by students with autism. The authors described these behaviors as including disruptions, tantrums, aggressive behavior, and refusing to follow directions. Funding programs to support these students may also be limited and it was reported that schools continue to lack the services needed to support these learners within the general education classroom (Beaumont, et al.). Due to these issues, providing teachers with instructional methods and support that is manageable and effective to provide social skills education to these students should be a priority. Wilkins and Nietfeld (2004) found pre-service training to be a critical component in positive attitude about inclusion practice. Teachers also require an instructional program that is easy to implement, that will include all students, and can be used classroom wide due to lack of time and training opportunities (Ostmeyer & Scarpa, 2012).

It was found that because children with severe disabilities have limited involvement in general education that it is perceived that they don't have the social or behavioral skills needed to participate (Beaumont et al.2015). Lyons et al. (2016) found that time with peers is critical in the development of social skills in students with deficits, as these skills can impact the quality of their learning. The authors reported that strong social skills were a predictor of positive outcomes after graduation. They also found, unfortunately, that there is little to guide educators in supporting students in this area.

Whitby et al. (2012) noted an increasing number of students with asperger's syndrome and autism in public schools. Although these students are typically taught

outside of the classroom through specialized instruction, the authors found that there are benefits in receiving both academic and social skills instruction within the general education classrooms due to peer models and the natural reinforcement of skills provided in this setting. Without providing appropriate social models, students could display increased delays in social learning, misinterpret social cues and begin to exhibit problem behaviors (Wilkes-Gillan et al., 2014).

Inclusion Benefits

According to Tutt et al. (2006), the general education classroom can be considered a social event and social skills are imperative for students to succeed within this environment. Garrote (2017) found that children with social emotional needs can benefit socially from being with their typically developing peers. The author also found that cooperative learning is beneficial for children diagnosed with autism, intellectual disabilities, and behavior problems. Teaching social skills in this environment can aid in the generalization of social skills, which can otherwise be a challenge for these children. When children learn in separate settings, it may not generalize to real life situations unlike teaching in the natural environment (Whalon et al., 2015).

Inclusion practice is increasing due to federal mandates, such as the IDEA; Sumbera, Pazey, & Lashley, 2014), and due to budgetary constraints in public schools (Jahnukainen & Itkonen, 2016). Educators are responsible for providing least restrictive environment, which means including children with a variety of different academic and behavioral needs. Due to these mandate changes and the gaps in social skills exhibited by many students, teachers are faced with having to work on the interactions and

relationships between students with social skills deficits and their general education peers (David & Kuyini, 2012). The importance of these relationships is known as is the need for intervention, and support for educators in providing social skills instruction (Huber, Carter, Asmus, & Chen, 2016).

Interventions involving peers is beneficial and can aid in teaching a variety of social skills (Lyons et al., 2016). This approach not only increases peer interactions it also decreases the amount of demands placed on teachers (Watkins et al., 2015).

Additionally, social skills needed for children to be successful in the classroom may be different than what is taught in separate settings. Teaching in the natural environment will allow for the targeting of specific skills necessary for success in that environment (Wilkes-Gillan et al., 2014). The natural environment also provides access to the modeling of social appropriate behavior which is an important part of social development (Ostmeyer & Scarpa, 2012).

Children typically move from play based skills to verbal, and social communication, and as they develop, physical, and play-based socialization transforms into verbal communication (Schlinger, 2009). This is not an easy or seamless transition for those who experience social skill deficits. Social learning theory (Bandura, 1977) would suggest that the observation of others will increase opportunities for social learning to occur but may not be the only means of providing learning opportunities for students (Anderson & Kras, 2007). Social stories may be an additional intervention used to teach these skills. This approach was developed by Gray (1994) and is used to guide an individual through a social situation he or she may struggle with. This, as well as other

strategies, can be integrated into a child's day to support learning across settings (Halle, Ninness, Ninness, & Lawson, 2016).

Battaglia and Radley (2014) also looked at peer mediated interventions and acknowledge that although it may be more upfront work for teachers, long term, it decreases the demand on them. In addition, instruction within the general education environment allows for students to practice skills in the natural environment with multiple peers and in multiple opportunities, resulting in an increased likelihood that social skills will improve. Inclusion can also be beneficial to general education students. These children were found to be more understanding, attentive, and sensitive towards those with differences as well as those without (Ogelman & Secer, 2012).

It was found that practicing social skills in the natural environment can increase social skill use, improve joint attention, and communication skills including the number of initiations, interactions, and turn taking which are essential to success in the general education setting (Garrote, 2017). It was also found that when social skills were provided in the general education setting there was a decrease in problem behaviors including; noncompliance, off topic conversation and inappropriate language (Battaglia & Radley, 2014). This research provides a strong argument for teaching social skills in the general education setting but falls short of discussing the generalization of these skills across settings.

Mavropoulou and Sideridis (2014) studied the impact that the partial inclusion of children diagnosed with autism had on their peer group. The authors found that after inclusion, peers had increased knowledge of autism, more positive attitudes and

intentions towards those with autism than peers who did not experience partial inclusion. The authors attributed this to Allport's (1954) contact theory, highlighting the value of even partial integration in increasing autism awareness and improving the attitudes of regular education peers toward those with autism and students with disabilities. The positive changes seen in the attitudes of peers and the acceptance of students may also help to facilitate social acceptance, and benefit overall school climate (Sanahuja-Gavaldà, Olmos-Rueda, & Morón, 2016).

Research conducted by Beaumont et al. (2015) contributes to the argument of the strength peer groups can have on social skill development for children with social skills deficits. The authors found that when given small group intervention and computer games, students displayed greater gains with group work. They also unexpectedly found that the skills generalized to the home setting. The authors assumed that the positive reinforcement received in this setting may be powerful enough to encourage skill application. Beaumont et al.'s findings are similar to the findings of Tedeschi and Felson (1994) who also found that there was a decrease in behavioral issues possibly due to an increased ability to better understand social situations and interact with their peers.

Students with delinquent behaviors appear to benefit from a direct instruction approach that included elements of cooperative learning (Rutherford Jr. et al., 1998). Cooperative learning occurs within a small group in which children work together to meet a goal or expected outcome. Social skills are a prerequisite to be an effective member of this type of learning (Goodwin, 1999). The cooperative social skills group structure allows for students to learn and practice social skills in a group setting. This can

provide students with natural opportunities for social interaction which is a known benefit for those with social skills deficits (Radley et al., 2017). In addition, cooperative groups may provide students with the peer support necessary to develop social communication, while promoting generalization of these skills (Rutherford Jr. et al., 1998).

Whitby et al. (2012) promoted use of a framework for teachers to use that would promote social learning for children with autism so that they can be more appropriately included with their typically developing peers. The authors believed that social skills cannot be taught in isolation so providing a framework within the general education setting could increase social learning opportunities. With a consistent and clear approach, and through work with peers, and peer models there could be increased generalization opportunity for these students (Anderson & Kras, 2007). Cameron and Lao (2013) also found that when children feel socially competent, they are more successful in school, academics, and are better able to form lasting relationships. They described the need for an environment that is both supportive to individual needs and that allows for independence and creativity.

Although research can show the benefits of inclusive education, teachers play a critical role in the efficacy and follow through of social skills instruction (David & Kuyini, 2012). Goodall (2014) found that increasing teacher understanding, not their knowledge around students with autism, improved teacher efficacy. The author found that when teachers can see potential, they will teach to that potential. The author recommended sharing the life and school experiences of adults with autism as part of the teacher training. Donohue and Bornman (2015) also found that expectations were more

positive when teachers had experience with disabilities. Incorporating this type of experience and hands on training could be beneficial for both students and teachers.

Summary and Conclusions

The number of students with social skills deficits who are now being included in general education classes continues to grow (Jahnukainen & Itkonen, 2016). Webb et.al. (2004) pointed out the long term and detrimental effects that social skills deficits can have on children. Not only can children exhibit significant behavioral challenges, but they may also experience social isolation, leading to avoidance behaviors, increased stress, and difficulties felt by children, families, and schools (Albrecht et al., 2015). As a result of these social skills deficits, these children may be taught in isolation, limiting contact with their peers and potentially escalating behavioral challenges (Wolfberg et al., 2015).

The experiences children have in school can influence their social-emotional development impacting them today, and into the future (Garrote, 2017) demonstrating the importance of this study and in the ability of schools to meet the needs of today's learners. Specific instruction in social skills can be effective (Albrecht et al., 2015; Laugeson et al., 2014). Researchers such as Battaglia and Radley (2014) and Ogelman and Secer (2012) have shown evidence of the benefits of inclusion and positive impacts on all students. Despite these findings, there is a gap in the literature about social skills generalization and whether the location of teaching these skills can impact the ability of a child to generalize the skills learned. This study examined if providing social skills instruction in the general education setting where it is necessary to exhibit these skills,

will not only provide the models needed for learning, but will also provide the reinforcement needed for the continued and ongoing use and generalization of these social skills to other instructional settings.

Albrecht et al. (2015) also found that the positive social experiences children have at school can help their social development. The authors studied the impact of school climate on the behavior and academic success of students and found that students with behavioral problems displayed deficits in social skills. These deficits can cause students to experience a variety of hardships including; peer rejection, social withdrawal, isolation, and difficulties with forming or maintaining relationships. These social competencies and social behaviors are essential for all students to be successful in school and life (Garrote, 2017; Mariyam & Shabbir, 2013). Additionally, Mavropoulou and Sideridis (2014) found benefits to overall school climate when students were exposed to inclusion programs.

