

5-11-2017

Utilization of a school specific intervention manual to increase teacher perceptions of the I&RS process and reduce special education referrals

Jacqueline Jade Kelly

Rowan University, jackiebuckman@hotmail.com

Follow this and additional works at: <http://rdw.rowan.edu/etd>

 Part of the [Special Education and Teaching Commons](#), and the [Student Counseling and Personnel Services Commons](#)

Recommended Citation

Kelly, Jacqueline Jade, "Utilization of a school specific intervention manual to increase teacher perceptions of the I&RS process and reduce special education referrals" (2017). *Theses and Dissertations*. 2406.

<http://rdw.rowan.edu/etd/2406>

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact LibraryTheses@rowan.edu.

**UTILIZATION OF A SCHOOL SPECIFIC INTERVENTION MANUAL TO
INCREASE TEACHER PRECEPTIONS OF THE I & RS PROCESS AND
REDUCE SPECIAL EDUCATION REFERRALS**

by

Jacqueline Jade Kelly

A Thesis

Submitted to the
Department of Interdisciplinary and Inclusive Education
College of Education

In partial fulfillment of the requirement

For the degree of
Master of Arts in Learning Disabilities

at

Rowan University

May 8, 2017

Thesis Chair: Sydney Kuder, Ed.D.

© 2017 Jacqueline Jade Kelly

Dedications

This is dedicated to my husband, Dr. Jeffrey R Kelly. I would have never been able to do this without your love and support. You were my port in the storm when I thought I would never finish. You always had a way of ensuring that I had the time and space to complete what I was working on.

I also dedicate this to my children, Georgie and Julianna. Never stop learning. You are strong, smart, and talented girls. You can be anything you set your mind too. You are both an inspiration to me.

Abstract

Jacqueline Jade Kelly

UTILIZATION OF A SCHOOL SPECIFIC INTERVENTION MANUAL TO INCREASE TEACHER PRECEPTIONS OF THE I & RS PROCESS AND REDUCE SPECIAL EDUCATION REFERRALS

2016-2017

Sydney Kuder, Ed.D.

Master of Arts in Learning Disabilities

One of the primary purposes of the Intervention and Referral Services (I & RS) process is to assist school staff in addressing students' learning, behavior, or health needs (N.J.A.C. 6A:16-7.1 [a]). This study sought to improve I & RS process and student outcomes in a southern New Jersey elementary school that services students from grades Pre-Kindergarten through second grade. At the outset of the study, school administrators reported that an area of need was to formulate an intervention resource for the school's I & RS committee and teaching staff. It was determined that an online/interactive intervention manual would be created allowing teaching staff to support each other when intervening with at-risk students. Interventions were developed for the manual by the researcher, and additional interventions were offered by teaching staff. Pre- and post-survey information, interview information, and referral statistics were used to identify and examine study effects. It was found that there was little effect on staff perceptions of the I & RS process and student referrals to the child study team were unchanged. The researcher concluded that the study did begin to move school I & RS processes in a more collaborative, supportive direction

Table of Contents

Abstract	iv
Chapter 1: Introduction	1
Chapter 2: Literature Review	5
Educator Acceptance of Prereferral	7
Educator Perceptions	9
Tiered-System of Supports	16
Intervention Research	20
Reading Interventions	21
Math Interventions	25
Behavioral Interventions	29
Conclusion	33
Chapter 3: Methodology	35
Procedure	35
Research Design.....	38
Chapter 4: Results	40
Pre-Intervention Results.....	41
Interview Results	43
Post-Intervention Results	44
Chapter 5: Discussion	46
Limitations	48
Practical Implications.....	49

Table of Contents (continued)

Future Studies49

References.....52

Appendix A: Pre-Survey55

Appendix B: Post Survey.....57

Chapter 1

Introduction

Today's classrooms are unlike any that have come before them, and therefore, the position of teacher is even more complex. Teachers who traditionally had smaller classroom sizes, general education students, and were rarely questioned on their methodology have had to make a multitude of changes to remain current and to meet the needs of today's learners. General education teachers are finding higher numbers of students with Individualized Education Plans (IEPs) integrated into the general education population, many without the background of how to successfully educate them. In the past decade, there has been the addition of the Core Content Curriculum Standards (NJ) that guide instruction for all students, with related standardized assessments to evaluate student achievement for which teachers are held accountable as part of the annual review process. Additionally, the requirement to implement pre-referral interventions prior to seeking assistance for students through child study team (CST) referral has also been implemented.

Many of these changes can be traced back to various legislative acts, like the No Child Left Behind Act (NCLB) and the more recent Every Student Succeeds Act (ESSA), that have been enacted. The Individuals with Disabilities Education Act (IDEA) ensures all school-aged children with disabilities have the right to a free, appropriate public education (FAPE) (Hallahan, Kauffman, Pullen 2012) in the least restrictive environment (LRE). FAPE affords students and families the right to an education in an environment that will benefit the child at no cost to them. Not every student can be successful in the

general education setting, under the FAPE provision, students are required to be provided with an education from which they will benefit educationally and meet individual needs.

A critically important aspect of IDEA was that students need to be educated in the LRE. LRE ensures that children are placed in an educationally appropriate setting; students that were once separated from the general education population because of a learning difference or disability are now included in the general education population. Modifications, accommodations, specialized instructional strategies utilized; whatever can be reasonably provided to facilitate a student's education with nondisabled peers to meet FAPE and LRE provisions are required and have become commonplace in today's public schools.

As noted, NCLB is an example of legislation that has changed the public school system. NCLB was intended to see that all children succeed. Children with and without disabilities were expected to take standardized, grade-level tests to determine success (Hallahan et. Al. 18). Although this legislation has since been replaced, parts of it seem to be here to stay. The PARCC testing is one example of a standardized test all students are expected to take and be able to perform well on. In fact, this assessment is linked to graduation and teacher performance evaluations. If a student performs poorly on the assessments, then it will reflect on teachers and administrators.

Both NCLB and IDEA suggest incorporating some type of intervention for students who are struggling to be successful (Jennings, 2009). States have the leeway to develop their own procedures for pre-referral intervention. This flexibility has also been

passed down to local educational systems within states. This has created many differences in training, policy, procedures, and responsibility among, and within, states.

New Jersey is a state that has a specific pre-referral process laid out in administrative code (N.J.A.C. 6A:16-7). This process is called intervention and referral services (I&RS). One of the primary purposes of the I&RS process is to assist staff who have difficulties in addressing students' learning, behavior, or health needs (N.J.A.C. 6A:16-7.1 [a]). The I&RS team seeks to help educators put a plan in place to assist a student find success or the whole classroom function more symbiotically.

Considering the many aspects of the I&RS as described in administrative code and the variability of procedures implemented by various school districts, the I&RS process can be a source of both assistance and frustration for teachers. Often a teacher is given an intervention to try, with little or no guidance from the I&RS team. Jennings (2009) contends the referring teacher frequently is not provided with the necessary knowledge, skills or support to ensure proper implementation of the proposed intervention. To further compound the problem, if the teacher continues to struggle, in many instances the I&RS team, at best, will not meet for another month. This author's contention would surely lead to teacher frustration and apathy toward the I&RS process.

As currently constructed, the I&RS process in this local school district is failing to meet the needs of staff, and ultimately students, as reported by both teaching and administrative staff. It is believed that the I&RS committee and staff lack useful intervention strategies to intervene with at-risk students. This has appeared to cause frustration among staff with the school district's I&RS process, resulting in attempts to

circumvent the process entirely and straining the resources of the special education department through the overreliance of special education referrals.

In an effort to meet the requirements of N. J. A. C. 6A:16-7 and to improve the established system of planning and delivery of intervention services in this local school district, this study will seek to develop an intervention manual that will assist staff who have difficulties in addressing student learning needs in specific areas of instruction to improve teacher perceptions of the I&RS process and to reduce the number of students referred for special education consideration. Through staff survey and interview information, a profile of instructional strengths and weaknesses will be identified to guide the development of an intervention manual that can be utilized by staff in the implementation of intervention plans to improve student performance.

The research questions examined in this study are:

1. Will the implementation of an intervention manual that takes into consideration the strengths and weaknesses of staff in the development of an academic intervention manual, specifically in the areas of reading and math for each tier, improve teacher satisfaction ratings of the I&RS process in a local public school district?
2. Will the implementation of this intervention manual decrease the number of students referred for special education consideration in a local public school district?

Chapter 2

Literature Review

This literature review will discuss the current legislative background that was the impetus for the development of Intervention and Referral Services (I & RS) in the schools of New Jersey and will examine research in the field of education with respect to interventions and variables that impact the I & RS process.

New Jersey Administrative Code Title 6A Chapter 16-7 (N.J.A.C. 6A: 16-7) provides general guidelines for the delivery of intervention and referral services, but how these standards are interpreted and implemented is largely decided upon by local school districts. This leaves the I&RS process open to interpretation and individualization by each local school district. Therefore, I & RS processes can look different from district to district and from school to school.

