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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

AN EVALUATION OF MAKING ACTION PLANS: THE
EFFECTS ON PARENT INVOLVEMENT IN
INDIVIDUAL EDUCATION PROGRAM
MEETINGS

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

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College of Education and Behavioral Sciences
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School Psychology

December, 2016

This Dissertation by Lauren P. Hangge

Entitled: *An Evaluation of Making Action Plans: The Effects on Parent Involvement in Individual Education Program Meetings*

has been approved as meeting the requirement for the Degree of Doctor of Sport and exercise Science in College of Natural and Health Sciences in Department of Sport and Exercise Science

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ABSTRACT

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Over the course of extensive research, researchers have acknowledged the positive effects of parent involvement on student's education, including positive academic and social emotional outcomes. Despite this, particularly for parents of students in special education, parents continue to be passive participants in their students Individualized Education Program meetings, and hold negative perceptions of IEP meetings, which negatively effects parent involvement. This study investigated the effects of a Making Action Plans (MAPS) meeting on parent involvement in an IEP meeting, using a non-experimental design, and qualitative analysis and multiple linear regressions to analyze research questions. Although some positive effects were noted, overall, results were not considered significant with the study's sample. Despite this, the current student did demonstrate positive implications for better understanding parent involvement in the IEP process, with MAPS being a potentially beneficial way to emphasize student strengths and encourage parent involvement.

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CHAPTER I

INTRODUCTION

Currently, the belief that all individuals have the right to a public education is commonly held for many Americans. This idea has driven the development of several specializations within education and psychology, and it has allowed education to be accessed by a large number of individuals and families. Although currently, there is a large population of children with disabilities in public schools, this is a relatively novel trend in public education. The history of educating children with special needs in public schools has been one full of both difficulty and growth; as recently as the late 1960s, states upheld legislation to actively exclude students with disabilities from the public school environment (Yell, Rogers, & Rogers, 1998). This history has been guided by the unyielding advocacy of parents and by several major pieces of state and national legislation. The work of families of children with disabilities and numerous laws have led to the current state of special education, which is governed by the Individuals with Disabilities Education Act (IDEA) (2004).

Several pieces of legislation and events led to the passing of IDEA and the development of our current special education laws. The Elementary and Secondary Education Act of 1965 was the first piece of legislation that aimed to provide funding to individual states in order to educate students, including students with disabilities

(Katsiyannis, Yell, & Bradley, 2001). Additionally, the law provided federal aid to states to educate students who were below the poverty level (Katsiyannis et al., 2001).

Additionally, two primary court cases, *Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania* (1972) and *Mills v. Board of Education* (1972) established the right for a free and appropriate education (FAPE) for all students, due process, and the right for parents to be notified during the special education process. These newly established rights would later be included in the Education of All Handicapped Children Act of 1975 (EAHCA), which is the precursor to IDEA (2004), our country's current special education law.

One component that was central to the EAHCA was the development of the individualized education program (IEP) (Yell et al., 1998). The goal of an IEP is to provide a written legal plan developed by a multidisciplinary team that concretely explains the student's disability, educational plan, placement, goals and objectives, and methods for measuring growth. The IEP is a legal document that guarantees the educational rights of the student. It is also a contractual agreement on the educational plan for the student. The development of the IEP in the EAHCA encompassed all of the previous legislative decisions that involved special education practices: least restrictive environment, procedural safeguards, FAPE, due process, and the mandate to provide education. Additionally, the IEP was meant to act as a safeguard for misclassification and placement for students by mandating that the IEP team meet annually to address the student's strengths and areas for growth (Jacob & Hartshorne, 2007).

Individualized Education Program Team

One of the critical components of the IEP process is the multidisciplinary IEP team. As explained in IDEA (2004), the IEP team must be made up of the student's parents, at least one of the student's general education teachers, at least one of the student's special education teachers (or any special education teacher, if the student has not yet been identified as needing special education services), an individual who is able to interpret evaluation results (a school psychologist, for example), and a representative of the school or public agency (a member of the administration, special education director, etc.), and if appropriate, the student. Additional service providers may be in attendance based on the child's needs, and may include speech/language pathologists and occupational or physical therapists. Given that parents must be included in multidisciplinary teams, but they differ from school personnel (IDEA, 2004), it is important to address the specific roles and rights that parents have in the special education process.