Using secondary data from the Social, Academic, and Emotional Behavior Risk Screener (SAEBRS) and the School-Wide Intervention System (SWIS) from two Connecticut schools, this study was conducted to determine if there is greater generalization of social skills exhibited by either elementary school children who received no specific social skills instruction in the general education setting, those who were taught social skills in the general education setting, or those who were taught social skills in the resource room setting. The following chapter describes the secondary data, the instruments used by the schools, and how the secondary data were used to answer the

research question. The tools used to provide the information on generalization in this secondary dataset are discussed and the importance of the findings are highlighted.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study was to determine whether the instructional setting in which social skills are taught has an impact on the ability of elementary school students with social skills deficits to generalize these skills across instructional settings. I analyzed the generalization of social skills of three groups of students with social skills deficits using secondary data provided by two schools in Connecticut. Pre- and postdata from elementary school students who received standard classroom instructional methods in the general education setting were analyzed to serve as baseline data and determine the natural growth in social skills that occurs in the classroom setting. The second group of students received social skills instruction for approximately four months by a certified teacher using strategies from positive behavior interventions and board-approved social skills curriculum in the general education setting. The third group of students also received instruction for approximately four months by a certified teacher using strategies from positive behavior interventions and approved curriculum, but this instruction occurred in the resource room setting.

In the following chapter, I will present detailed information on the methodology, participants, and rationale for conducting this study. Although there is evidence of the positive impact of social skills instruction for students with social skills deficits, it was unclear if these children can generalize the skills learned to other instructional settings. The tools used to provide the information on generalization in this secondary dataset will

be discussed in detail in this chapter and the importance of the findings will be highlighted.

Research Design and Rationale

There are many students in today's schools who are identified as having social skills deficits (Cranston, 2017). These deficits can be detrimental to their educational and social development (Webb et al., 2004). Although there are known benefits of social skills instruction, what was unknown was whether these skills are generalized to other settings based on the setting in which they are initially taught. I hypothesized that elementary school students with social skills deficits will benefit from social skills instruction in the general education setting where the skills can be modeled, practiced, and reinforced making children more likely to exhibit the social skills they learned across school settings.

The independent variable in this study was the instructional setting, which included the general education setting with social skills instruction, the general education setting with standard classroom instruction, and the resource room setting with social skills instruction. The dependent variable was generalization of social skills as determined by exhibiting social skills across school settings as collected by teachers using the SAEBRS before and after a minimum of a 3-month period of instruction and information stored in the SWIS.

Using secondary data, I chose this quantitative design because of the increasing population of children with social skills deficits as well as the development of school programs and instruction to address these needs. This design was also chosen because of

the need for specific data based on current instructional practices and resulting outcomes. I chose the data based on its availability and the planned development of an inclusive social skills program as well as a continuation of resource room supports at two identified schools in two districts. The schools were selected based on the social emotional needs of its students and their limited exposure to social skills instruction prior to the start of data collection.

I used secondary data and, therefore, time and resource constraints were eliminated. Although most research is conducted based on the researcher providing the curriculum for social skills instruction, this study was different in that the public schools were implementing the instruction themselves and secondary data allowed for review of what occurred within the natural setting. The data gathered from the selected schools were used to support best teaching practices and the development of effective social skills instruction. The results of this study can be disseminated at district partnership meetings to aid in the development of effective programming throughout the state. The instruments used to gather data as well as the social skills instructional methods were adopted by the schools. The findings from this study provide evidence of the most effective instructional setting in which to teach elementary age students to allow them to generalize the social skills learned, advancing knowledge in how to better help children become stronger both socially and academically.

Methodology

In this study, I analyzed secondary data from two Connecticut elementary schools in two districts. I compared the pre- and postdata stored in the SWIS software system and

the results from the SAEBRS forms completed by the teachers in the selected schools to determine whether there was greater generalization of social skills for those students who were taught social skills in general education classrooms compared to those who were taught in resource rooms and those who were not provided social skills instruction in the general education setting. Permission to use secondary data was granted by the district superintendent and special services director.

I employed a quasi-experimental, comparison group design to determine the outcome of a school-based intervention on the generalization of social skills. Pre- and postdata were collected in the same way for all three groups of students. The groups of students were similar in age and socio-economic status.

Population

The study included secondary data retrieved from the performance of students in elementary schools with social skills deficits. Using the SAEBRS and SWIS, I analyzed the data to determine whether there was a difference in children's ability to generalize social skills across instructional settings based on the setting in which they were taught. Data were retrieved from these two sources, which were completed by teachers who agreed to teach social skills to children with social skill deficits. These teachers were located in multiple classrooms across two elementary schools in two rural Connecticut districts of varying socio-economic status. The population size was based on the number of students identified as having social skills deficits from the total population of students in each school, which ranged from 300 to 400 students.

The SWIS data system stores data from all aspects of the student's day, including, art, music, physical education, library/computers, lunch, and recess from all members of the faculty and school staff. These data reflect the student's behavior in each subject area for the duration of the school day. Personal information about the teachers or the students, such as student name or teacher name, were not recorded when I retrieved the data from the SAEBRS and the SWIS data system from the school designee.

Students who were on specific behavior intervention plans were not included in SWIS data because they have alternate forms of data collection. Students on individualized behavior plans also may have multiple forms of social skills instruction throughout their day. These are students who exhibit social skills deficits as well as maladaptive behaviors or other significant impairments that interfere with their ability to participate in the general education setting.

Sampling and Sampling Procedures

In this study, I analyzed secondary data to determine the ability of elementary age students to generalize social skills across school settings. Secondary data are economical and allow for specific information to be analyzed from previously collected data sets. In this case, I was granted access and permission to obtain secondary data from two schools in Connecticut. The selection of secondary data used for analyses was based on the students who were reported to have social skills deficits and who received social skills instruction in either the resource room setting, the general education setting, or the general education setting with no specific social skills instruction. The elementary age students in the selected schools were believed to provide a representative sample for

other children of this age group because of the varying populations and needs of the enrolled students.

Sampling Frame

All teachers of the students within the identified schools gathered preintervention data prior to the introduction of group-wide social skills instruction in the resource room setting and the general education setting. All students whose scores were within the at-risk range as identified by the SAEBRS or who were identified through tiered interventions were identified as students with social skills deficits. Postintervention data were gathered from students who were identified as needing social skills instruction and was analyzed in this study for social skills growth and generalization. Using G*Power 3.1.9.2 with .80 power and a .25 effect size, I calculated the target sample size to be 126 participants.

Procedures for Obtaining Secondary Data

The schools that I obtained secondary data from were attempting to increase the social development of their students. I selected them based on the accessibility of the data, student needs, and the introduction of social skills instruction to the general education setting. The schools gathered pre- and postdata on the social skill level of all students and those at-risk were identified. The SAEBRS screener was given to faculty prior to the introduction of social skills instruction. The pretests were kept in the school's Positive Behavior Intervention Supports (PBIS) room or with the school psychologist in locked storage. SWIS data were entered by the PBIS staff or the behavioral specialist and

stored in the schools' PBIS room. Posttest data were gathered after the instructional period of a minimum of one school quarter.

SWIS data can be accessed through the school computer that requires system administrator log in. I accessed the data gathered from the SAEBRS through school personnel and analyzed it to determine whether there was greater generalization of social skills in those students taught in the general education setting with social skills instruction. Given that this study involved secondary data, informed consent was not necessary.

I obtained permission for use of the secondary data from district administrators in both school districts. The findings of this study can be presented to the board of education (BOE) and all information presented or submitted to the BOE will be available on the schools' websites for those who were not in attendance at the meeting itself. A summary of the report will also be made available to district administration and BOE members.

Instrumentation

The SAEBRS (Kilgus, Chafouleas, Riley-Tillman, & von der Embse, 2013) is a 19-item teacher rating scale that identifies students who are at risk for social, academic, and emotional behavior deficits. The responses on the scale range from 0 (*never*) to 3 (*almost always*), and the subscales include: social behavior, academic behavior, and emotional behavior (Kilgus et al.). The SAEBRS rating scale can be completed by teachers in less than 5 minutes per student (Kilgus et al.). Once completed, the scores are summed for each subscale, and the subscale scores can be used in isolation or combined to gain the total behavior score (Kilgus et al.). The SAEBRS includes a score chart with

guidelines for “at risk” and “not at risk” children based on the subscale scores and the total behavior score (Kilgus et al.).

To measure the dependent variable, social skills, the SAEBRS was completed by teachers prior to the introduction of social skills instruction to attain baseline information on students’ social skill level on the social behavior, academic behavior, and emotional behavior subscales. A posttest of the SAEBRS was completed by the same teachers who completed the SAEBRS pretest after the students were exposed to social skills instruction for a minimum of a 3-month period.

I analyzed the results from the social, academic, and emotional behavior subscales and the total behavior score along with the SWIS data to identify social skill generalization in elementary school children with social skills deficits who were taught in three instructional settings: social skills lessons in the general education setting, social skills lessons in the special education setting, and standard classroom instructional methods in the general educational setting. For this study, social skill generalization was measured as growth of social skills by an increase in score on the SAEBRS from an “at risk” score to “not at risk” score on at least one subscale, and thus, showing an improvement on the total behavior score in addition to improvement in the SWIS data management system by a decrease in the number of behavior referrals across school settings.

The SAEBRS

According to the Severson et al. (2007), the SAEBRS is supported for use in screening children who are at behavioral and emotional risk, stating that it is highly

efficient for teachers to use in the evaluation of behavior. Severson et al. also found the SAEBRS to be a statistically reliable measure with high sensitivity scores, a test-retest reliability score of .48, and internal consistency of .93. Kilgus et al. (2013) reported that the SABRS screener is designed for kindergarten through Grade 12. The authors examined its use and found that the scales were internally consistent and supported the usability of the SAEBRS in the universal evaluation of students.