N.J.A.C. 6A: 16-7 also requires that school districts formulate collaborative team approaches that feature structured and collegial planning, decision making and problem solving processes, and that are fully integrated into the educational program, have proven to be effective in providing the required intervention and referral services for students' learning, behavior, and health problems to assist staff who have difficulties in addressing students' learning, behavior, or health needs.

N.J.A.C. 6A:14-3.3 (h) (Special Education) mandates that interventions shall be provided in the general education setting prior to referring a student for an evaluation of eligibility for special education and related services. The number of children referred for special education services is often a consideration of the prereferral intervention team,

and the affect that I & RS can have on special education referrals is evident in much of the research being conducted.

According to the Resource Manual for Intervention and Referral Services (2009), I & RS programs are to be used to assist general education staff in expanding skills and abilities to accommodate the needs of students in the general education program who are at risk for school failure. The I & RS process is intended to bring difficult cases into focus using resources in a coordinated way. The manual's authors contend that I & RS teams must be able to operate in any one of three modes at any given time: Collaborative Mode; Direct Services Mode; and Indirect Services Mode (Consultative). Direct assistance and support to all staff is the intent of code's provision for I & RS. Choosing the multidisciplinary team approach for planning and delivering I & RS services is at the core of a well-coordinated system of services.

There are many factors to consider in the development and implementation of I & RS services in any school setting. Most importantly is the structure of coordinated systems, the perceptions that staff hold about respective I & RS systems, and the abilities staff have in implementing interventions. The research in these areas will be explored to gain a greater understanding of these factors and used to develop an I & RS manual that will improve I & RS services for a local school district by providing a resource of interventions, improve intervention implementation skills in staff, and improve staff perceptions of the I & RS process.

Educator Acceptance of Prereferral

Clonan, Martens, & McDougal (2000) looked at change procedures that were instituted to promote the acceptability of a prereferral intervention program at four pilot schools, as well as, educator perceptions of the program. Utilizing a three-stage approach to organizational change, which includes organizational readiness, implementation support, and diffusion or expansion of the project, Clonan et al. (2000) sought to promote prereferral intervention acceptability. The researchers implemented school-based intervention teams (SBIT) comprised of a diverse group of 6 to 10 professionals. SBIT is a model that utilizes defined roles for team members, with scripted consultative processes to guide teams through problem identification, analysis, goal-setting, and intervention design.

Clonan et al. (2000) systematically moved through each stage while monitoring the effectiveness and integrity of intervention processes at each stage over a two-year period. The researchers utilized questionnaires for both SBIT members and teaching staff to assess perceptions. A SBIT integrity checklist was also utilized in the study to assess meeting objectives. To assess the effect of SBIT, special education referral rates were also monitored throughout the study.

Clonan et al. (2000) found that, overall, teachers were comfortable with the SBIT project and their overall involvement. It was also found that administrators at a school and at a district level found the SBIT project acceptable as well. Finally, Clonan et al. (2000) attributed the 22% decrease in special education referrals in study schools to the implementation of the SBIT project.

Cosgrove, Eidle -Barkman, Meyers, and Truscott (2000) sought to develop one school's Prereferral Intervention Team (PIT) through a consultative model provided by the researchers. They conducted three studies that focused on (a) the acceptability of the organizational consultation project, (b) the relationship between changes the PITs adopted to improve their team functioning and the acceptability of these changes, and (c) the acceptability of these adopted changes one year later.

Through observations, interviews, and feedback sessions, it was ascertained that the consultative model was favored by the PIT members and led to a more productive team. The consultative model in this study was described as providing specific information through data collection, diagnosis, and feedback to team members about PIT processes.

Interventions put in place by PITs addressed myriad issues, such as academic, behavioral, and social difficulties. Cosgrove et. al. (2000) found interventions often fail or are ignored. It was hypothesized that one reason for this failure could be the implementation of the intervention suggested. For instance, if an intervention has not been implemented as designed, then it often will not meet the highest degree of success, and vice-versa, when an intervention has been implemented with the integrity in which designed, then the level of success rises. According to these researchers, the ability to implement interventions by an educator is something that effects whether it will be used at all. If the educator deems the intervention to require too much work with too little benefit, then the intervention will often be ignored. Cosgrove, et. al. (2000) found that perceptions of the problem, person belief about the intervention, and personal relationship are critical elements to the implementation of intervention, stating that these

factors not only speak to a quantifiable component for the effectiveness of a specific intervention but also the intrinsic factors of feelings. Cosgrove et al. (2000) found that if the educator approached the PIT team with a negative emotion about the members, then there was little chance of change.

One change made as part of the Cosgrove et al (2000) study were that teachers were included in the PIT teams. All seventeen teachers interviewed expressed positive feelings to this change. Another change was to implement a problem-solving model for referrals, which was not found to be an easy change for the staff to make, however after the first year despite the difficulties, the teams found this to be an acceptable change. It was predicted that both changes would improve the productivity and quality of implementation of interventions given by the PIT, considering that staff members found these changes acceptable. Cosgrove et al. (2000) explained that, within the study, as acceptability ratings improved for PIT processes, like staff inclusion and problem-solving approach to case conceptualization, feedback improved for the organizational consultative process.

Educator perceptions. Teachers' perceptions of the prereferral intervention process was explored by Slonski-Fowler & Truscott (2004) by interviewing and observing 12 kindergarten through fourth-grade teachers in two western New York suburban elementary schools. Slonski-Fowler (2004) sought to understand (a) the teachers' perceptions of the {PIT process, meetings, and recommendations; and (b) how those perceptions might have affected the teachers' participation in the process.

The individual prereferral intervention team (PIT) members, goals, and instructional modifications were areas that varied from school to school, and therefore, lead to an acceptable or unacceptable attitude from the school staff in the study. Researchers found that unacceptable attitudes were held in schools where teachers disengaged from the PIT process due to perceptions of teacher input being de-valued, to ineffective strategies being provided, and/or to the lack of follow-up in the PIT process. Slonski-Fowler et al. (2004) found that there was substantial information on the functioning of the PIT as a whole but little research and attention payed to the role of the classroom teacher. Also, the classroom teacher is a critical component of the PIT process, as teachers are tasked with not only implementation of the intervention but also the progress monitoring to determine success or failure.

Slonski-Fowler et al. (2004) found that preconceived notions of the PIT and the classroom teacher can ultimately lead to the overall success and/or failure of the intervention process. These researchers site that classroom teachers found that there was a lack of follow-up and this was a major problem with the PIT process. Consequently, it was also found that the PIT thought that classroom teachers did not want recommendations but wanted to pass the responsibility of an unsuccessful child to someone else.

There were three areas that Slonski-Fowler et al. (2004) found needed to be addressed. The first of these was that teachers felt that their input was devalued or ignored by the PIT. This was found to be due to the notion that the student work samples were not considered, nor was the teachers' concerns heard out in their entirety. These types of concerns lead to a fifty-percent dissatisfaction rate with the PIT. The

dissatisfaction was not the only effect of teachers' feeling of devaluation. This is often when we see teachers become disengaged with the process. Interventions will not be implemented and students will not be referred if an educator can only see a negative.

Teachers also reported that interventions provided by the PIT were limited and lacked clarity (Slonski-Fowler et al., 2004). Often teachers are coming to the PIT meeting with a list of interventions that have already been implemented. They are looking for new ideas and suggestions on how to make a student be successful or extinguish behavior in the classroom. Slonski-Fowler et al. (2004) found that the PIT often recommends many of the same interventions to teachers. Slonski-Fowler et al. (2004) suggested professional development be provided to PIT in order to provide meaningful and specific interventions and also careful consideration applied to the integrity of the interventions implementation in the classroom.

The final issue addressed was the team process, or the lack of, an effective team process by Slonski-Fowler et al. (2004). The concept of accountability needed to be brought to light. The PIT give suggestions and interventions, yet they are not the ones that have the burden of responsibility. The teachers are tasked with implementation and data collection of suggested interventions. Slonski-Fowler et al. (2004) found that teachers would like a more collaborative approach to the PIT process. They should not be the only ones held accountable for the success/failure of a suggested intervention. The PIT team should have a vested interest in the student being referred to them.

Borthwick-Duffy, Lane, and Mahdavi (2003), explored teacher perceptions of the pre-referral intervention process by asking eighty teachers to complete a fifteen-question

survey. The study was conducted with six schools in California and Arizona with grade levels ranging from kindergarten through sixth grade. To complete this study, the authors attended faculty meetings where they distributed a survey and answered staff's questions and/or concerns

When completing the survey, the teachers were asked to consider one student whom they had referred to the pre-referral intervention team. This was intended to provide Borthwick-Duffy et. al. (2003) with accurate and specific student data. Sixty-three of the teachers surveyed shared that they had referred a student to their pre-referral team within the past two years. If teachers had not referred a student, then they were directed to complete the survey with a student they had considered referring in the past.