Parent Involvement in Special Education and Legal Rights

Parent participation has distinct considerations for parents with children in special education when compared to parents of students who do not access special education and given the understood benefits of parent involvement (Epstein & Sheldon, 2002; Hoover-Dempsey, 1995; Hoover-Dempsey et al., 2005; Neymotin, 2014; Wilder, 2014), it is important for educators to recognize the role of parents in special education. Turnbull and Turnbull (2001) explained that parent participation in special education allows parents to take on the role of legitimate education decision makers and encourages parents and professionals to be members of collaborative teams. Additionally, parents have the right to access their child's educational records and are eligible to serve on local

or state special education committees (Turnbull & Turnbull, 2001). This gives parents the opportunity to connect to families experiencing similar situations and be active participants in their child's education.

As mentioned previously, parents have a right to notification of actions or changes made to their child's education programming, and these notifications must be done within predetermined timeframes (Fiedler, 2000). One area for notification is an educational evaluation. The school must notify parents in writing of their desire to conduct an educational evaluation, and parents must provide signed consent for the evaluation to be conducted.

In addition to parental rights surrounding evaluations, parents also have participation rights during the IEP meeting. Given that the goal of the IEP meeting is to address the placement, strengths, weaknesses, and present levels of performance for the student, IDEA (2004) requires that the parents of a student are members of any group that makes decisions about that student. In order to meet this requirement, it is required that schools provide prior written notice of any team meeting to parents to give parents an adequate amount of time to plan for the meeting (Jacob & Hartshorne, 2007). Furthermore, all meetings must be scheduled at a place and time that is agreeable for all team members, to the best of the team's ability (Jacob & Hartshorne, 2007). Additionally, parents must be provided with a copy of the child's IEP. Despite this, a school can conduct an IEP meeting if the parent is not able to attend, only if the school has made an attempt to involve the parents in the meeting process (Fiedler, 2000).

Given what has been mandated regarding parent participation, researchers have become interested in studying exactly how these legal mandates are actualized in

practice. By observing IEP meetings, researchers are able to better understand the implications of parent involvement and the impact that parent involvement has on special education team meetings.

Previous Observational and Intervention Research

In order to better understand the dynamics of IEP meetings and the impact of parent involvement on these meetings, researchers have attempted to use observations to gain information (Goldstein, Strickland, Turnbull, & Curry, 1980; Vaughn, Box, Harrell, & Lasky, 1988). Additionally, although limited, intervention research has been conducted in order to potentially increase parent involvement in IEP meetings. Both aspects of the observational research are aiming to understand and address the importance of parent participation in special education meetings.

Observational Research

The Education for All Handicapped Children's Act (1975) was the first piece of legislation to mandate parent involvement. Researchers and practitioners had acknowledged the importance of parent involvement, and after the implementation of the EAHCA, researchers became curious about the effect that mandated parent involvement had on parent participation. Did the passed legislation have a positive impact on parent involvement in students' IEP meetings?

One of the original studies aimed at addressing this question was conducted by Goldstein et al. (1980) five years after the implementation of the EAHCA. Goldstein et al. (1980) observed 14 IEP meetings in three school districts in North Carolina. The meetings were coded by observers and focused on who was speaking during the meeting, who was being spoken to, and the topic that was being discussed. Coding of the meeting

occurred at 2-minute intervals. Additionally, the length of the IEP meetings and who was in attendance was also recorded (Goldstein et al., 1980). The researchers developed a follow-up questionnaire to determine the satisfaction of the meeting by all who were in attendance, including parents and school personnel (Goldstein et al., 1980). From their observations, Goldstein et al. (1980) determined that the IEP meetings ranged in length from 6 to 72 minutes, with the mean meeting length being 36 minutes. The topics that were most often discussed were the goals and objectives for the student (20%), behavior (14%), and meeting-related information, like signing paperwork, etc. (13%); and special education teachers were observed talking at least twice as often as parents (Goldstein et al., 1980). The frequency of parent contributions seemed to be related to the length of the IEP meeting, with parents speaking only 0-2 times in meetings that lasted 6-20 minutes long (Goldstein et al., 1980). The majority of the communication during the meetings was directed at parents, with special education teachers reviewing an already developed IEP, rather than a reciprocal conversation between parents and school staff (Goldstein et al., 1980).