Kilgus et al. (2013) were encouraged by the inclusion of both adaptive and maladaptive behaviors and found the adaptive behaviors identified in the SAEBRS screener as being necessary for academic success and formation of relationships. In addition, the maladaptive behaviors identified on the SAEBRS were noted as being a primary concern at the elementary level. This research provided initial support for SAEBRS construct validity. When compared with other rating scales, it was determined to have consistently high correlational findings that supported the concurrent criterion-related validity of both the individual and combined scales of the SAEBRS (Kilgus et al.). Further comparison by the authors yielded high receiver operating characteristic curve findings and strong sensitivity scores showing that this rating scale appropriately measures what it is supposed to. The SABRS combined cut scores demonstrated the greatest consistency, being the only scale reviewed that identified the same cut score in relation to multiple criterion scales. On the other hand, the authors found a high occurrence of positive prediction with regards to identifying at risk students; therefore, the authors recommended not using the instrument in isolation to reduce the risk of falsely identifying children as being in need.

The SAEBRS screener was developed based on the strengths of existing screening tools, while compensating for their weaknesses, and it includes several variables relevant to the target age group (Kilgus et al., 2013). Correlational and diagnostic accuracy were found to meet or exceed the standards for applied use, proving to be comparable to that of other technically adequate screeners. Overall, the SAEBRS was found as a viable approach to school-based behavior screening (Kilgus et al.).

SWIS Data System. In addition to the SAEBRS, data from the SWIS data system were reviewed. This system was developed by the University of Oregon faculty in collaboration with public schools. These data provide information on areas of maladaptive behavior including aggression, property destruction, noncompliance, and inappropriate verbal interactions. Data are entered by a school employed individual trained in how to enter these data for reporting purposes, based on the behaviors exhibited by the child. The SWIS reporting form is accessible to all school staff and can be completed by teachers or faculty, across instructional settings, including in the hallways, cafeteria, and at recess. These data were used to determine if there are differences in generalization of social skills across settings. Additionally, data can be reviewed for the type of behavior of concern that was exhibited by the child, as well as the location in which the behavior was exhibited. Students' data were reviewed to determine if small group instruction had an impact on their ability to generalize social skills in comparison to those who received instruction in the general education setting.

The SWIS is a confidential, web-based system used to collect student behavior data. Data entry categories include behavior, date, time, motivation, and location. The

number of incidents along with the location and behavior type within a three-month period of interest were used for secondary data analysis in the present study. Motivation and time of day will be excluded. There is also a distinction between minor and major behaviors. For the purposes of this study, both categories will be reviewed. A trained staff member was charged with entering the data into this system from the corresponding paper forms completed by teachers or staff who witnessed the student's behavior. After data were entered into SWIS, these forms were filed in student confidential records, and data are stored on password protected computers in the designated school classrooms.

The SWIS system is used in many schools today to monitor student behavior. Flannery, Fenning, Mcgrath Kato, and Bohanon (2013) found the SWIS system useful in pulling data about office discipline referrals for high school students to determine the most frequent behaviors exhibited. Tate (2009) used the SWIS system to successfully identify middle school students who needed behavioral support and more intensive interventions.

Data Analysis Plan

IBM SPSS software was used to analyze secondary data gathered from each school and the results of this analysis were used to answer the research question for the present study, which was: What is the difference in a child's ability to generalize social skills across instructional settings when they are taught social skills in the general education setting compared to the resource room setting, and when they are taught in the general education setting with standard classroom instructional methods? The hypothesis is as follows.

H_0 : Students do not display an increased ability to generalize social skills across instructional settings when taught in the general education setting using social skills instruction compared to resource room and standard classroom instruction.

H_1 : Students display an increased ability to generalize social skills across instructional settings when taught in the general education setting using social skills instruction compared to resource room and standard classroom instruction.

An analysis of covariance was the statistical test used to test the hypotheses.

ANCOVA allows to compare one variable in two or more groups taking into account (or to correct for) variability of other variables, called covariates. Baseline data, no instruction, were analyzed to determine the naturally occurring growth and generalization for students. Pre- and postdata were also analyzed for the general education and resource room instruction groups to determine the impact that instructional setting has on the generalization of skills. In addition, data from the SWIS data system, such as the location, was used to identify the varying school settings in which the skills were used, providing evidence of social skills generalization across school settings.

Prior to data entry, any duplicate entries, out-of-range data, and extraneous characters were removed to ensure a clean data set. Once data were organized from all groups, a planned comparison was made to test the hypotheses. The results were interpreted with the assumption that the event probability is the same for all subjects within a population and that the responses from one subject to the next are independent of

one another. The odds ratio is < 1 , social skills instruction is greater than no instruction. The confidence interval is 95%.

Threats to Validity

Although multiple measures and random groups were used to best represent the population and ensure accurate data collection, threats to validity may still exist. Threats to external validity could include reactive or interaction effects of testing. This research utilizes pre- and postdata, as a result, the teacher's sensitivity or responsiveness to the measure may have been affected because of seeing it multiple times. Reactive effects were considered as the instruction occurred in the natural setting, making it difficult to determine if the effect can be entirely attributed to the instruction given, baseline data were analyzed to account for this.

Some threats to internal validity may occur with pre- and postdata. One is history, which involves the events that occur between the first and second measurement. Maturation could occur, although the passage of time between pre and post data is not lengthy, students may still demonstrate social skills growth regardless of social skills instruction. Statistical regression may be a factor based on the selection of subjects because of their low scores. Experimental mortality is the final potential threat and can occur with the loss of subjects; however, it is not likely that these numbers will be large enough to have an effect or impact the data.

Threats to construct validity may also exist. For example, there may be inadequate preoperational explication of constructs, in that the operational definitions may be inadequately defined. There may have been interaction of different treatments. Social

skills instruction may have been introduced in a classroom where this intervention was not planned, although this was not reported. In addition, social skill development could occur incidentally during the school day. Evaluation apprehension may occur if the teachers completing the assessment wanted to look better by scoring their students higher than they should, or by not filling out behavior forms and managing behavior in house to appear more competent.

Ethical Procedures

The Walden University data use agreement was signed by the superintendent of schools and the director of student services for me to obtain secondary data from the schools in the form of scores from the SAEBRS and data from the SWIS software system. The potential impact on human participants is small; however, the Walden University Institution review board (IRB) application was submitted and approved on January 2018, approval #01-30-18-0518274. Approval was attained prior to obtaining secondary data. Data were accessed from securely stored files located within the school buildings. Data transferred from the school for analysis is stored on my password protected computer and will be saved for a minimum of 5 years. These data do not include any identifying characteristics such as, names, ages, or classrooms. The original data are stored in locked files on school premises and were not removed at any time during data analysis.

Recruitment was unnecessary as the schools approached were already implementing or planning to implement social skills curriculum and the data requested were in process of collection or already completed and stored. The students' names were

not recorded during data analysis. Stored data are accessible by school personnel who are responsible for entering raw data into the SWIS software system. Data analyzed for this study were collected from the districts who granted permission for my secondary data use.

Summary

The detrimental effects of social skills deficits are of increasing concern (Webb et al., 2004). There is a need for social skills instruction, and schools are struggling to support the social emotional needs of their students (Morgan et al., 2016). There is a gap in the research on the best way to provide this instruction to help students generalize the social skills they have learned. This study provides evidence that instruction in the general education setting is the most effective method for teaching social skills to elementary school children with social skills deficits. In this environment, social skills are modeled, practiced, and reinforced and therefore, hypothesized to be more likely to be generalized across school settings.

I analyzed quantitative secondary data that were collected by teachers at two schools before and after social skills instruction was provided in three different instructional settings: the general education classroom with social skills instruction, the resource room setting with social skills instruction, and the general education classroom without social skills instruction. Data was analyzed to determine the ability of children with social skills deficits to generalize social skills based on the setting in which those social skills were taught. The findings from this study will be submitted to the school administrators and board of education and will be disseminated through the district's

websites and through the board of education meeting minutes. Chapter 4 presents to results of the research conducted.

Chapter 4: Results

Introduction

I conducted this study because of the large number of children in today's schools with varying social-emotional needs. With an increasing number of children diagnosed with autism, ADHD, and others who struggle with social skills deficits, it is imperative that schools find effective ways to support them (Corkum et al., 2010; Radley et al., 2017). Social skills deficits can not only impede typical development and lead to depression and anxiety, but they can impact a child's ability to participate in class (Misurell et al., 2011; Thompson & Trice-Black, 2012).

Given the prominence of impairments in social skills for many children, social skills training is frequently implemented as an intervention. In many school districts, social skills instruction is provided in a small group or individual format with like peers (Radley et al., 2017). Although these interventions have been successful in social skills development for many children, these children continue to struggle with producing the skills learned in the instructional setting to a setting where these skills are expected to occur (Radley et al.). Research has shown that both social skills instruction and inclusion can be effective in helping children develop social skills (Albrecht et al., 2015; Battaglia & Radley, 2014; Laugeson et al., 2014). The purpose of this quantitative study was to determine whether the instructional setting in which social skills are taught has an impact on the ability of elementary school students with social skills deficits to generalize these skills across instructional settings.

This research was driven by a theoretical framework comprised of Bandura's (1977) social learning theory and Vygotsky's (1978) social development theory, which was used to develop the following research question and hypotheses:

Research Question: What is the difference in a child's ability to generalize social skills across instructional settings when they are taught social skills in the general education setting compared to the resource room setting and the general education setting with standard classroom instructional methods?

*H*₀: Students do not display a significant increased ability to generalize social skills across instructional settings when taught social skills in the general education setting compared to resource setting and classroom instructional methods.

*H*₁: Students display a significant increased ability to generalize social skills across instructional settings when taught social skills in the general education setting compared to resource setting and standard classroom instructional methods.