The survey provided by Borthwick-Duffy et al. (2003) contained fifteen questions that focused on the following topics: (a) student assistance, (b) student characteristics, (c) preparedness, (d) special education, (e) feasibility and confidence, and (f) implementation support. The final question focused on how to improve the pre-referral process. This question was open-ended and allowed for the teachers to give their own feedback.

Borthwick-Duffy et al.(2003) found that teachers went to their pre-referral intervention teams in order to obtain interventions, obtain professional support, and to inform parents of a concern. They also learned that teachers were in favor of demonstrations of how to implement the suggested interventions in the classroom. The authors also indicated that teachers whom felt a student had a severe problem, whether it was academic or behavioral, were less inclined to implement the intervention suggested. The reason for this was not discovered in this study and was a topic for future studies.

Dieker and Whitten (1995) conducted a study of intervention assistance teams with elementary schools in Illinois. The study was conducted utilizing a twenty-five item questionnaire that focused on (a) school and team demographics, (b) team logistics, (c) team process, (d) team management, (e) team strategies, and (f) team recommendations. Eighty-three elementary schools returned surveys to participate in the study.

Dieker and Whitten (1995) found that on average twenty-seven students were referred to prereferral teams from September 1st to March 1st and the prereferral team was able to meet the needs of fifty-nine percent of the students, leaving forty-one percent to need further testing. The largest success that prereferral intervention teams had was with behavior management.

One take-away from the survey was that seventy-four percent of the teams in Illinois focused on a collaborative approach to problem solving. This was not limited to school professionals but also with parents. This collaborative approach allowed for a more successful and efficient prereferral intervention process. Dieker et al. (1995) also provide several tables that provide suggestions for prereferral intervention teams. They are: framework for intervention assistance teams; most frequently used and successful intervention assistance team strategies listed by most frequent response; and recommendations for developing intervention assistance teams.

School-based intervention teams are often tasked with developing both academic and behavioral interventions. Delamatre, McNamara, and Rasheed (2008) quoted the Individuals with Disabilities Education Improvement Act (IDEIA) of 2004 as the requirement that multidisciplinary teams make decisions in regard to evaluations, success

during the prereferral intervention process, and behavioral interventions/plans. This led these researchers to conduct a survey to determine characteristics, perceptions and outcomes of teams in the state of Ohio. A twenty-eight item survey was developed to gain an understanding of various aspects of a multidisciplinary team, such as perceptions of their own teams' organization, efficiency, interpersonal process, outcomes, etc.

Delamatre et al. (2008) found that most intervention teams consisted of a school principal, school psychologist, special education teacher, and general education teacher. A large percentage either had the principal or the school psychologist serving as a chairperson. The most common amount of time teams convened was one-hour a week. The perception of the team as a positive task force was directly related by the skill in applying intervention planning. It was also found that school faculty and staff judgement were found to be directly related to that of the multidisciplinary team. When faculty participated as a team member and the meetings ran smoothly, staff was more likely to participate and support the school team. This, however, was not linked to student outcomes.

Delamatre et. al. (2008) further stated that teams have many variables and can function in very different ways, however there has been no direct link to the level of student success. They caution that if this is the case, then the idea that all schools should be participating in some type of multidisciplinary team as a method of intervention needs to be reexamined. There is also an understanding that these results could have been skewed by a limited sampling of surveys returned. If the schools returned only their best case scenarios, than this could contribute to the inability to correlate an efficient team to higher student outcomes and an inefficient team with less successful student outcomes. It

was recommended that a third-party investigate the effectiveness of multidisciplinary teams by direct observation. Delamatre et al. (2008) found this would be more objective, though admittedly not a cost-effective measure.

In order to compare school based intervention teams, Bahr, Dieker, Kocarek, Manson, and Whitten (1999) sent seven-hundred-fifty surveys to schools in Michigan, Illinois, and Wisconsin. Out of the seven hundred fifty surveys only one hundred twenty-one school districts participated in the study, returning five hundred twenty usable surveys. The surveys consisted of seven sections that gathered data on demographics, type of team, team effectiveness, team personnel, follow-up, quality indices, and views on professional issues.

The surveys indicated that, although schools used separate terms for their teams, the primary goal of the teams was to provide prereferral interventions strategies. They also found that participants in Illinois and Wisconsin felt their teams were more effective than the teams in Michigan. There was, however, no reasons noted for this variance in effectiveness.

In the area of team personnel, Bahr et al. (1999) found that a majority of teams were led by school administrators and also that the special education teacher was the most knowledgeable about interventions in both the academic and behavioral realms. The recommendation for improvement in the area of team personnel is that each person have a specific role and also that they receive adequate training that can then be turned to the staff at large.

In the area of follow-up, Bahr et al. (1999) found several differences across the states. Wisconsin reported to have more time for follow-up than Michigan or Illinois; however Illinois reported higher levels of adequate follow-up. The researchers found that although most of the participants favored the follow-up that was conducted, it was an area of concern and showed a need for improvement. They recommend that all follow-up be conducted and written up. Informal meetings and classroom visits should be properly documented.

The results of the surveys also found that Illinois used more quality indices, such as permanent products, standardized tests, and curriculum based assessment to glean if interventions have been effective. This is the area that was found to be in the most need of improvement. The use of teacher judgment, although an important consideration, leaves too much for interpretation. There should be a higher value placed on academic and recorded behavioral data. There cannot be valid data collected pre/post intervention on a perception, therefore making it difficult to ascertain if an intervention has been successful.

Tiered-System of Supports

As discussed earlier, the Resource Manual for Intervention and Referral Services (2009) recommends that I & RS services in schools be constructed as a well-coordinated system of services. The State of New Jersey Department of Education recommends using a Response-to-Intervention (RTI) framework when providing I & RS processes in schools. Using the RTI framework to guide I & RS processes in schools provides a well-

constructed system to develop intervention plans, implement interventions at various levels, and monitor the effectiveness of interventions and/or plans.

Teacher perceptions of the I & RS process are directly related to the success of intervention processes. This has been seen at the development, implementation, and monitoring stages of intervention. In developing an intervention manual that utilizes a tiered level of intervention framework, this factor must be considered. Research in the area of intervention, especially studies where RTI approaches are used, provides insight into strategies and approaches to intervention that should be considered in the development of an intervention manual. Through use of a tiered system of intervention, effective intervention processes can be determined, which as discussed, improves teacher perceptions and overall processes.

In a literature review, Harlacher, Nelson-Walker, and Sanford (2010) examined ways that teachers can increase the intensity of interventions when utilizing a RTI approach or tiered interventions. There is a call for the support of a special education teacher to support general education teachers in the implementation of classroom modifications. The rationale behind this is that under the RtI model teams are seeking to identify if a student has, or is at risk for, a learning disability. It therefore would be appropriate for the input of special education staff to lend their knowledge and experience when applying a research-based intervention.

The concept of instructional modification is one that Harlacher et al. (2010) found to be a setback for the successful implementation of a tiered system of supports. This idea requires teachers and administration to have an empirical knowledge of programs,

how they can be used, and if they are, in-fact, research-based. Another unwavering concept is that programs be implemented with fidelity. It cannot be considered a successful/unsuccessful intervention unless data has been properly collected and the program administered to students as intended.

Harlacher et. al. (2010) identified nine ways to modify and intensify instruction: (1) time allotted for instruction; (2) instructional groupings; (3) repetitions for success; (4) amount of judicious review; (5) interventionist facilitating group; (6) pacing; (7) praise-to-corrective feedback ration; (8) precorrection; and (9) error correction. Some of these interventions must be planned prior to instruction beginning, while others can be adjusted as instruction is in place. These instructional modifications were addressed with reading instruction yet the authors feel that they can be implemented in other content areas as well.

The nature and purpose of RTI was explored by Fuchs, Fuchs, and Stecker in a 2010 study. The authors contend the practice of RTI is one that many assume has a set framework and purpose, yet it can depend on the district and the prereferral intervention team on how RTI will be used in the school system. Fuchs et al. (2010) compared the differences of RTI as applied from two perspectives, or philosophies of education (i.e., Individuals with Disabilities Education Act [IDEA] and No Child Left Behind [NCLB]).

In practice, utilizing the three tiers of the RTI model classroom teachers intervene early with research-based programs. The delivery of instruction intensifies as the student demonstrates a level of unresponsiveness to intervention. Fuchs et al. (2010) identified that proponents of the IDEA philosophy assert that this is a more effective method of

identification for a learning disability. The group that utilized a NCLB approach to RTI identified this as a practice that allows all students to be included in the general education classroom. Utilizing the tiered system of supports allows teachers to meet the needs of diverse group of learners in the classroom and can successfully eliminate the majority of out-of-classroom special education placements (Fuchs et al., 2010).

Fuchs et al. (2010) found many similarities in the two groups. The core foundation of RTI is present and universal. However, the IDEA group generally would like to see fewer tiers of intervention and a faster rate of referral for students suspected of having a disability. Whereas the NCLB group would like to see fewer referrals for special education services and students of all ability levels functioning in a classroom.