In a similar vein of Goldstein et al.'s 1980 research, Vaughn et al. (1988) were interested in determining the effects of mandated involvement on parent participation 10 years after the passing of the EAHCA. The researchers observed 26 initial IEP meetings, whose students were a part of a large southwestern school district in the United States. Vaughn et al. (1988) used a coding method to record the frequency and duration of questions and comments made by parents during their student's IEP meeting. The authors categorized parents' comments into three categories: questions, comments that were not made in response to a staff member's question, and responses to staff questions

or comments (Vaughn et al., 1988). Similar to Goldstein et al. (1980), Vaughn et al. (1988) interviewed parents at the end of the meeting to measure their satisfaction with the meeting, among other topics related to their student. The length of the meetings ranged from 20-110 minutes, with a mean of 41 minutes, similar to the mean length of the meetings observed by Goldstein et al. (1980). Of the mean meeting length of 41 minutes, approximately only 7 minutes of the meeting consisted of parents and school staff communicating when compared to the amount of time spent signing paperwork and completing the clerical aspects of the IEP meeting. Of parents' comments, the least amount of time was spent asking questions (.9% of the meeting), and initiating comments comprised the largest amount of parent contributions (8.3%) (Vaughn et al., 1988).

Intervention Research

After Goldstein et al. (1980) observed IEP meetings in order to determine the level of parent involvement in meetings, Goldstein and Turnbull (1982) attempted to implement an intervention, which aimed to increase parent involvement in IEP meetings. The study utilized two different involvement interventions: (a) providing parents with questions prior to the IEP meeting and a follow-up phone call, and (b) having the school counselor attend the IEP meeting to serve as a parent advocate (Goldstein & Turnbull, 1982). Parents ($n = 45$) were randomly assigned to three intervention groups. Group 1 received questions prior to the meeting and a follow-up phone call; Group 2 had the school counselor present at the IEP meeting; and Group 3 did not utilize any intervention strategies, and their IEP meetings were run as usual (Goldstein & Turnbull, 1982). Observational methods were used, and speakers and topics were coded in 30-second intervals (Goldstein & Turnbull, 1982). Goldstein and Turnbull (1982) determined that

parents who were part of both intervention conditions (questions prior to the meeting and a school counselor present) had more relevant contributions to the meeting when compared to the control group. Additionally, the researchers found that parents participated at significantly higher rates if the school counselor was present at the meeting and was acting as a parent advocate. There was no significant difference between parents who were provided with questions prior to the IEP meeting and a follow-up phone call after the meeting.

In both the observational and intervention research that has been conducted on parent participation in IEP meetings, there have been discrepant findings about the level of satisfaction that parents have with their student's IEP meetings (Goldstein et al., 1980; Goldstein & Turnbull, 1982; Vaughn et al., 1988). This contributes to the need for additional research about parent participation in IEP meetings.

Although Goldstein and Turnbull (1982) found positive effects on parent involvement if parents participated in an intervention, the results were limited to the frequency of contributions. Frequency can provide some information regarding the level of involvement in a meeting, but frequency counts could also misrepresent the amount of parent involvement in a meeting. A parent may contribute only one or two times, but those contributions may be very rich in detail, productive, and valuable to the discussion. By recording only frequency, a parent who responded with a "yes/no" would be coded the same as a parent who provided a much more in-depth comment and would arguably be missing a large amount of information regarding the level of parent participation in an IEP meeting.