This chapter will include information on the population included in data analysis. I will present the results from the secondary data analysis from two schools in two different school districts located in Connecticut. The interventions will be described and the findings will be discussed to highlight the importance of the study and its impact on public school instruction.

Data Collection

Two school districts in Connecticut signed a data use agreement for this study. Data administrators from one elementary school in each district provided me with secondary data from the SAEBRS and SWIS in the form of Microsoft Excel documents containing information on pre- and postdata incident reports that document student behavior. I will refer to the two schools as School A and School B. I analyzed secondary data from both schools between March 2018 and April 2018. These data were entered into IBM SPSS for analysis based on students who were found to be in the at-risk range in the area of social skills as determined by scores on the SAEBRS. Postdata was collected on only those students who fell into the at-risk range on one or more of the subtests. These data were then analyzed on the number of referrals those students had pre-and postsocial skills instruction to determine an impact of the instruction on social skills generalization.

There were varied response rates between the two schools. Although the total population numbers of student in both districts were similar, School B had a larger number of participants ($n = 93$). There were fewer participants who were enrolled in School A ($n = 36$), partially due to staff changes and program changes in the district. The difference in numbers could also be due to the student population in the districts, School B is a district with higher numbers of students identified as needing special education (14%) compared to School A (12%). Despite the unexpected decrease in the number of participants from School A, I analyzed the secondary data as planned.

Communication between me and the school staff responsible for data storage occurred through e-mail including the school administrator. Data were transferred to me through Excel documents and stored on my password-protected computer as well as on the protected computers in Schools A and B. All data transferred was deidentified of any distinguishing characteristics.

Demographic Characteristics

According to the School Profile and Performance report for school year 2016–2017, the elementary population in School B included an almost equal male to female composition (51.6% and 48.4%, respectively). A majority of the student population in School B was White (90%) and 12% were identified as disabled (Department of Education, 2018). The current enrollment was 306 students and there were 24 teachers and 18 paraeducators supporting the population. Eighty-seven percent of students spend 79% to 100% of their school day with nondisabled peers (DOE, 2018).

School A has a slightly higher male to female ratio at 55.8%, consisting of 72% White and 14% Hispanic or Latino students. The current enrollment was 336 students and there were 29 teachers and 10 paraeducators supporting this population. Seventy three percent of their students spend 79% to 100% of their school day with nondisabled peers (DOE, 2018). There are a larger number of students receiving free and reduced lunch ($n = 47.5$) as well as a larger population of special education students ($n = 14.3\%$) when compared with School B.

Sample Population

The sample population in this study provided me with an opportunity to analyze secondary data that had been collected on students who were identified by the SAEBRS as having social skills deficits in the participating schools. The schools were beginning implementation of instruction in the general education setting. Both school districts were using pre- and postdata to gather information on program implementation and efficacy and granted me access to these data.

School A and School B both used the SAEBRS as a pre- and posttest to identify students in need of social skills instruction and to track the efficacy of the intervention that the schools had put in place to support students with social skills deficits. Both schools administered a social skills intervention to students identified as having social skills deficits in at least one area on the SAEBRS pretest; however, School B identified students as having social skills deficits in all three instructional locations: in class with no social skills instruction, in class with social skills instruction, and in the resource room with social skills instruction. School A only identified students as being in class with no social skills instruction or in the resource room with social skills instruction.

The students in this study were all included in the general education classroom for at least part of their day and were not on specific behavior plans for behavior modification or reduction. Those students who were in seclusion programs or on intensive behavior intervention plans were not included in the SWIS data collection system based on their individual needs. This excludes the most disabled population of students at both schools involved in this study.

Results

Descriptive Statistics

I received secondary data from both Schools A and B in Connecticut on 51 students who were in class with no social skills instruction, 41 students who were in class with social skills instruction, and 37 students who received social skills instruction in the resource room setting for a total of 129 students. This total was comprised of 36 students from School A and 93 students were from School B who were identified by the SAEBRS pretest as having social skills deficits. The descriptive statistics regarding the number of students in each location of instruction can be found in Table 1. Table 1 also displays the mean number of behavior referrals recorded in the SWIS data system for students in each location of instruction, showing the fewest for Instructional Setting 2, in class with social skills instruction ($M = 1.07$, $SD = 1.63$).

Table 1

Average Number of Behavioral Referrals by Instructional Setting

Instructional setting	<i>M</i>	<i>SD</i>	<i>N</i>
In class with no SS instruction	2.24	3.070	51
In class with SS instruction	1.07	1.634	41
Resource room with SS	1.54	2.063	37
Total	1.67	2.441	129

*Unadjusted means are presented, N = number of participants, SS = social skills.

I conducted a one-way ANCOVA to determine the difference in the ability of the students to generalize social skills after having received instruction in either the resource

room with social skills instruction or in the general education classroom with social skills instruction, controlling for natural social skill growth. For this study, baseline data on natural social skill growth was included as a covariate. The adjustment for the pretest score in ANCOVA is beneficial in making sure that any posttest differences truly result from the intervention and are not an effect of pretest differences between the groups.

When analyzing data on referrals for maladaptive behavior across instructional settings, I found a significant effect of the location of instruction on the ability of students to generalize social skills used across settings after controlling for natural skill growth, $F(2, 123) = 5.13, p = .007$, as shown in Table 2. There is a significant effect of instructional setting on the generalization of social skills to other settings.

Table 2

Significance of Generalization After Social Skills Instruction

Source	Type III Sum of Squares	<i>df</i>	Mean Square	Sig.
baseline	95.76	1	95.76	.000
Group	13.21	2	6.61	.007
Group*baseline	6.79	2	3.39	.075

Note. Sig. = significance.

Looking more specifically between the instructional settings, in class with no social skills instruction (Instructional Setting 1), in class with social skills instruction (Instructional Setting 2), and in the resource room with social skills instruction (Instructional Setting 3), the contrast analysis in Table 3 shows a comparison of the

significant difference between in class with social skills instruction and both in class with no social skills instruction and in the resource room with social skills instruction, $p < .05$. That is, there is a significant difference in ability of those who were in class with social skills instruction to generalize social skills when compared with those in the other locations. However, students who were taught in class with no social skills instruction and in the resource room with social skills instruction are not significantly different from each other, $p > .05$. These findings mean that the gains made by those in the general education classroom setting with social skills instruction were of greater significance than those in the other instructional settings.

Table 3

Significance Between Social Skills Generalization and Instructional Setting

(I) Instructional Setting	(J) Instructional setting	Mean Difference (I-J)	Std. Error	Sig. ^b
1	2	2.097	.355	.000
	3	.776	.356	.094
2	1	-2.097	.355	.000
	3	-1.321	.381	.002
3	1	-.776	.356	.094
	2	1.321	.381	.002

Note. Group 1 = In class with no instruction, Group 2 = In class with social skills instruction, Group 3 = Resource room with social skills instruction.

^b Adjusted for natural social skills growth.

The research question for this study was: What is the difference in a child's ability to generalize social skills across instructional settings when they are taught social skills in the general education setting compared to the resource room setting and the general education setting with standard classroom instructional methods?

H₀: Students do not display a statically significant increased ability to generalize social skills across instructional settings when taught social skills in the general education setting compared to resource setting and classroom instructional methods.

H₁: Students display a statically significant increased ability to generalize social skills across instructional settings when taught social skills in the general education setting compared to resource setting and standard classroom instructional methods.

The results of the ANCOVA showed that the differences in means by location of instruction were statistically significant, $F(2,123) = 5.13, p > .05$. Based on these results, the null hypothesis was rejected. In summary, there were significant differences in generalization of social skills exhibited by students who were in class with social skills instruction, in class with no social skills instruction, or in the resource room with social skills instruction. Based on the bootstrapped significance and confidence intervals, as shown in Table 4, there is a significant difference in the ability of children in Instructional Setting 2, children who were in class with social skills instruction to generalize social skills across settings, $p = .006$. Children in Instructional Setting 1, in

class with no social skills instruction, $p = .123$, did not have significant generalization of social skills across settings.

Table 4

Bootstrapped Display of Significant Generalization in Instructional Setting 2

	Std. error	Sig.	Lower	Upper
Intercept	2.43	.001	6.28	15.69
Baseline	.08	.001	.47	.76
Instructional setting 1	1.89	.123	-.78	5.60
Instructional setting 2	1.96	.006	1.38	9.17

Note. Instructional setting 1 = In class with no social skills instruction, Instructional setting 2 = In class with social skills instruction, Lower and Upper = confidence intervals.

Table 5 shows the results of the Sidak corrected post hoc comparisons displaying the bootstrapped significance and confidence intervals, which reveals that students who were in the general education classrooms with social skills instruction differ significantly from those who were in general education classrooms with no social skills instruction and those who were in the resource room with no social skills instruction, $p = .000$ and $p = .004$, respectively. There is no significant difference in the generalization of social skills exhibited by students in the general education classrooms with no social skills instruction and in the resource room with social skills instruction, $p = .065$.

Table 5

Bootstrap Comparison of Significant Generalization in Instructional Setting 2

(I) Group	(J) Group	Mean Difference		
		(I-J)	Std. Error	Sig. ^b
In class with no instruction (1)	2	1.45	.255	.000
	3	.58	.249	.065
In class with SS instruction (2)	1	-1.45	.255	.000
	3	-.88	.269	.004
In the resource room with SS instruction (3)	1	-.58	.249	.065
	2	.88	.269	.004

Note. SS = social skills.

Figure 1 displays a linear relationship between pre- and postintervention social skills for each group, as assessed by visual inspection of a scatter plot. There is a positive relationship between social skill generalization and the instructional setting in which skills are taught. Additionally, the interaction between groups was not statistically significant, $f(2, 123) = 2.64, p = .075$, mean square = 3.39, meeting the assumption of homogeneity of regression slopes.