Fuchs and Fuchs (2016) investigated the impact that two types of instructional adaptation, routine and specialized, have on the students in classrooms that are performing below proficiency levels. The description of routine adaptations was explained as variations of materials, grouping arrangements, and goals. These adaptations can be put in place by teachers in the beginning of the school year. One example of this type of intervention given by Fuchs and Fuchs (2016) is grouping children by reading level. An example of a routine adaptation is to pair students to complete work or Peer-Assisted Learning Strategies (PALS). An example of a specialized adaptation is behavioral consultation, which the researchers contend to be an effective strategy with students that exhibit problematic behavior in the classroom setting. The researchers state that there is no evidence of the effectiveness for students with learning difficulties. There is also reference made to the co-teaching model and universal

design. There are cautions given for there is little empirical evidence to determine the effectiveness with certainty.

Fuchs and Fuchs (2016) found that both routine and specialized instructional adaptations were rarely enacted by teaching staff. Most revisions to teaching were to accommodate students with a learning disability. Although the understanding for the ability to accommodate all students in a classroom with various learners and learning styles was discussed, the fact remains that teachers are not accommodating all learners by adapting their instruction to meet their needs. The researchers concluded that there was a need for a Responsiveness to Intervention program to meet the needs of the low achieving student and the needs of the students with or at-risk for learning disability.

The preceding reviews of research on how pre-referral processes found that the variability in the way prereferral intervention services, like I & RS, are implemented is not a phenomenon restricted to the State of New Jersey. The research has shown that these services can lower special education referrals. The effectiveness of the services has been illustrated to depend on many factors, like the processes and/or structure utilized, the diversity and expertise of staff participating on intervention teams, staff perceptions of the process and the interventions recommended, staff capacity to implement interventions, and the support received in the implementation and monitoring of interventions.

Intervention Research

A common thread in intervention throughout educational systems has been specific areas of intervention. It appears that language arts/literacy, mathematics, and

behavior has been the areas of primary focus of intervention and research efforts. Addressing academic areas that are typically part of high-stakes evaluation is likely no coincidence, although achievement in these areas can impact achievement in all other areas, with behavior difficulties contributing to both academic and social development. Looking more closely at intervention strategies in each area, it appears that the same factors previously mentioned are evident in area specific intervention processes.

Reading interventions. Intervening with students to improve their reading achievement can be a difficult balancing act for a school and the staff who are tasked with implementation. This was evident in a study conducted by Lewis, Mahdavi, Menzies (2008). These researchers conducted a study implementing research-based strategies in first grade classrooms in an urban area of Southern California to determine if students would be more successful. The study consisted of forty-two students, where 30% of students were not at grade-level.

The first aspect of the Lewis et al. (2008) study was to ascertain the students' current reading level. There were several assessments administered, including the DIBELS and the DRA. Once the students were properly assessed, they were placed in one of four groups. The first group focused on instruction for phonemic awareness, the second group decoding and fluency, and the third and fourth groups were guided reading groups. Each group received instruction that was specific to their needs for forty-five minutes. The students' group designation was not static and could change based on need.

Another component of the change in delivery of intervention examined by Lewis et al. (2008) was the ability for teaching staff to collaborate. Two teams were formed;

one for kindergarten through second grades and the other for third through sixth grades. This collaboration allowed teachers to discuss and adjust instruction as needed. The teachers also took this time to problem solve.

The Lewis et al. (2008) study demonstrated that a reading intervention can be successful if implemented with fidelity. The intervention yielded gains for all students, where 90% of students were at or above grade level. The 10% of students (i.e., four students) who were not at grade level showed challenges that were above that of the other participants (Lewis et al., 2008), where three students were declared eligible for special education services. These students who were not at grade level, did however, show gains.

Johnson & Boyd (2012) explored tier-2 interventions put in place at Sunshine Elementary, a K-5 elementary school in a low-SES suburban area of the Northwest. Through the analysis of school data, it was found that the current tier-2 intervention was not effective. An instructional coach was implemented as an intervention. The instructional coach followed teachers and assisted with problem identification, solution development, implementation, evaluation, and refinement.

The first task the instructional coach completed in Johnson & Boyd (2012) was an observation of instruction. Through this process, it was determined that the program being taught was done so with fidelity in both the tier-1 and tier-2 levels, and although Sunshine Elementary was following the main components of RTI, there was a problem with the instructional match (Johnson & Boyd, 2012). Furthermore, it was determined that not only was the instruction the students were receiving was ineffective but the

students were spending almost half their day being exposed to methods that were ineffective for them (Johnson & Boyd, 2012). Therefore, researchers went about researching ways to find a reading instructional program that would support the needs of the struggling reader and to reorganize the schedule so that more reading instruction would not affect the instruction of other content areas (Johnson & Boyd, 2012).

First, Johnson & Boyd (2012) adapted the schedule to a 90-minute block of homogeneous instruction and a 60-minute block that was to focus on content and writing instruction. Since Sunshine Elementary did not have the ability to invest in a separate reading program, the instructional coach altered instruction based on the book, *Teach Your Child to Read in 100 Easy Lessons* (Johnson and Boyd, 2012). This was a book that was typically designed for parents to teach their beginning reader progress to the approximate level of second grade reader by following the lessons in the book. This was used as a direct instruction approach to teach the students who were struggling to read. The students who were reading at grade-level had no changes to their program (Johnson & Boyd, 2012). However, the students who had been reading above grade-level were able to be instructed at their level. Researchers found that staff were able to support the students above grade level in ways that previously would have been impossible (Johnson and Boyd, 2012). The focus for the above grade level students became chapter books, vocabulary development, and comprehension. The content area and writing instruction was completed in thematic units that teachers worked together to develop (Johnson and Boyd, 2012). The authors noted that the focus became more about writing and creativity, projects, and exploration that previously had been neglected.

The changes made at Sunshine Elementary were found to be beneficial not only to the struggling reader but also to the at- or above-grade level learner (Johnson & Boyd, 2012). Additionally, this project also left the teachers feeling more positive about their roles in the classroom and at the school, as reflected in interview data (Johnson & Boyd, 2012). Teachers reported that their ability to break from the scripted teaching and to be able to construct lessons and interact with the students more left them feeling more respected as a professional (Johnson and Boyd, 2012).

Chard, Tyler, & Vaughn (2002) explore interventions put in place to enhance fluency and seek to ascertain which can be the most beneficial with the struggling reader. It was found that the ability to read sight words, decode words, and read phrases and sentences automatically and rapidly is the common core problem with struggling readers and readers with a LD (Chard et al., 2002).

Chard et al. (2002) found that in all studies on repeated readings the student read the text independently a minimum of two times and a maximum of seven times. Chard et al. (2002) stated that repeated readings have been found to increase reading rate, accuracy, and comprehension. Chard et al. (2002) found that repeated readings with a model were more effective than without. Utilizing this model, the student's comprehension also improved (Chard et al., 2002). Chard et al. explained one theory for this is students were able to initially be able to focus on the content of the story being read rather than the decoding of the words. This model can also be utilized with peer models; however, it should be implemented cautiously, with the role of the student being clear and understood (Chard et al., 2002).

Vaughn and Wanzek (2007) explored the research on early reading interventions for students with reading difficulties and students with reading disabilities by reviewing 18 studies published between 1995 and 2005. The authors contend, when intervening with a student it can often be difficult to choose an appropriate intervention and decide when to terminate that intervention because of limited success without jeopardizing the fidelity of the intervention. Vaughn and Wanzek (2007) examined two types of interventions for this study, standardized and individualized. The studies that were found to be the most successful addressed phonics instruction and reading text (Vaughn and Wanzek, 2007). These programs utilized a variety of materials and methods to attain the same degree of results. Often programs used a guided reading approach, where students were able to read text at their level but not strictly decodable text. Other programs included a spelling component to their phonics instruction.

Two other areas addressed by Vaughn and Wanzek's (2007) research were that of intensity and early intervention. It was determined that students that were instructed on a one-to-one basis made greater gains than students that were instructed in groups. It was also found that interventions provided at the first-grade level have a higher success rate than that in second and third grade. The reasoning for this is the expectations of second and third-grade students are much higher than students in the first-grade. If a student is experiencing reading difficulty in the second and third grade, then it becomes significantly harder to provide appropriate interventions.

Math interventions. Intervening in math with students in preschool through grade three will likely ensure that students can succeed later in their academic careers (Ferguson, Mink, Witzel, 2012). These authors explain that a poorly developed

understanding of numbers or number sense has been found as a link to difficulties in mathematics. If a child cannot understand what a number is and manipulate it, then difficulties often arise when instruction moves to calculation (Ferguson et al., 2012). In the early stages of development, students will often memorize math facts without developing an understanding of the true concept (Ferguson et al., 2012). This may seem like a successful student until the concepts develop and he/she is unable to keep pace because there is not understanding of the numbers relationship to each other (Ferguson et al., 2012).