Since these two studies, there has been additional research conducted on the positive effects of parent advocates and facilitators, but limited research has been conducted on ways to increase parent involvement in IEP meetings. Jones and Gansle (2010) conducted one of the only studies on this topic in recent years. Building upon Goldstein and Turnbull's (1982) work, Jones and Gansle (2010) observed 41 annual IEP meetings in order to determine if a pre-meeting intervention would have an effect on parent involvement in their child's IEP meeting. Parents were randomly assigned to a pre-conference or control condition. Those parents in the pre-conference group attended a conference with their student's teacher prior to their IEP meeting in which teachers discussed jargon that might be used in the meeting, provided parents with example questions they might ask, and role-played asking questions in the IEP meeting with the parents. The frequency of parent participation (when a parent spoke) was counted and was used as the only measure of parent participation in the study (Jones & Gansle, 2010). In addition to the frequency of participation, parents were also given a survey to evaluate their comfort level with the meeting and their perceived level of participation. A survey was also given to teachers and administrators to determine their level of satisfaction with the IEP meeting and how involved they perceived parents to be (Jones & Gansle, 2010).

Jones and Gansle (2010) did not find any significant differences between the treatment and control groups in this study ($p = .43$), indicating that the parents in the pre-meeting condition did not make more comments during their child's IEP meeting when compared to parents who did not participate in a pre-meeting. Despite this, teachers rated parents who had participated in the pre-meeting as participating more than those who had not (Jones & Gansle, 2010). This suggested that even though actual participation did not

increase, teacher perceptions of parent participation increased due to the intervention. Jones and Gansle (2010) argued that the mere contact with parents prior to the IEP may positively change school personnel's views, which may explain the researchers' findings.

Similar to critiques of previous research, the number of times parents spoke was the only measurement used to assess parent involvement, which potentially left out valuable information (Jones and Gansle, 2010). Additionally, all teachers were involved in both the pre-meeting and control conditions, which may have explained their inflated perceptions of parent involvement by parents in the intervention condition. Simply by being familiar with parents in the pre-meeting group may have biased their opinions and perceptions of parents during the IEP meetings.

Purpose of the Study

With mandated parent involvement in special education (IDEA, 2004), it continues to be very important to understand what parent involvement looks like in practice and to begin to investigate methods to increase parent involvement. This is especially important given the positive student outcomes that are associated with parent involvement (Epstein & Sheldon, 2002; Hoover-Dempsey, 1995; Hoover-Dempsey et al., 2005; Neymotin, 2014; Wilder, 2014).

Prior research has demonstrated that despite mandated parent involvement, parents continue to play passive roles in their children's IEP meetings (Goldstein et al., 1980; Goldstein & Turnbull, 1982; Vaughn et al., 1988), which demonstrates the discrepancy between the spirit of IDEA and its implementation in the school environment. Additionally, the limited research investigating potential interventions to increase parent involvement has remained largely inconclusive and focused almost

primarily on the frequency count of parent comments as a measure of involvement (Goldstein & Turnbull, 1982; Jones & Gansle, 2010).

Integrating prior observational and intervention research on parent participation in IEP meetings (Goldstein et al., 1980; Goldstein & Turnbull, 1982; Jones & Gansle, 2010; Vaughn et al., 1988), the purpose of the current study was to investigate the effects of an additional team meeting, called a Making Action Plans meeting (MAPS) (Forest & Lusthaus, 1989), on the rich participation that parents have in their student's IEP meeting. For the purpose of the current study, the term "rich participation" or "rich comments" referred to parent participation that exceeds a simple "yes or no" response and may include self-initiated comments and questions (Vaughn et al., 1988), stories about the student, examples from the student's home environment, student's strengths and weaknesses, etc. The use of rich participation in this study was an attempt to address the limitation of frequency counts of parent participation that has primarily been used in previous research.

Research Questions

- Q1 Do parents who participate in a MAPS meeting prior to their student's IEP meeting have richer participation and comments during the IEP meeting than parents who do not participate in a MAPS meeting?
- Q2 Does parent participation in a MAPS meeting predict the number of words spoken in an IEP meeting over and above the influence of parent education level and type of student disability?
- Q3 Does parent participation in a MAPS meeting affect parent attention in an IEP meeting?

Delimitations

Participants for this study were obtained using convenience sampling and ideally consisted of 20 groups of parents and their respective special education teams. The lack

of the ability to have a larger sample size may have been a limitation for the study. The intervention and comparison conditions were comprised of intact groups of participants from two demographically similar schools. With the use of a quasi-experimental design, random assignment was not possible. Due to the lack of random assignment, the study had the potential to be effected by factors other than the intended independent variables. Additionally, because all meetings were observed by this researcher, there was the potential for participants to alter their behavior simply due to the fact that they were being observed, rather than as an effect of the intervention.