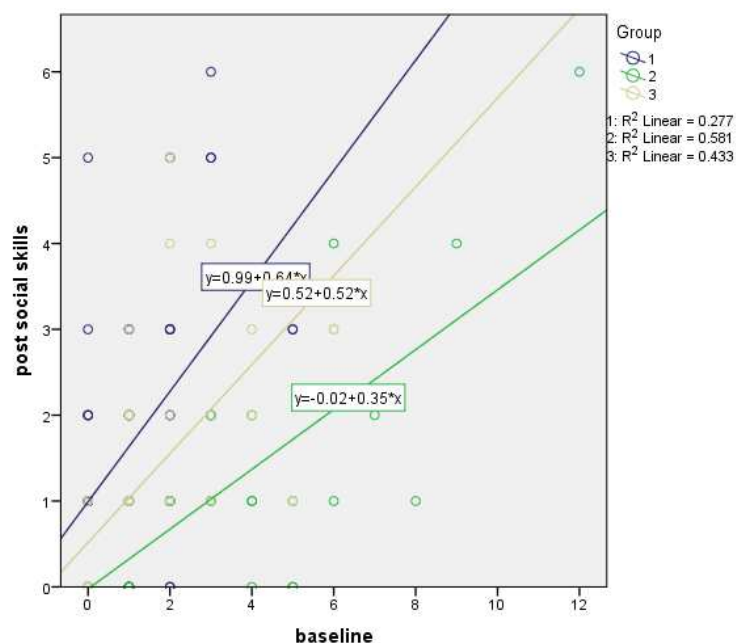


Figure 1. Graph displaying linear slope between the 3 instructional locations, from IBM SPSS.

Figure 2 displays the social skills growth between each group. Those in the general education classroom setting with no social skills instruction started with higher social skill levels initially. As shown in the figure, growth in both the general education classrooms with no social skills instruction and in the resource room with social skills instruction showed similar gains in social skill development, though this gain is not significant. Those children with social skills deficits who were in general education classrooms with social skills instruction made significantly greater gains in social skill development than their peers who were in general education classrooms with no social skills instruction and in the resource room with social skills instruction.

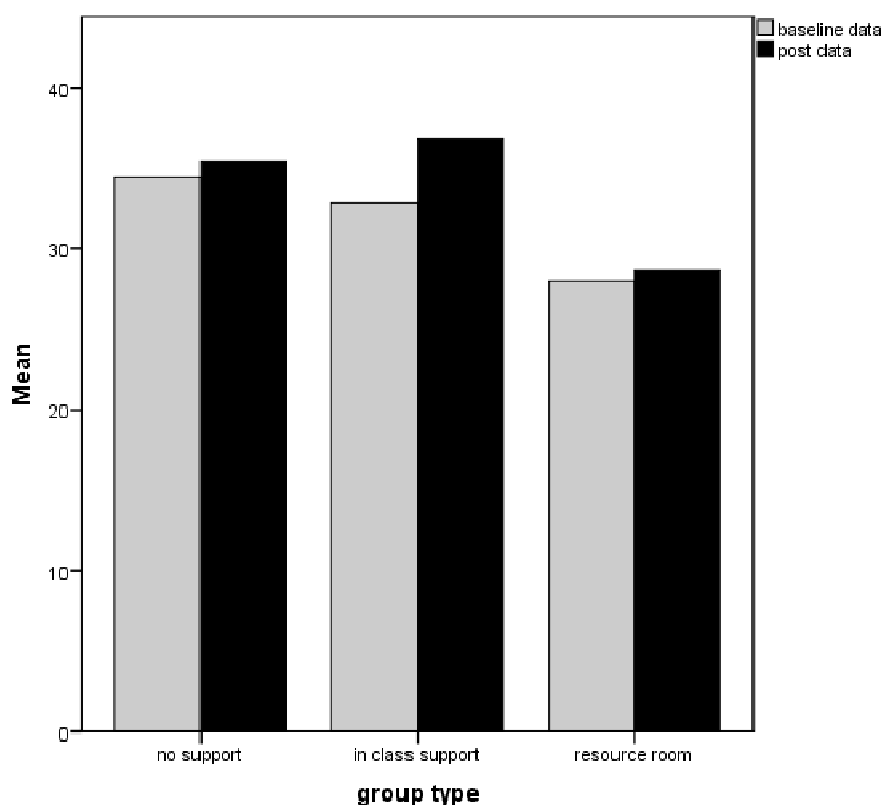


Figure 2. Bar graph displaying difference between pre and post data social skills growth in all three instructional settings as produced from IBM SPSS software.

Summary

In this chapter, I presented the findings from the secondary data collected by teachers on students from two schools in Connecticut who were identified by the SEABRS as having social skills deficits. The analysis revealed that there was significant increase in generalization of social skills to other settings among those students who were taught in the general education classroom with social skills instruction as opposed to those students who were taught in a general education classroom with no social skills instruction or taught in the resource room with social skills instruction. In chapter 5 I present the conclusion of this study. I provide an interpretation of these findings and

limitations of this study. Implications for social change, recommendations for action, and recommendations for further study are also discussed.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Children with social skills deficits in verbal and nonverbal communication can face a number of social challenges both in and out of school, which can impact them socially and academically (Mavropoulou & Sideridis, 2014). There is an increasing need for social skills instruction in today's schools to allow students to succeed in the classroom and to develop as social beings. Inclusion opportunities in public schools can have a positive impact on the development of social skills and can increase peer understanding and empathy for students with special needs (Mavropoulou & Sideridis). Providing instruction in an inclusive setting can allow for greater social development for those in need.

The purpose of this quantitative study was to determine whether the instructional setting in which social skills are taught has an impact on the ability of elementary school students with social skills deficits to generalize these skills across instructional settings. The results of this study provided evidence of a difference in children's ability to generalize social skills based on the setting in which instruction took place - the general education classroom with no social skills instruction, the general education classroom with social skills instruction, and the resource room with social skills instruction. The results from this study can inform teaching practice and allow for greater student success.

Interpretation of the Findings

There are an increasing number of students who have social skills deficits in the public-school setting (Humphry & Lewis, 2008). These students may experience social

isolation and social anxiety because of ineffective inclusion practice (Humphry & Lewis). In addition, Humphry and Lewis (2008) found that educational practices may contribute to or even act as barriers to student learning and impact their ability to participate in the classroom setting. On the other hand, Whitby et al. (2012) posited that effective instruction of social skills in the general education classroom setting could provide the exposure students need for generalization and without these experiences social skills can be delayed. In this study, my findings support students' generalization of social skills to other settings when they were taught in the inclusive general education classroom setting. The findings revealed that students who were taught in the general education classroom setting with social skills instruction were more likely to generalize those skills as demonstrated by a significant decrease in behavior referrals across settings when compared with those students who did not receive social skills instruction or who received social skills instruction in a resource room setting.

There has been limited research on the implications of instructional setting on the ability of children with social skills deficits to generalize the skills learned. The findings of this study provide a contribution to social skills development and the education of children with social skills deficits. This information could be used to better inform instruction and promote stronger, more effective teaching practices.

The findings from this study also support the assumption that students who are given support in the general education classroom setting with their peers, where social skills taught can be readily used and reinforced, will be more likely to exhibit those social skills across settings. When compared with children who received social skills instruction

in the general education setting, children in the other two instructional settings both generalize social skills at a similar, lesser rate. Albrecht et al. (2015) discussed the need for social skills instruction for all students in the general education classroom setting by using tiered interventions and RTI strategies that many schools already use. My findings in this study support the authors' argument for a need for the inclusive instruction of social skills for many students in order to support social growth and skill generalization.

Mariyam and Shabbir (2013) discussed the complex social skills that are required to engage in social interactions including interpreting social cues and understanding how behavior or social cues impacts others. Social skills can be taught and practiced in the general education classroom setting, which will allow for increased learning opportunity and the probability of generalization of these skills across settings. Given the number of influences and situations faced by children in America today, it is more important than ever to provide them with social support in the classroom setting (Jenson, 2010). With additional evidence of social skills generalization from this study, the importance of social skills instruction in the general education classroom setting as mentioned by Jenson (2010) is further supported.

The results of this study also support the research of Whalon et al. (2015) who found that the inclusion of students with social skills deficits in the general education classroom has many known benefits for students with social skills deficits. My findings in this study extend this knowledge to provide evidence of social skills generalization being an additional benefit for those identified with social skills deficits. The findings could provide additional evidence for advancing inclusion practices in public schools.

Laugeson et al. (2014) identified concerns with ineffective social skills intervention strategies that could result in the inability of children to generalize the skills they have learned. The authors believed that teaching skills in isolation or in specialized settings is an issue because of the absence of peer models. My findings in this study provide support of these authors' position and provide evidence to argue for teaching skills in the general education classroom setting to allow for peer models and reinforcement that may impact students' ability to generalize the social skills learned.

Additionally, the results of this study provide an extension of research by Stichter et al. (2006) who found that the environments and interactions that children have with peers and adults can greatly impact what they learn both socially and academically. This research would support instruction of social skills in the classroom as being impactful in the lives of students. This impact reaches beyond what is learned in class and includes the skills that are preformed throughout the school day (Stichter et al.).

Laugeson et al. (2014) found that when effective social skills programs were used, students showed significant improvement in a variety of social skills areas. Again, extending that research, there is now evidence of the importance of such programming in the general education setting to promote social skill use across settings. Given these findings, it would be beneficial for schools to review current practices and adjust instruction to allow for students in need of social skills instruction to get the greatest benefit from their education.