Ferguson et al (2012) provide three strategies for assisting children in gaining a strong number sense:

The first recommendation is to use concrete experiences, such as counters or base ten blocks. This should not be limited to only one experience. Allow children to use many different objects or representations to model number concepts to avoid an over generalization. It is also recommended that if a teacher utilizes his or her fingers to model a quantity that the same quantity also be modeled using objects. The final recommendation is to move counting out of the classroom. Students should be able to count objects in their home and natural environment.

The second recommendation is to teach skills to proficiency. Ferguson et al. (2012) recommend teachers change their thoughts if children gain proficiency rather than when. It is important that instruction be catered to meet the individual needs of the student. When we move from one skill to another prior to mastery, we are not enabling knowledge to be built on a solid foundation of understanding.

The final recommendation of Ferguson et al. (2012) is to make language connections. Mathematics has its own language and symbols that children must learn if they are going to be successful. These concepts can be integrated into the classroom in a variety of ways. Ferguson et al. (2012) encourage teachers to sing math songs, read math text, calendars, maps, and newspapers to broaden a student's understanding of math language, and teachers should encourage students to discuss their reasoning when solving math problems.

Carr, Royer, Stroud, & Taasoobshirazi (2011) studied mathematical fluency by comparing the results of 178 students from two states on (1) a computer program designed to increase fluency in addition and subtraction, (2) a program designed to improve cognitive strategy use for addition and subtraction, (3) a program that combined the fluency and cognitive strategy instruction programs, and (4) control group. In this study, fluency was defined as the speed in which students can compute basic single and double digit arithmetic problems. It has been found that girls are slower in their ability to solve math problems (Carr et al., 2011). This was a secondary purpose of the research to determine if the interventions would successfully increase girl's ability to fluently solve math problems.

All the students who participated in the Carr et al. (2011) study were given a pretest. The pretest found that males entered the study outscoring females. The results of the study indicated that students that participated in a program that was designed to improve cognitive strategy and fluency had the most success. The results also indicated that girls continued to use concrete representations to solve math problems instead of utilizing cognitive strategies.

Utilizing a tiered system of supports (RTI) to determine the level of support needed for students who struggle in the area of mathematics has both merit and unintentional consequences, as found in Compton, Fuchs, & Fuchs (2012). These researchers sought to consider both the power and limitations of RTI for reducing the need for ongoing and intensive services. Mathematics skills are based on a large number of component skills (Compton et al., 2012). It, however, remains unclear if a deficit in one of the math component skills will negatively impact the development of other skills (Compton et al., 2012). It has been shown that being unable to solve basic math problems has numerous negative consequences (Compton et al., 2012).

The first program investigated in Compton et al. (2012) was a first-grade tutoring program that focused on multiple curricular components. There were 139 students that had been identified as at-risk for developing mathematics difficult. These students were separated with one group serving as control and one received tutoring. The procedure consisted of two components, a 30-minute tutor led lesson and a 10-minute computer exercise that was intended to increase math fact fluency (Compton et al., 2012). This method was found to be effective for a majority of the at-risk students. It was found that approximately 5% of students were unresponsive to this intervention (Compton et al., 2012).

The limitations of the first program were taken into consideration and addressed by the first-grade tutoring program to build fluent and accurate math facts performance (Compton et al., 2012). The researchers explained the purpose of this intervention was to examine the role of domain-general abilities versus that of number sense. In this study, the at-risk students were assigned either to a control group or to a tutoring session three

times a week for thirty-minutes; one of which focused on core content and then a review of concepts just learned, the other a timed math fluency practice was conducted at the end of the session. It was found that the timed fluency practice helped to bridge the gap between students that were at risk and their peers (Compton et al., 2012).

The next area of research conducted involved the acquisition and transfer effects of third-grade math facts tutoring (Compton et al., 2012). In this model, students completed a flashcard warm-up for 2-minutes, conception and strategic instruction for 10-15 minutes, lesson specific flashcard practice for 1-minute, with the final activity being computerized fluency practice. There was also a group that participated in a word-problem tutoring condition, where there was less emphasis placed on basic facts and more emphasis on how they can assist in solving math world problems. Compton et al. (2012) found that for both groups the area of math fact fluency was greatly improved.

The final area of research conducted by Compton et al. (2012) focused on separate and combined effects of primary prevention and supplementary tutoring on word problems. This study consisted of 120 classrooms, with 40 control and 80 classrooms given validated schema-broadening word-problem instruction. There were also students that were identified at-risk to participate in tutoring either from the control group or the study group. Compton et al. (2012) found that tutoring was more effective with the study group than the control group. The authors contend that this was an important conclusion because it speaks to the importance of general classroom interventions.

Behavioral interventions. Individual student outcomes are an area that is followed infrequently (Clonan, Martens, & McDougal, 2000). The authors contend there

needs to be data gathered on the effectiveness of programs with the students to ascertain if recommendations are valid or in need of change. This type of quantifiable information will also lead to better diagnostic recommendations by the prereferral team (Clonan et al., 2000). This is an important consideration for all interventions in all areas of instruction and behavior.

Exploring the topic of inclusion, Autin (1999) examined how the Individuals with Disabilities Education Act (IDEA) has impacted classrooms. The author explains that the expectation is that students with disabilities will participate to the highest degree appropriate with their general education peers. The IDEA has added various processes to make that expectation more of a reality. There are specific areas addressed, such as evaluations and Individualized Education Plans (IEP) that outline a plan and provide evaluations that are norm-referenced to accurately determine how a disabled student is meeting success. The IEP is also responsible for addressing standardized assessments, modifications to curriculum, and providing supplementary aids and services as needed for a student with a disability to be successful.

Autin (1999) continues to explain that the reauthorized IDEA also provides for services to be provided on behalf of a student with a disability. This means that general education teachers who find themselves teaching children with disabilities in their classroom can receive specialized training on how to help the children meet success in the classroom. This training can become crucial not only for the implementation of academic supports but also for behavior. Autin (1999) states that children with disabilities often have behavioral challenges, as well as, academic. The ability to

implement and properly adhere to behavioral management plans can often be an area that general educators have had little experience and training.

The concepts of Functional Behavior Assessment (FBA) and development of positive behavior supports plans (BSP) in classrooms were explored by Borgmeier, Hara, Loman, Rodriguez (2015). The authors research initially determined that school staff in this study was correctly and accurately developing an FBA. The next course of this study was to make effective behavioral interventions. Borgmeier et al. (2015) looked at the results of using a 60-minute training on selecting functional-based interventions using FBA vignettes.

There were several problems found when creating a BSP; the most glaring is the general disregard of the information collected during the FBA process (Borgmeier et al., 2015). Borgmeier (2015) stated that the purpose of completing the FBA is to determine the reason, or “function,” of the observed behavior. The other concern Borgmeier (2015) highlighted was that only 54% of BSP in this study contained a positive behavioral support and rather focused on punitive consequences for undesirable behaviors. Additionally, the final concern was that many of the BSP contained basic go-to interventions and had little bearing on the individual student.

In order to ascertain whether the 60-minute training was effective with the 291 educational professionals, Borgmeier et al. (2015) sought to answer the following three questions:

1. Does FBA training result in significant gains in participants’ ability to select function-based interventions from pretest to posttest.

2. Are there differences in pretest and posttest scores within and between participants in different training venues, roles or job titles, levels of previous training in FBA/BSP, and experience participating in the FBA/BSP process?
3. What categories of intervention (e.g., identifying alternative behavior, antecedent or consequence interventions) are school personnel strongest and weakest in prior to and following training, and which categories show the most improvement in response to training?

Borgmeier et al. (2015) found that regardless of the role that participants showed significant gains pre and posttest. This would allow one to deduce that the training was successful, and although there were some professionals that scored higher than others, the training was a worthwhile allocation of time (Borgmeier et al., 2015).

Students that exhibit problematic behaviors in the classroom often receive inadequate behavioral interventions, if any (Anderson, Christensen, Marchant, and Renshaw, 2008). Anderson et al., (2008) investigated the ability of general education teachers to implement Functional Behavior Supports (FBS) as a prereferral intervention. Anderson et al. (2008) claim this method of intervention has been found to be appropriate for students of all ages and ability level. The authors explain that when utilizing a functional behavioral approach, an undesired behavior is replaced by a more desirable behavior or extinguished.

Anderson et al. (2008) involved 13 teachers that taught kindergarten to fifth-grade. The training consisted of three core components: (a) group training; (b) independent reading and applied activities; and (c) individual consultation. The training

provided to the teachers was interactive and allowed teachers to apply their knowledge immediately to a student in class. This method was to ensure appropriate skill acquisition.

At the conclusion of the training, Anderson et al. (2008) found that the teachers had increased their understanding of FBS. The teachers who participated found that the training produced favorable results for their test student, although the data showed that the modifications only demonstrated a moderate change (Anderson et al., 2008). It should also be mentioned, however, that the teachers who participated were asked to choose students who were exhibiting mild behavioral problems (Anderson et al., 2008).