Definitions of Terms

Parent Involvement. For the purpose of the current study, parent involvement was defined as parental support in a child's education, occurring at and linking home and school, where home-based activities are related to a child's learning in school (reviewing work and monitoring progress) and school-based activities focus on supporting students in the school environment (volunteering, attending conferences, and communicating with teachers) (Hoover-Dempsey & Sandler, 1997; Lai & Vadeboncoeur, 2012).

Rich Participation. For the purpose of the current study, rich participation was defined as any parent participation in their students IEP meeting that exceeds a simple one-utterance ("yes," "no," "okay," etc.) comment. This may include questions, comments about the student's strengths or weaknesses, stories about the student, comments about information presented by school staff, and responses to staff questions. The purpose of this definition was to make a distinction between a simple comment that lacks substance and more-detailed parent participation.

Making Action Plans (MAPS). First developed by Forest and Lusthaus (1989), the MAPS model is a child-focused method of parent/school interaction that can be used in the special education process. Making Action Plans is a planning process which allows parents, family members, and in some cases, friends of the student to share their goals, dreams, and nightmares for the student. A MAPS meeting typically lasts one hour and involves any person who has a stake in the student's education and wellbeing (Forest & Pearpoint, 1992; O'Brien & O'Brien, 2002). For the current study, the individuals who attended the student's IEP meeting also attended the MAPS meeting. During the meeting, a facilitator encourages discussion and participation and records the group's comments on a large colorful poster board. There are eight key questions that are discussed in a MAPS meeting and include topics such as: history, dreams and nightmares for the student, description of the student, student strengths and weaknesses, and a plan of action for the student (Forest & Pearpoint, 1992).

CHAPTER II

LITERATURE REVIEW

Parent involvement has been an area of extensive research and review for some time, with researchers collectively acknowledging the positive effects that parent involvement has on a student's education. Before beginning a discussion of the different components of parent involvement, it is necessary to define the term, as the definition of parent involvement has been a topic of debate in the research (Wilder, 2014). Although the construct seems somewhat intuitive, the varying definitions have caused confusion and a lack of consistency in research regarding parent involvement (Wilder, 2014). For the purpose of the current study, a combined definition of parent involvement from Hoover-Dempsey and Sandler (1997) and Lai and Vadeboncoeur (2012) was used. In this combined definition, parental involvement is parental support in a child's education, occurring at and linking home and school, where home-based activities are related to a child's learning in school (reviewing work and monitoring progress) and school based activities focus on supporting students in the school environment (volunteering, attending conferences, and communicating with teachers).

These two definitions were chosen based on their emphasis on the home and school relationship and for their alignment with the major theory guiding the current study, which will be discussed in detail in the following section. Additionally, this definition takes into account the home support that parents can provide their students,

rather than focusing only on what is traditionally viewed as involvement, such as volunteering in the classroom or participating in parent-teacher organizations.

Parent Involvement Theory

There are several prominent theories and models of parent involvement that aim to address the reasons why and ways in which parents become involved in their children's education (Deslandes, 2001; Hoover-Dempsey et al., 2005). Hoover Dempsey (1995) presented a model of parent involvement that not only demonstrates the importance of parent involvement, but also attempts to explain *why* parents become involved in their children's education. This sets Hoover-Dempsey's model apart from others and makes attempts to improve parent involvement more concrete; if we understand why parents get involved, we can encourage those behaviors and beliefs to increase involvement. Hoover-Dempsey (1995) asserted that other models of parent involvement did not adequately address the question of why parents become involved and are limited in explications of how parent involvement has a positive effect on students' education.