Bandura (1977) determined that the social interactions children, both with and without disabilities, have were instrumental in their social development. Given that social

learning theory (Bandura, 1977) holds that behavior is learned through experience or observation, it is not surprising that this research produced evidence to show that students have greater social skill generalization after receiving social skills instruction in the general education classroom setting. Bandura's research established that children, when given a model of behavior that was reinforced, would reliably reproduce that behavior (Joseph et al., 1977). The theory also posits that the feedback or reinforcement received during the development of a new behavior will greatly impact the future occurrences of that behavior (Anderson & Kras, 2007). This theory directly supports the findings of this study that provide evidence of the impact that instruction can have on increasing the future occurrences of the behavior.

Bandura's (1977) social learning theory is said to be one of the first theories of socialization. The theory emphasizes the importance of observation and modeling of new behavior which is how Bandura believed new behavior was learned and later used in a response to a similar stimulus (Tedeschi & Felson, 1994). Although Bandura considered environmental and cognitive factors, the author suggested that learning occurs through a four-part process, including attention, retention, motor reproduction, and motivation. Bandura believed that people can learn through observing others as well as through the consequences of their behavior. This may contribute to why children show greater generalization of skills learned after they are supported in the general education setting.

Stroot, 2001 found that children who observe behavior in groups or individually will then use that behavior with less error. This observational learning exposure serves as a guide for future use (Stroot). The author found that students who are instructed outside

of the classroom are lacking group behavior observation opportunities. When in a group, a child can watch others demonstrate behaviors that allow them to participate in a group and be included. The new learner, after observing these behaviors, can then imitate them and become accepted into the group previously observed, which again would support why these students are more likely to generalize the social skills they have learned in the general education setting (Stroot).

Similarly, Vygotsky (1978) discussed the importance of observation in the development of new skills. When learning a new activity, children depend on others who have had experience with these skills to be successful themselves (John-Steiner & Mahn, 1996). This may help to explain why students in the resource room setting were not as likely to generalize social skills. Vygotsky believed that children gain experience within social settings, and it is through this experience that the skill is internalized and used as part of their social repertoire. Given this theory, it was not surprising that children learn social skills at a higher rate when they are given instruction with their peers, than without because the acquisition of new skills is dependent on their exposure to their peer group and social situations.

Vygotsky (1978) also posited that some children, in addition to exposure, require a significant amount of assistance and collaboration from knowledgeable individuals during initial skill acquisition before being able to use the skill independently. This is similar to my findings in this study that provide evidence of students who received social skills instruction in the general education setting being more likely to generalize the social skills learned than those who did not receive direct instruction in social skills.

These findings demonstrate the importance of social skills instruction in the general education setting for students with social skills deficits.

Akhmetova et al. (2017) used Vygotsky's theory in their argument for inclusion practice. They emphasized the importance of social interaction between children with social skills deficits and those who are typically developing for mastery of skills and mental development. My findings support these authors' argument in promoting effective and appropriate inclusion practice in helping children to better develop the skills required to be successful in class and in social opportunities throughout the day.

Limitations

The findings I obtained in this study should be interpreted with some limitations in mind. First, this study was conducted with a sample composed of students with varying degrees of social skills deficits ranging from deficits in one to three areas of need based on baseline data collected by teachers. As a result, the data reflect students with a broad range of skill area deficits.

Second, the secondary data were deidentified, limiting the ability to examine the data by age, grade, or gender. As a result, it was not possible for me to determine whether these variables may have an impact on social skills generalization. Additionally, there was an inability to control the school environment because students are exposed to a number of different children, teachers, and are in a period of growth and development. I assumed that the schools provided instruction as they had planned. However, there was no guarantee that students were not exposed to another type of instruction or other factors that may have impacted their ability to learn and generalize social skills.

In this study, I only analyzed data from a small population of children from a geographically similar location. The secondary data used for this study were limiting in that I was dependent on the schools to provide data to be analyzed, and many area districts had already started implementing various types of social skills instruction. In addition, the accessibility of these data was also convenient to me in that both districts were known.

Recommendations

Future research could include information on students' age, grade, or gender in relation to social skills development. These variables may be factors in how children learn social skills and impact their ability to generalize the skills they learn. For example, Li and Wong (2016) found that girls from an early age have higher exposure to prosocial behaviors such as comforting behavior. In another study Lamont and Van Horn (2013) found that there was a more pronounced social skills growth between kindergarten and first grade, and again in third and fifth grade, with lesser growth occurring between fifth and sixth grade.

In addition to age, grade, and gender being potential variables for consideration in a child's ability to acquire and generalize social skills, there could more focused research on students who present with similar profiles based on the SAEBRS scores. Looking specifically at a student's deficit area could help educators to specialize instruction based on specific skills deficits areas. Tailoring social skills instruction to meet individual need could increase a child's ability to generalize social skills.

To better support the findings in this study, that there is an increased probability that students will generalize social skills when taught those skills in the general education setting, it would help to look at data from various regions. Expanding this research could help to determine if the findings from this study hold up across various regions. Additionally, studying the effects of in school social skills instruction on social skills use at home or in the community would also provide information on the efficacy of instruction provided to students.

This study provides evidence of increased generalization of social skills within the school day based on the instructional setting. An additional recommendation for further research could include studies on social skills exhibited outside of the school setting after being instructed in school. This type research could provide further evidence on the impact of instructional location on social skills development and can help to determine if instruction during the school day is enough to improve social skills outside of the school setting.

This study excluded students who were in the resource room setting for all, or most of their day. An additional consideration for future research would involve a child's intellectual ability or disability area and the impact on social skills development within the inclusion setting. Brooks, Floyd, Robins, and Chan (2015) found that children with intellectual disability and specific learning disabilities have social skills and there has been limited effectiveness of classroom mainstreaming and social skills training for these children. The authors commented on the importance of participation in social activities to

enhance social adjustment, but little is known about the benefits of activity participation for children with intellectual and specific learning disabilities.

Implications

Schools continue to face budget shortfalls and struggling student populations. Administrators and teachers are charged with having more responsibility, more students, and more student need, with less staff, and support. In these times, it is crucial to determine how to best meet the needs of students within the general education setting, as there is limited or no funding for specialized programs. These findings could provide guidance on the importance of allowing students with social skills deficits to learn and participate in the general education setting. This practice could not only increase the likelihood that students will generalize the skills used across settings, but it could allow for an environment that is more accepting and supportive of children of all needs.

Semrud-Clikeman and Schafer (2000) found that deficits in social skills can have an emotional impact on children that can lead to increased anxiety and depression and can negatively influence social competence. If social skills instruction is provided in the general education classroom setting, these potential issues can be avoided. In class instruction leading to increased social skills use may also decrease the chances of peer rejection and bullying that occur as a result of social skills deficits according to Cappadocia et al. (2012). If social skills are improved, these issues, along with other emotional risks can be avoided and can support students' academic development (Rosenberg et al., 2015).

The purpose of this study was to determine if the instructional setting in which social skills are taught can impact the ability of children with social skills deficits to generalize the skills they learned. The findings of this study do support that students who are taught in the general education classroom with social skills instruction are significantly more likely to generalize social skills than those who receive instruction in the resource room or in the general education classroom with no social skills instruction. This research does also show, however, that students do continue to show progress in social skills development in each setting, but to a lesser degree than those in the general education setting with social skills instruction. Further research could be done in this area to determine if the social skills learned in school also generalize to behavior outside of the school day, which would play a role in family and societal growth.

The results of this study will be disseminated through the district administrators either electronically or in person based on their availability. In addition, I will ask to share these findings at a board of education meeting as a variety of people could benefit from learning the results of this study. This study may provide a first step in changing how social skills instruction is implemented in public schools.

Providing students with the appropriate social skills instruction and allowing them to utilize the skills learned more readily across settings will help students to meet with more success in school. If students can access the general education curriculum through group work, peer modeling and support, and positive overall classroom experiences, they may have increased opportunity to perform better on academic tasks, leading to an increased knowledge base and better performance.

The theories of both Vygotsky (1978) and Bandura (1977) both relate to a child's ability to learn and maintain skills as a result of learning that occurs in an environment with their peers. Through experience or observation, students learn to use and apply the skills necessary to become social beings. The evidence presented in this study would similarly point to the potential impact environment or setting of instruction has on students who learn in the general education setting with social skills instruction. It could be argued that because these skills are reinforced in the general education setting, the future occurrence of the social skill use could be increased.

Including students with social skills deficits in the general education classroom will provide students who struggle with social skills deficits with the same opportunities that are available to their peers. Although the demographics of the students in this study are similar, the impact of such findings can be wide spread across populations. The findings from this research show that students who are taught social skills in the general education setting are more likely to demonstrate appropriate social skills across settings. Providing this research to school administrators could help to change the instruction given in public schools and could not only benefit the lives of the students with social skills deficits, but it can allow for social improvement across ability and grade levels. Today, as more students communicate through electronics, social skills instruction provides a way for children to work on face to face interactions and acceptance of all children regardless of ability.

Schools in Connecticut continue to look for ways to support children in house due primarily to budgetary constraints. The drop in educational funding can also impact the

ability of educators to support children in house due to a lack of professional development and staffing. To promote student success, it would be crucial to provide training on how to provide social skills instruction and how to support social needs on an ongoing basis. This training and instruction could save districts money later as students will find greater success and require less support instead of falling behind. The longterm impact is beneficial to administrators, teachers, children, and families. Educating all of the stakeholders can help in better supporting children with social skills deficits to be more successful in school and beyond.

Conclusion

The purpose of this study was to determine if there was an impact on a child's ability to generalize social skills based on the setting in which those skills were taught, the general education classroom without social skills instruction, the general education classroom with social skills instruction, or the resource room with social skills instruction. This study used secondary data from two different schools in two different districts to determine if social skills across settings were impacted by the instructional setting. It was found that students who were taught in the general education classroom with social skills instruction were more likely to generalize skills across settings. As a result of the data analysis, I have made suggestions to be considered when planning social skills instruction for those students identified as having social skills deficits.