Conclusion

The New Jersey Administrative Code clearly mandates pre-referral intervention services in the general education setting through the use of I & RS. The implementation of these services is up to the individual school district, although guidance has been provided in the form of recommendations for the structure and processes of I & RS. As discovered in the research, I & RS can be met with praise and positive perceptions from teaching staff or with trepidation, which plays a crucial role in the fidelity and effectiveness of interventions and the process as a whole. Perceptions are greatly influenced by the structure of I & RS committees, the processes used, the interventions recommended, and the follow-up provided. Many things can be adjusted to this process to elicit positive perceptions from staff as the literature has shown. Interventions, which are at the heart of pre-referral intervention services, are numerous and take many forms. They can be subject-specific, based on instructional approach, implemented schoolwide,

or targeted to at-risk students. Determining the best intervention for the problem presented can be a challenge for I & RS committees. With positive staff perceptions and interventions that are empirically validated, the I & RS process can be improved, which can ultimately lead to a reduction in special education referrals and schools meeting the mission of serving all students.

Chapter 3

Methodology

This study was conducted in a southern, New Jersey elementary school that services students from grades Pre-Kindergarten through second grade. The school had an enrollment of seven hundred-fifteen (715) students at the time of the study, out of which thirty-percent (30%) qualified for free and reduced lunch and 20% (146 students) qualified for special education and related services.

The instructional staff was comprised of fifty-seven (57) teachers holding at least a Bachelor of Arts degrees and elementary education certificates, with seven (7) teachers holding a graduate degree and specialized teaching certification. A majority of the teaching staff had five years of experience, or more, at their respective grade level.

Procedure

Prior to starting this project, the researcher interviewed school administrators (i.e., principal and vice-principal) to determine the area of greatest need for the school. School administrators reported that an area of need would be to formulate an intervention resource for the school's Intervention & Referral Services (I & RS) committee. It was disclosed that the I&RS team often struggled to develop effective interventions for the teachers to implement with students. The study parameters were established based on this information and in accordance and agreement with the school's administration.

First, the school's principal introduced the researcher at a faculty meeting to outline the study. The staff was informed of the research project elements, was afforded the opportunity to ask questions, and also provide input about the I & RS process and

study. This meeting served to introduce staff to the researcher and to gain an understanding of the project and the methodology being used.

In order to identify the area(s) that teaching staff believed was in the greatest need for improvement with I & RS processes, teachers were asked to complete an optional survey (see Appendix A) at a subsequent faculty meeting. This survey focused on the teacher's level of satisfaction with past I & RS procedures, with implementation of interventions, with collegiality, changes they would like to see with I & RS processes, and areas of intervention need. The survey contained a total of fourteen (14) questions for response was designed to take approximately five to ten-minutes to complete.

To gain a more in depth understanding of previous training within the school and teachers' perceptions of I & RS processes, two (2) teachers were interviewed individually. These individuals participated on a volunteer basis. The teachers' identities were kept confidential to alleviate concerns of professional standing within the school, which was believed to have the potential to temper responses. The interviews were conducted at a time designated by staff members in their individual classrooms and took approximately fifteen minutes to complete. The interview focused on the teachers understanding of the I & RS process and the Tiered System of Supports. The teachers were then asked how they generally felt about referring a student to the I & RS team and if their previous referrals have been successful. The teachers were then asked what could be done to make the process more meaningful to them.

Once the initial survey and interview information was collected, a manual of intervention strategies that could be accessed via an online portal that teachers could

utilize when intervening with students was developed based on survey responses and follow-up interviews as well as contributions from the teaching staff. These interventions were compiled in the manual with the teacher's name (with consent) or source, the intended use for the intervention (i.e., academic area or behavior), how long the intervention likely needed to be implemented, and the targeted grade level for the intervention. The goal was that, by providing this information, staff members would be able to conference with the teacher that has volunteered the intervention and use that person as a resource. This book was made available to all teachers to assist in identification of at-risk students and to provide intervention support.

The manual focused on providing information about a TSS and what interventions would look like at the various levels. The staff was asked to provide interventions that they utilize in classrooms to be included in the manual. Interventions could be added directly by a staff member and they could place their name, along with the intervention, so that if another staff member wanted to implement the intervention and had a question, then he/she knew who would be able to provide assistance.

The intervention manual was introduced to teaching staff at a faculty meeting. The staff was asked to add any interventions that they had found to be successful during their teaching experience. See below for an example of an intervention placed in the manual:

Intervention Example:

Sight Words

Grades: K-2

Source: Mrs. XXX

Level of Intervention: Tier 3

Time: 5 minutes 3X daily

Activity: Review sight words utilizing an individual sight word book. As the student becomes proficient with the individual words you can then move on to the next word in the book. Utilizing the book helps to keep track of words mastered as well as the words the student still needs more practice to learn.

All teachers who referred a student(s) to the I & RS team were given a survey (see Appendix C) following the I & RS meeting to determine perceptions about the interventions recommended by the I & RS team, the number of interventions attempted prior to I&RS referral, if the interventions addressed the referral, satisfaction of the I&RS process, and also provided the opportunity to make suggestions for improvement. The teachers that were interviewed were also consulted after they attended I & RS meetings to gain input and understanding of challenges they were facing and ability to implement the interventions independently.

Research Design

This study utilizes a qualitative design. LeCompte (1994) defined qualitative design as a class of research designs that elicit descriptions of observations in the form of interviews, narratives, field notes, recordings, transcripts from audio- and video- tapes, written records of all kinds, pictures or films, and artifacts. This study follows LeCompte's (1994) description of a qualitative design in the several ways.

Utilizing a pre and post-variable survey allowed the researcher to gauge what was going on in the setting and also what it meant to the participants, important aspects of

qualitative design as identified by LeCompte (1994). The use of surveys allowed the researcher to gauge the individual teachers' perception of both the I & RS process and also the effectiveness of the intervention manual. Utilizing anonymous surveys allowed teachers to share their unique experiences without the need to be associated with their experiences.

Interviewing the teaching staff also aligns with components of a qualitative research design as described by LeCompte (1994). The interview process allowed the researcher to gain a more in depth understanding of what has previously been discussed in reference to I & RS and also the training that had been conducted.

Chapter 4

Results

This study sought to determine if the addition of an intervention manual would improve the Intervention and Referral Services (I & RS) process for teaching staff through improved perceptions and student outcomes. The study involved all teaching staff (57 teachers) in a Pre-Kindergarten through second grade school. The research questions that were to be answered were:

1. Will the implementation of an intervention manual that takes into consideration the strengths and weaknesses of staff in the development and implementation of interventions, specifically in the areas of reading and math at each intervention tier, improve teacher satisfaction ratings of the I & RS process in a local public school district?
2. Will the implementation of an intervention manual decrease the number of students referred for special education consideration in a local public school district?

At the outset of this study, the researcher addressed school administration (i.e., principal & vice-principal) to determine areas of specific need within the I & RS process. The researcher was informed that there was a need for a broader base of interventions. Following the meeting with school administration, teaching staff was convened at a faculty meeting. Here, staff was introduced to the researcher and informed of the project, that participation in this study was voluntary, and results would be kept confidential. The researcher asked for two members that would be willing to volunteer for an interview.

Staff members who were willing to participate in the interview were asked to speak to the researcher at a later date to ensure confidentiality.

Pre-Intervention Results

There was a total of eleven surveys returned to the researcher. On Question 1, “How do you feel about past interventions given by the I & RS team?” participants reported a moderate level of satisfaction about past interventions (mean=4.3 on a 10-point scale). Responses ranged from 0 (2 participants) to 10 (1 participant). For Question 2, “Do you feel that the interventions addressed the referral?”, four participants responded “yes,” two responded, “no,” and five indicated “partially.” The responses for Question 3, “How comfortable are you instituting the intervention/interventions independently?” had three respondents feel they were, “partially comfortable,” six respondents felt “somewhat comfortable,” and 2 respondents were, “not comfortable at all,” instituting the interventions given. Question 4 asked how many interventions were attempted prior to going to the I & RS team. The responses ranged from 0 to 4, where two respondents attempted 0 interventions, four respondents attempted 2 interventions, four respondents attempted 3 interventions, and one respondent attempted 4 interventions.

On Question 5, “How satisfied are you with the I & RS meeting you just had?” most respondents (7) were, “moderately satisfied,” while three respondents were, “very satisfied,” and two were, “not at all satisfied.” Question 6, “What would you like to improve about the experience you just had with the I & RS team?” was open-ended; however, several of the responses were similar. One respondent wanted more

communication, two respondents would like interventions to be implemented more easily, there were four concerns about the paperwork and the ability to have time to log interventions, and there were four that did not respond. On Question 7, “Do you have any other comments, questions, or concerns?,” one respondent found that having another teacher that had background knowledge of the student was beneficial; there was no response on the other 10 surveys.

Question 8, “How satisfied are you with the I &RS process?,” asked participants to rate the process on a *Likert*-type scale of 1 to 5, where 1 meant “not at all” and 5 meant “very satisfied.” The majority (4 participants) rated the I & RS process with a 3. Question 9, “What would you like to change about the I & RS process?,” was open-ended, where seven respondents would like to change the amount of time it takes to log information online, two respondents would like more consideration given to the individual students’ learning style, one respondent found that revisits take too long, and there was no response on one. There was also a 1 to 5 *Likert*-scale given for Question 10, “How do you feel about the interventions given to you at your recent I & RS meeting?” Five (5) respondents rated the interventions with a 3, while one respondent rated interventions with a 1, two respondents rated the interventions with a 2, two respondents rated the interventions with a 4, and one respondent rated the interventions with a 5.

Question 11, “What area of instruction are you most comfortable intervening on your own?,” found that most respondents (5) were comfortable intervening in language arts, two respondents were comfortable intervening in math, two respondents were comfortable intervening in all areas, and there was no response on two surveys. Question 12, “What area of instruction are you least comfortable intervening on your own?,” found

six respondents whom were least comfortable conducting behavioral interventions, one respondent was least comfortable with sight word interventions, and there was no response on four surveys. The final question essentially asked if a co-worker needed assistance, would you be willing to help him or her, to which all eleven respondents stated they indeed were willing to help.

Interview Results

Two teachers were interviewed prior to the implementation of the intervention manual. Teacher 1 had seventeen-years of teaching experience in various early elementary grades. When she was asked how she felt about the I &RS process, she stated that she felt it generally was not worth her time. She would only refer a student if she felt that the student was significantly disabled and was sure they would get services from the CST. This teacher was asked what she did with students who were struggling in the classroom if they were not going to the I & RS team. She stated that she did her best to intervene in the classroom. Following this statement, the teacher was asked if she implemented these interventions based on a tiered system of supports (TSS). She was unfamiliar with the concept.

Teacher 2 had three-years of teaching experience. This teacher stated that she has brought two students to the I & RS team this year. When asked how she felt about the process, she stated that she generally feels nervous and unsure of what information to provide to the team. She was then asked if she felt the team had been helpful with her two most recent referrals. In response, she stated that she did find the team helpful. One student was referred to the CST, while she was receiving more support in the classroom for the other student. The teacher was then asked to identify the area she feels she needs

the most support with. She stated that intervening with students who have behavior problems is a challenge for her. She receives behavioral interventions from the I & RS team, but does not know how to implement these interventions on her own. Finally, the teacher was asked if she had any understanding of TSS. The teacher remembered learning about this in her teacher preparation classes, but could not remember any specifics.

Post-Intervention Results

An online intervention manual was developed as a *Google* Document, which was shared with all faculty. Following the development and the implementation of the intervention manual, teachers whom referred students to the I & RS team were asked to complete a survey to determine if the intervention manual helped to address the needs of the teachers with respect to intervening with students in the classroom. A total of seven surveys were returned. Question 1, “How many interventions did you attempt prior to going to the I & RS team?,” found similar results as the presurvey; most respondents (3) attempted three interventions. There was a follow-up question 1a, “Did you use a tiered system of supports?,” where three respondents responded, “yes,” two responded, “no,” and two responded that they were not sure. Question 2 asked if the intervention manual was reviewed? There were four “yes” responses and three “no” responses. The follow-up question 2a, “Did you find it useful?,” one respondent found the manual more useful than expected, five found the manual’s usefulness as expected, and one respondent found the manual less useful than expected. Question 2c asked what respondents would like to change about the manual. Two respondents would like more entries added, one would

like to see the addition of behavioral interventions, and there was no response on four surveys.

Question 3 asked if the respondent's feelings toward the I & RS process had changed. One respondent found that their feelings changed and six respondents' feelings did not change. Question 3a, "Did you find the intervention manual useful when preparing to go to the I & RS committee?," indicated that most respondents (5) found the manual useful, while two respondents did not. Question 3b was an open-ended question that asked which part was useful. There was one response that found the new ideas useful. Question 4, "Do you feel that the interventions given by the I & RS team addressed your initial referral?," found that three respondents felt interventions addressed the initial referral, three felt the interventions somewhat addressed the referral, and one respondent did not feel that the I & RS team addressed the referral. The final question asked if the respondent felt that the I & RS team listened to concerns and treated referrals with an appropriate level of professionalism. Five respondents found that, "yes," the referral was treated appropriately, one respondent thought that, "no," the referral was not treated appropriately, and one respondent felt that the referral was "somewhat" treated appropriately.

There were 27 students referred to the I & RS committee and 4 to the CST during the 2015-2016 school year. A total of 25 students were referred to the I & RS committee and 4 to the CST during the 2016-2017 school year. There was no change to the special education referrals from the 2015-2016 to the 2016-2017 school year.

Chapter 5

Discussion

This study sought to determine if implementing a school-specific intervention manual would improve teachers' perception of the intervention and referral services (I & RS) process and in turn decrease the number of referrals to the Child Study Team (CST). The study took place in a southern New Jersey Pre-kindergarten through second grade school, with a total of 57 teaching staff. The process included a pre-survey, development of the intervention manual, a post-survey, and two teacher interviews.

The pre-survey suggested that the areas teachers would like to change the most are the amount of time between meetings and the amount of paperwork required to refer a student to the I & RS team. The first concern is something that can be considered by the school for future I & RS processes, but was not addressed in this study. The second concern is something that, although tedious to teaching staff, is a necessary requirement to gain a full picture of the students' difficulties. When conducting interviews, this was stated as a reason preventing teachers from referring students to the I & RS team. One teacher found the whole process too tedious and opted to "handle" students on her own. The other teacher stated that she only referred students that had the greatest need and that she was relatively sure would go to the CST.

Survey information offered important details and perceptions that can be utilized by the school and were informative to the study. The pre-survey information suggested that teachers were willing to help each other when it came to intervening. The average number of interventions implemented prior to going to the I & RS committee was three.

Teaching staff were most comfortable intervening in the areas of language arts and mathematics and least comfortable intervening in the areas of sight words and behavior.

The intervention manual originally contained seven interventions provided by the faculty. After it was introduced and shared with the faculty, there were three more interventions added by staff members. This lends to the belief that staff are utilizing the manual. Borthwick-Duffy et al. (2003) found that teachers went to pre-referral intervention teams to obtain interventions, obtain professional support, and to inform parents of a concern. As these researchers found, utilization of the intervention manual in this study supports the obtainment of interventions and allowed for professional support.

Supporting each other professionally is also a noted quality as described in New Jersey administrative code; N.J.A.C. 6A: 16-7, which requires that school districts formulate collaborative team approaches that feature structured and collegial planning, decision making and problem solving processes and that are fully integrated into the educational program, have proven to be effective in providing the required intervention and referral services for students' learning, behavior, and health problems to assist staff who have difficulties in addressing students' learning, behavior, or health needs. The utilization of the intervention manual allows for further instances of professional support and collegiality.

Dieker et al. (1995) found that seventy-four percent of the (intervention) teams in Illinois focused on a collaborative approach to problem solving. This was not limited to school professionals but also with parents. This collaborative approach allowed for a more successful and efficient prereferral intervention process. The utilization of a school

specific intervention manual can lead to a more collaborative approach within the school. There is currently little parental involvement in the I & RS processes of this school, but that can be a goal that can be addressed within the school's processes in the future. It is the last piece missing from this school's I & RS processes that would align with the findings of Borthwick-Duffy et al. (2003).

Post-survey results found that teachers had a positive response to the intervention manual. One of the critical components of the I & RS process according to the Resource Manual for Intervention and Referral Services (2009), I & RS programs are to be used to assist general education staff in expanding skills and abilities to accommodate the needs of students in the general education program who are at risk for school failure. The intervention manual is another tool that general and/or special education teachers can use to further support students. Positive perceptions of the intervention manual will hopefully lead to continued and increased use of the manual and, ultimately, to improved I & RS processes within this school.

Limitations

This study was limited by the number of teaching staff that chose to participate. The relatively low percentage of post-surveys returned limited analysis of intervention strategies and perceptions. The reasoning behind the limited response is uncertain, but could be explained by the existing perceptions of staff and climate of the school, which has held a less than favorable opinion of I & RS processes leading up to this study.

Interventions that were added to the manual were supplied by few teaching staff. Several interventions were added by additional staff members, but the overall

participation rate was less than expected. It is unclear how many interventions will be added in the future and/or if teachers will continue to utilize the manual, as changing staff perceptions and school climate on a larger scale is likely a slow process, but one that has been started within this school.

Practical Implications

Cosgove et. al. (2000) found interventions often fail or are ignored. In creating a school-specific manual, where teachers can collaborate, it is anticipated that interventions will be more easily accepted. Use of a school-specific intervention manual allows teachers to collaborate with each other prior to and during the I & RS process. It is anticipated that teaching staff will support one another, and in turn, coordinate more appropriate interventions. The posting of the intervention manual on-line will assist the manual in becoming a living document that can change and adapt to the current needs of staff in serving students. This can decrease the potential of the intervention process being largely ignored or meeting failure.