There are many implications for positive social change as a result of these findings. This research has the potential to change how social skills instruction is implemented in the public school setting. This change could increase the ability of

children who struggle in varying social areas to socially thrive and be more successful and involved in their classrooms leading to better and longer lasting relationships, better grades, and in the long term, could positively impact relationships and employment creating positive change for individuals and society as a whole.

References

- Akhmetova, D. Z., Chelnokova, T. A., & Morozova, I. G. (2017). Theoretical and methodological basis of inclusive education in the researches of Russian scientists in the first quarter of 20th century (P. P. Blonsky, L. S. Vygotsky, V. P. Kaschenko, S. T. Shatsky). *International Education Studies*, *10*(2), 174-179. doi:EJ1130631.
- Albrecht, S. F., Mathur, S. R., Jones, R. E., & Alazemi, S. (2015). A school-wide three-tiered program of social skills intervention: Results of a three-year cohort study. *Education & Treatment of Children*, *38*(4), 565-586. doi:10.1353/etc.2015.0023
- Anderson, J. F., & Kras, K. (2007) Revisiting Albert Bandura's social learning theory to better understand and assist victims of intimate person violence, *Women & Criminal Justice*, *17*(1), 99-124, doi:10.1300/J012v17n01_05
- Anderson, S. R., & Romanczyk, R. G. (1999). Early intervention for young children with autism: continuum-based behavioral models. *Journal of the Association for Persons with Severe Handicaps*, *24*(3), 162-173. doi:10.2511/rpsd.24.3.162
- Balakrishnan, V., & Narvaez, D. (2016). A reconceptualism of Vygotsky's ZPD into ZCD in teaching moral education in secondary schools using real-life dilemmas. *Student Learning, Childhood & Voices*, *3*. doi:10.1080/2331186X.2016.1142925
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Brännström, L., Kaunitz, C., Andershed, A. K., South, S., & Smedslund, G. (2016). Aggression replacement training (ART) for reducing antisocial behavior in

- adolescents and adults: A systematic review. *Aggression and Violent Behavior*, 27, 30-41. doi:10.1016/j.avb.2016.02.006
- Brooks, B. A., Floyd, F., Robins, D. L., & Chan, W. Y. (2015). Extracurricular activities and the development of social skills in children with intellectual and specific learning disabilities. *Journal of Intellectual Disability Research*, 59(7), 678-687. doi:10.1111/jir.12171.
- Camargo, S. P. H., Rispoli, M., Ganz, J., Hong, E. R., Davis, H., & Mason, R. (2014). A review of the quality of behaviorally-based intervention research to improve social interaction skills of children with ASD in inclusive settings. *Journal of Autism and Developmental Disorders*, 44(9), 2096-2116. doi:10.1007/s10803-014-2060-7.
- Cameron, P., & Lao, T. (2013). The role of the learning environments in facilitating social and creative skills. *Global Education Journal*, 2013(2), 1-19.
- Cappadocia, M. C., Weiss, J. A., & Pepler, D. (2012). Bullying experiences among children and youth with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 42(2), 266-277. doi:10/1007/s10803-011-1241-x.
- Center for Disease Control and Prevention. (2016). Autism spectrum disorder (ASD). Retrieved from: <http://www.cdc.gov/ncbddd/autism/index.html>
- Chow, J. C., & Gilmour, A. F. (2016). Designing and implementing group contingencies in the classroom. *Teaching Exceptional Children*, 48(3), 137-143.

- Collins, T. A., Gresham, F. M., & Dart, E. H. (2016). The effects of peer-mediated check-in/check-out on the social skills of socially neglected students. *Behavior Modification, 40*(4), 568-588. doi:10.1177/0145445516643066
- Cooper, J. O., Heron, T. E., & Howard, W. L. (2007). *Applied Behavior Analysis, 2nd ed.* Pearson.
- Corkum, P., Corbin, N., & Pike, M. (2010). Evaluation of a school-based social skills program for children with attention-deficit/hyperactivity disorder. *Child & Family Behavior Therapy, 32*(2), 139-151.
- Cranston, A. (2017). Want to know the secret to prioritizing school climate? *Leadership, 46*(5), 24-27.
- Dageseven, E. D. (2011). Comparison of direct instruction and problem-solving approach in teaching social skills to children with mental retardation. *Educational Sciences: Theory and Practice, 11*(3), 1414-1420.
- David, R., & Kuyini, A.B. (2012). Social inclusion: Teachers as facilitators in peer acceptance of students with disabilities in regular classrooms in Tamil Nadu, India. *International Journal of Special Education, 27*(2), 157-168.
- Devender R. B., & Hart, S. L. (2010). Increasing peer-to-peer social skills through direct instruction of two elementary school girls with autism. *Journal of Research in Special Educational Needs, 10*(2), 124-132. doi:10.1111/j.1471-3802.2010.01149.x
- Doolittle, P. E. (1995). Understanding learning through Vygotsky's zone of proximal development. *Educational Resources Education Center.* doi:ED384575.

- Dugas, D. (2017). Group dynamics and individual roles: A differentiated approach to social-emotional learning. *Clearing House, 90*(2), 41-47.
doi:10.1080/00098655.2016.1256156
- Elliott, S. N., & Gresham, F. M. (2013). Social skills improvement system. In *Encyclopedia of Autism Spectrum Disorders, 2933-2935*. doi:10.1007.2F978-1-4419-1698-3-509
- Flannery, K. B., Fenning, P., Mcgrath Kato, M., & Bohanon, H. (2013). A descriptive study of office disciplinary referrals in high schools. *Journal of Emotional & Behavioral Disorders; 21*(2), 138-149. doi:10.1177/1063426611419512
- Gagnon, S., Huelsman, T., Reichard, A., Kidder-Ashley, P., Griggs, M., Struby, J., & Bollinger, J. (2014). Help me play! Parental behaviors, child temperament, and preschool peer play. *Journal of Child & Family Studies. 23*(5), 872-884.
doi:10.1007/s10826-013-9743-0.
- Garrote, A. (2017). The relationship between social participation and social skills of pupils with an intellectual disability: A study in inclusive classrooms. *Frontline Learning Research, 5*(1) 1-15.
- Gilmore, K. (n.d.). Small group social skills instruction: The results of a Tier 3 intervention within a school-wide positive behavior support program. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 76*(9).
- Goodwin, M. W. (1999). Cooperative learning and social skills: What skills to teach and how to teach them. *Intervention in School & Clinic, 35*(1), 29.

- Hall, G. E., & DiPerna, J. C. (2017). Childhood social skills as predictors of middle school academic adjustment. *Journal of Early Adolescence, 37*(6), 825-851.
- Hammond, R. K., Campbell, J. M., & Ruble, L. (2013). Considering identification and service provision for students with autism spectrum disorders within the context of response to intervention. *Exceptionality, 21*(1), 34-50.
- Hebert-Myers, H., Guttentag, C. L., Swank, P. R., Smith, K. E., & Landry, S. H. (2006) The importance of language, social, and behavioral skills across early and later childhood as predictors of social competence with peers. *Applied Developmental Science, 10*(4), 174-187. doi:10.1207/s1532480xads1004_2
- Hui Shyuan Ng, A., Schulze, K., Rudrud, E., & Leaf, J. B. (2016). Using the teaching interactions procedure to teach social skills to children with autism and intellectual disability. *American Journal on Intellectual & Developmental Disabilities, 121*(6), 501-519. doi:10.1352/1944-7558-121.6.501
- Hurlbut, A. R., & Tunks, J. (2016). Elementary preservice teachers' experiences with response to intervention. *Teacher Education Quarterly, 43*(3), 25-48.
- Jahnukainen, M., & Itkonen, T. (2016). Tiered intervention: History and trends in Finland and the United States. *European Journal of Special Needs Education, 31*(1), 140-150.
- Jenson, J. M. (2010) Advances in preventing childhood and adolescent problem behavior. *Research on Social Work Practice, 20*(6), 701-713.
- Jones, D. R. (n.d.). Examining the impact of a positive behavior support program and direct instruction of social and emotional learning skills on the externalizing

behaviors of disruptive youth. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 75(7).

Joseph, J. M., Kane, T. R., Nacci, P. L., & Tedeschi, J. T. (1977). Perceived aggression: A re-evaluation of the bandura modeling paradigm. *Journal of Social Psychology*, 103(2), 277.

Kilgus, S. P., Chafouleas, S. M., & Riley-Tillman, T. C. (2013). Development and initial validation of the Social and Academic Behavior Risk Screener for Elementary Grades. *School Psychology Quarterly*, 28(3), 210-p226.

Kretchmar, J. (2017). Social learning theory. *Social Learning Theory -- Research Starters Education*, 1.

LaMarca, V. (2008). *Teaching social skills to children with autism*. Lovaas Institute – Indianapolis. Retrieved at <http://www.lovaas.com/blog/archives/15-Teaching-Social-Skills-to-Children-with-Autism.html>

Lamont, A., & Van Horn, M. L. (2013). Heterogeneity in parent-reported social skill development in early elementary school children. *Social Development*, 22(2), 384-405.