Future Studies

The intervention manual had positive reviews from the staff in post-survey responses, however it did not appear to change perceptions of the I & RS processes as a whole. All seven post-surveys suggested that staff reviewed the intervention manual and found it to be useful. Several teachers added interventions after it was launched on *Google Docs*. It was hypothesized that utilizing a school-specific intervention manual, created by the teaching staff, would improve the teachers' perceptions of the process. In this small sample size, that appeared to be the case. Continued use of the manual has the

potential to improve staff perceptions as collaborative efforts continue and increasingly more staff are exposed to the manual and find success using interventions contained within it.

The continued use of the intervention manual and the usefulness to teaching staff would require a longer research period. School administrators could periodically monitor the intervention manual to determine if staff is utilizing the document, while also contributing to posted interventions. Improving staff perceptions of the I & RS process in this school was not likely going to be changed in the brief duration of this study, although study elements can begin the process of improved perceptions by building upon these early results and continuing to move the school and staff in an increasingly collaborative, supportive, and knowledgeable environment.

While conducting interviews with the teachers, it was clear that the understanding of “tiers of intervention” were unclear. The teachers knew what they were, but did not understand the systematic implementation of intervention required to determine success. This is an area that needs to be addressed in the future with staff. This would be an area to explore further to determine if understanding of the tiers in a “tiered system of supports” would improve the fidelity of I & RS processes. Building staff capacity of interventions is another area for staff development. This might have been a contributing factor to poor staff participation in expanding the intervention manual.

Finally, teachers found that they needed more support when intervening with students with behavioral problems. This is an area that needs to be researched further.

There is a school-wide behavioral program, but the individual classrooms vary in the implementation of the behavioral system, expectations, and follow-through.

References

- Anderson, T., Christensen, L., Marchant, M., Renshaw, T. L. (2008). Training elementary school general educators to implement function-based support. *Education and Treatment of Children, 31* (4), 495-521.
- Autin, D. (1999). Inclusion and the new IDEA. *The exceptional parent, 29* (5) 66-70.
- Bahr, M., Dieker, L., Kocarek, C. E., Manson, D., & Whitten, E. (1999). A comparison of school-based intervention teams: Implications for educational and legal reform. *Exceptional Children, 66* (1), 67-83.
- Borgmeier, C., Hara, M., Loman, S. L., Rodriguez, B. J. (2015). Training school personnel to identify interventions based on functional behavioral assessment. *Journal of Emotional and Behavioral Disorders 23* (2), 78-89.
- Borthwick-Duffy, S., Lane, K. L., & Mahdavi, J. N. (2003). Teacher perceptions of the Prereferral intervention process: A call for assistance with school-based interventions. *Preventing School Failure, 47.4*, 148-155.
- Boyd, L. & Johnson, E. S. (2012). Designing effective tier 2 reading instruction in early elementary grades with limited resources. *Intervention in School and Clinic 48*(4), 203-209.
- Burns, M. K. (2011). Matching math intervention to students' skill deficit: A preliminary investigation of a conceptual and procedural heuristic. *Assessment for Effective Intervention, 36* (4), 210-218.
- Carr, M., Royer, J. M., Stroud, R., Taasobshirazi, G. (2011). Combined fluency and cognitive strategies instruction improves mathematics achievement in early elementary school. *Contemporary Educational Psychology, 36*, 323-333.
- Chard, D. J., Tyler, B., & Vaughn, S. (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities, 35* (5), 386-406.
- Clonan, S. M., Martens, B. K., & McDougal, J. L. (2000) Using organizational change procedures to promote the acceptability of prereferral intervention services: The school-based intervention team project. *School Psychology Quarterly, 15.2*, 149-171.
- Compton, D. L., Fuchs, D., & Fuchs, L. S. (2012). The early prevention of mathematics difficulty: Its power and limitations. *Journal of Learning Disabilities, 45* (3), 257-269.
- Cosgrove, G., Eidle-Barkman, K. A., Meyers, J., Truscott S. D. (2000). The acceptability of organizational consultation with prereferral teams. *School Psychology Quarterly, 15.2*, 172-206

- Delamatre, J., McNamara, K., & Rasheed, H. (2008). A statewide study of school-based intervention teams: Characteristics, member perceptions, and outcomes. *Journal of Education and Psychological Consultation, 18*, 5-30.
- Dieker, L. & Whitten, E. (1995). Intervention assistance teams: A broader vision. *Preventing School Failure, 40* (1), 41.
- Ferguson, C.J., Mink, D. V., Witzel, B. S. (2012) Number Sense: Strategies for helping preschool through grade 3 children develop math skills. *National Association for the Education of Young Children, May*, 89-94.
- Fuchs, D., Fuchs L. S., & Stecker, P. M. (2010). The “blurring” of special education in a new continuum of general education placements and services. *Exceptional Children, 76* (3)301-315.
- Fuchs, D. & Fuchs L. S. (2016). Responsiveness-to-intervention: A “systems” approach to instructional adaptation. *Theory Into Practice, 55*, 225-233.
- Hallahan, D.P., Kauffman, J.M., & Pullen, P.C. (2012). Current practices for meeting the needs of exceptional learners. In J.W. Johnson, A.C. Davis, P. Bursleson, & A. Reilly (Eds.), *Exceptional learners: An introduction to special education* (pp.24-49). Pearson.
- Harlacher, J. E., Nelson-Walker, N. J., Sanford, A. K. (2010) The “I” in RTI: Research based factors for intensifying instruction. *Teaching Exceptional Children, 42* (2), 30-38.
- Jennings, M. (2009). *Before the special education referral, Leading intervention teams*. United States of America: Corwin.
- J. Richardson (personal communication, February 28, 2017 & April 13, 2017)
- K. Schoyer (personal communication, February 28, 2017 & April 11, 2017)
- Lecompte, M,D, (1994). Qualitative Research Design and the “Program Evaluation Standards.” *The Journal of Experimental Education, 63* (1), 29-43.
- New Jersey Department of Education, Office of Special Education Programs, (NJOSEP). (2016, 10). *Implementing a Schoolwide Approach to Tiered Interventions*. Workshop conducted at the Learning Resource Center- South at EIRC on behalf of the New Jersey Department of Education, Office of Special Education Programs (NJOSEP), Blackwood, NJ.
- New Jersey Department of Education, Division of Student Services, Office of Educational Support Services. (2009). *Resource manual for intervention and referral services (I&RS)*.
- New Jersey Department of Education. (2015). *New Jersey Administrative Code, Title 6A, Chapter 14, Special Education*.

- Slonski-Fowler, K. E. & Truscott, S. D. (2004). General education teachers' perceptions of the prereferral intervention team process. *Journal of Educational and Psychological Consultation, 15* (1), 1-39.
- Vaughn, S. & Wanzek, J. (2007). Research-based implications from extensive early reading interventions. *School Psychology Review, 36* (4), 541-561.

Appendix A

Pre-Survey

1. How do you feel about past intervention/interventions given by the I&RS team?

0 Poor 10 Great



2. Do you feel the interventions addressed the referral?

- Yes
- No
- Partially

3. How comfortable are you instituting the intervention/interventions independently?

- Very
- Somewhat
- Not at All

4. How many interventions have you tried independently prior to going to the I&RS team?

5. How satisfied are you with the I&RS meeting you just had?

- Very
- Moderately
- Not at All

6. What would you like to improve about the experience you just had with the I&RS team?

7. Do you have any other comments, questions, or concerns?

8. How satisfied are you with the I&RS process?

Not at all

Very satisfied

9. What would you like to change about the I&RS process?

10. How do you feel about the interventions given at your recent I&RS meetings?

They have not been helpful and I saw no improvement

I found them helpful and they improved my initial concern

11. What area of instruction are you most comfortable intervening on your own?

12. What areas of instruction are you least comfortable intervening on your own?

13. . If a coworker needed assistance with his/her class would you be willing to help?

Yes

No

14. Please feel free to share any other comments/questions/concerns.

Appendix B

Post Survey

Post Intervention Manual Survey

1. How many Interventions did you attempt prior to going to the I&RS team?

1a. Did you utilize a tiered system of supports?

2. Did you Review the Intervention Manual?

Yes No

2a. Did you find it useful?

Less than expected As expected More than expected Consistently more

2b. What was the most useful to you?

2c. What would you like to improve?

3. Have your feelings toward the I&RS process changed?

Yes No Same

3a. Did you find the intervention manual useful when preparing to go to the I&RS committee?

Yes No

3b. If yes, what part?

4. Do you feel that the interventions given by the I&RS team addresses your initial referral?

Yes No Somewhat

5. Do you feel that the I&RS team listened to your concerns and treated your referral with an appropriate level of professionalism?

Yes No Somewhat

6. Comments:

Thank you very much for taking the time to complete this survey. Your feedback is valued and very much appreciated!