Laugeson, E. A., Ellingsen, R., Sanderson, J., Tucci, L., & Bates, S. (2014) The ABC's of teaching social skills to adolescents with autism spectrum disorder in the classroom: The UCLA PEERS® program. *Journal of Autism and Developmental Disorders*, 44(9), 2244-2256. doi:10.1007/s10803-014-2108-8

- Leaf, J. B., Dotson, W. H., Oppenheim-Leaf, M. L., Sherman, J. A., & Sheldon, J. B. A. (2011). Programmatic description of a social skills group for young children with autism. *Autism Partnership, 32*(2), 111-121. doi:10.1177/0271121411405855
- Leonardo, Z., & Manning, L. (2017) White historical activity theory: Toward a critical understanding of white zones of proximal development. *Race Ethnicity and Education, 20*(1), 15-29. doi:10.1080/13613324.2015.1100988.
- Li, R. Y., & Wong, W. I. (2016). Gender-typed play and social abilities in boys and girls: Are they related? *Sex Roles, 74*(9-10), 399-410. doi:10.1007/s11199-016-0580-7
- Lord, C., & McGee, J. P., Eds. (2001). *Educating children with autism*. Committee on Educational Interventions for Children with Autism, Division of Behavioral and Social Sciences and Education. Retrieved from <http://www.nap.edu/catalog/10017.html>
- Mariyam A., & Shabbir A. (2013). Positive schooling and subjective well-being of Pakistani children (A qualitative study). *Pakistan Journal of Social & Clinical Psychology, 11*(1), 42-51.
- Mavropoulou, S., & Sideridis, G. D. (2014) Knowledge of autism and attitudes of children towards their partially integrated peers with autism spectrum disorders. *Journal for Autism and Developmental Disorders, 44*, 1867–1885. doi:10.1007/s10803-014-2059-0
- Mereoiu, M., Bland, C., Dobbins, N., & Niemeyer, J. A. (2015). Exploring perspectives on child care with families of children with autism. *Early Childhood Research & Practice, 17*(1). Retrieved from <http://ecrp.uiuc.edu/v17n1/mereoiu.html>.

- Misurell, J. R., Springer, C., & Tryon, W. W. (2011). Game-based cognitive-behavioral therapy (GB-CBT) group program for children who have experienced sexual abuse: A preliminary investigation. *Journal of Child Sexual Abuse, 20*(1), 14-36.
- Morgan, J. J., Higgins, K., Miller, S., Pierce, T. B. Boone, & Randall; T. R. (2016). Teaching online social skills to students with emotional and behavioral disorders. *Journal of Special Education Technology, 31*(2), 109-120.
doi:10.1177/0162643416651725.
- Olive, E. (2010). Behavior management and behavioral change: How can we tell them apart? *Reclaiming Children & Youth, 19*(1), 3-6.
- Ogelman, H. G., & Secer, Z. (2012). The effect inclusive education practice during preschool has on the peer relations and social skills of 5-6-year olds with typical development. *International Journal of Special Education, 27*(3), 169-175.
Retrieved from
<http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ1001069>.
- Paul, A. R., McKechnie, A. G., Johnstone, E. C., Owens, D. G., & Stanfield, A. C., (2015). Brief report: The association of autistic traits and behavioral patterns in adolescents receiving special educational assistance. *Journal of Autism and Developmental Disorders, 45*(9), 3055-3060. doi:10.1007/s10803-015-2445-2.
- Petty, K. (2009). Using guided participation to support young childrens social development. *YC: Young Children; 64*(4), 80-85.
- Popa, C. (2011). Prosocial behavior in cooperative group work activities. *Journal Plus Education / Educatia Plus, 7*(1), 166-17.

- Prasse, D. P., Breunlin, R. J., Giroux, D., Hunt, J., Morrison, D., & Thier, K. (2012). Embedding multi-tiered system of supports/response to intervention into teacher preparation. *Learning Disabilities -- A Contemporary Journal*, *10*(2), 75-93.
- Puckett, K., Mathur, S. R., & Zamora, R. (2017). Implementing an intervention in special education to promote social skills in an inclusive setting. *Journal of International Special Needs Education*, *20*(1), 25-36. doi:10.9782/2159-4341-20.1.25
- Radley, K. C., O'Handley, R. D., Battaglia, A. A., Lum, J. D., Dadakhodjaeva, K., Ford, W., & McHugh, M. (2017). Effects of a social skills intervention on children with autism spectrum disorder and peers with shared deficits. *Education & Treatment of Children*, *40*(2), 233-262.
- Rodriguez, B. J., & Anderson, C. M. (2016). Integrating a social behavior intervention during small group academic instruction using a total group criterion intervention. *Journal of Positive Behavior Intervention*, *37*, 223-234 doi: 10.1177/1098300713492858
- Rosenberg, N., Congdon, M., Schwartz, I., & Kamps, D. (2015). The use of say-do correspondence training to increase generalization of social interaction skills at recess for children with autism spectrum disorder. *Education and Training in Autism and Developmental Disabilities*. *50*(2), 213-222.
- Rutherford Jr., R. B.; Mathur, S. R., & Quinn, M. M. (1998) Promoting social communication skills through cooperative learning and direct instruction. *Education & Treatment of Children*, *21*(3), 354.

- Sanahuja-Gavaldà, J. M., Olmos-Rueda, P., & Morón, V. M. (2016). Collaborative support for inclusion. *Journal of Research in Special Educational Needs, 16*, 303-307. doi:10.1111/1471-3802.12293
- Sansosti, F. J. (2010). Teaching social skills to children with autism spectrum disorders using tiers of support: A guide for school-based professionals. *Psychology in the Schools, 47*(3), 257-281. doi:10.1002/pits.20469
- Saylor, C. F., & Leach, J. B. (2009). Perceived bullying and social support in students accessing special inclusion programming. *Journal of Developmental and Physical Disabilities, 21*(1), 69-80. doi:10.1007/s10882-008-9126-4
- Semrud-Clikeman, M., & Schafer, V. (2000). Social and emotional competence in children with ADHD and/or learning disabilities. *Journal of Psychotherapy in Independent Practice, 1*(4), 3.
- Severson, H. H., Walker, H. M., Hope-Doolittle, J., Kratochwill, T. R., & Gresham, F. M. (2007). Proactive, early screening to detect behaviorally at-risk students: Issues, approaches, emerging innovations, and professional practices. *Journal of School Psychology, 45*, 193–223.
- Shumate, E. D., & Wills, H. P. (2010). Classroom-based functional analysis and intervention for disruptive and off-task behaviors. *Education & Treatment of Children 33*(1), 23-48.
- Skinner, C. H., & Daly, E. J. (2010). Improving generalization of academic skills: commentary on the special issue. *Journal of Behavioral Education, 19*(1), 106-115.

- Stichter, J. P., Lewis, T. J., Richter, M., Johnson, N. W., & Bradley, L. (2006). Assessing antecedent variables: The effects of instructional variables on student outcomes through in-service and peer coaching professional development models. *Education & Treatment of Children, 29*(4), 665-692.
- Stroot, S. A. (2001). Chapter 8: Socialization and participation in sport. *Sociology of Sport & Physical Education, 129-147*.
- Sumbera, M. J., Pazey, B. L., & Lashley, C. (2014). How building principals made sense of free and appropriate public education in the least restrictive environment. *Leadership & Policy in Schools, 13*(3), 297-333. doi: 10.1080/15700763.2014.922995.
- Tate, A. M. (2009). Letter to the editor. *Communique, 38*(2).
- Tedeschi, J. T., & Felson, R. B. (1994). *Violence, Aggression and Coercive Actions*. Washington, DC: American Psychological Association.
- Thompson, E., & Trice-Black, S. (2012). School-based group interventions for children exposed to domestic violence. *Journal of Family Violence 27*(3), 233-241.
- Visser, J. C., Rommelse, N., Vink, L., Schrieken, M., Oosterling, I. J. van der Gaag, R. J., & Buitelaar, J. K. (2013). Narrowly versus broadly defined autism spectrum disorders: Differences in pre- and perinatal risk factors. *Journal of Autism and Developmental Disorders, 43*(7), 1505-1516. doi:10.1037/t47293-000.
- Watkins, L., O'Reilly, M., Kuhn, M., Gevarter, C., Lancioni, G. E., Sigafos, J., & Lang, R. (2015). A review of peer-mediated social interaction interventions for students

- with autism in inclusive settings. *Journal of Autism and Developmental Disorders*. 45(4), 1070.
- Webb, B. J., Miller, S. P., Pierce, T. B., Strawser, S., & Jones, W. P. (2004). Effects of social skill instruction for high-functioning adolescents with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 19(1), 53-62. doi:10.1177/10883576040190010701
- Westerman, P. L., Stout, S. M., & Hargreaves, H. A. (2012). Mentoring improves self-efficacy, competence, and connectedness in a therapeutic horseback riding program. *Reflections: Narratives of Professional Helping*, 18(3), 37-46.
- Weyns, T., Verschueren, K., Leflot, G., Onghena, P., Wouters, S., & Colpin, H. (2017). The role of teacher behavior in children's relational aggression development: A five-wave longitudinal study. *Journal of School Psychology*, 64, 17-27. doi:10.1016/j.jsp.2017.04.008.
- Whitby, P. J. S., Ogilvie, C., & Mancil, G. R. (2012). A framework for teaching social skills to students with Asperger syndrome in the general education classroom. *Journal on Developmental Disabilities*, 18(1), 62-72.
- Wilkes-Gillan, S., Bundy, A., Cordier, R., & Lincoln, M. (2014) Evaluation of a pilot parent-delivered play-based intervention for children with attention deficit hyperactivity disorder. *American Journal of Occupational Therapy*, 68(6), 700-709. doi:10.5014/ajot.2014.012450

- Wilkins, T., & Nietfeld, J. L. (2004). The effect of a school-wide inclusion training programme upon teachers attitudes about inclusion. *Journal of Research in Special Educational Needs*, 4(3),115-121. doi:10.1111/j.1471-3802.2004.00026.x
- Zach, S., Yazdi-Ugav, O., & Zeev, A (2016). Academic achievements, behavioral problems, and loneliness as predictors of social skills among students with and without learning disorders. *School Psychology International*, 37(4), 378-396. doi: 10.1177/0143034316649231