Although a full overview of the model is beyond the scope of this literature review, Hoover-Dempsey (1995) and Hoover-Dempsey and Sandler (1997) presented a model of parent involvement that proposed a multifaceted process that occurs when parents become involved in their children's education and includes the parents' decision to become involved, their choice of involvement forms, mediating variables to involvement, and child outcomes from involvement (Hoover-Dempsey, 1995). Rather than focusing on parent factors like socioeconomic variables (socioeconomic status, parent education, etc.) as many models of involvement do, Hoover-Dempsey (1995)

outlined factors such as parent self-efficacy for helping their children in school, requests for involvement from children and schools, parent modeling, and the use of developmentally appropriate involvement strategies. This allows for a broader view of parent involvement that can be applied to many families in diverse situations. This diversity may include ethnicity, socioeconomic status, or ability level, among others. Children with disabilities are presented with a unique set of circumstances when accessing education that requires different laws, considerations, and beliefs than students in general education may experience.

Implications of Parent Involvement

It has been well established that parental involvement benefits children's general academic outcomes and that parents' attitudes, beliefs, and actions regarding their children's education impact academic and emotional success (Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey et al., 2005). Specifically, parental involvement has been shown to increase academic factors such as student achievement, teachers' perceptions of student competence, attendance (Epstein & Sheldon, 2002), and student grades (Hoover-Dempsey et al., 2005) as well as behavioral factors, which also impact children in the school setting (Jarmuz-Smith, 2011).

One of the most compelling outcomes in education as a whole is student achievement, and its relationship to parent involvement has been studied extensively. In a meta-synthesis conducted by Wilder (2014), specific aspects of parent involvement on student achievement were analyzed. In all the studies and meta-analyses that were included in the meta-synthesis, Wilder concluded that, despite the child's age, parent involvement has a significant impact on academic achievement, with the largest impact

on achievement being in elementary-age students. Wilder also examined the effects of parent involvement based on the way the construct was defined in research. Given that the definition of parent involvement has been an area of inconsistency (Wilder, 2014), this is an important distinction to make. Even with the numerous definitions of parent involvement used, Wilder concluded that there is a consistently positive influence on student achievement if parents are involved in their child's education.

In addition to the positive impact of involvement across all construct definitions, Wilder (2014) explained that in previous meta-analyses conducted by Jeynes (2003, 2005), parent involvement has positive effects across all ethnicities and genders. Interestingly, Jeynes (2005) concluded that two specific aspects of parent involvement have the most influence on student achievement: parental expectations and parenting style. Other more activity-based forms of involvement (attending school events and checking homework) did not contribute as strongly to achievement (Jeynes, 2005). This conclusion supports Hoover-Dempsey's (1995) model of parent involvement, which allows for a broader idea of parent involvement, rather than activity-based involvement that may be hindered by parent work schedules, transportation difficulties, and childcare concerns.

Research has also demonstrated that parent involvement can influence teacher perceptions of students' ability, which has been consistently shown to impact students' actual ability and achievement (Hughes, Gleason, & Zhang, 2005). In a study examining a teachers' perceptions of academic ability, Hughes et al. (2005) found that parent involvement significantly impacted teachers' perceptions of student achievement, even when students' actual Woodcock Johnson-III scores were being controlled for. This

indicates that despite a student's actual level of academic achievement, parent involvement can strongly influence a teacher's perceptions of his or her students.

In a study completed by Epstein and Sheldon (2002), schools who implemented parent involvement strategies (calling parents, providing parents with a contact person at the school, and conducting parent workshops, among others) and developed home-school partnerships saw a 2% decrease in chronic student absenteeism in one academic year. Additionally, schools that developed stronger connections with parents also had increased student attendance rates (Epstein and Sheldon, 2002). The authors concluded that parent involvement and specific involvement strategies may assist in improving student attendance rates and decreasing chronic absenteeism (Epstein & Sheldon, 2002). Given that students who have stronger attendance rates have more opportunities for instruction, decreased rates of drop out, and higher levels of achievement (Epstein & Sheldon, 2002), improving parent involvement in their student's education is important.

In addition to academic factors, parent involvement has also been shown to have positive effects on students' behavioral outcomes (Neymotin, 2014). Given that behavioral and social emotional outcomes are being given increased attention in schools, focusing on behavioral outcomes through parent involvement could help support this aspect of education. In a study completed by Neymotin (2014), higher levels of parent involvement, as measured by teacher report of parental involvement, child report of parent involvement in checking homework, and parent report led to lower instances of arrest, suspension, and behavioral referrals in high school students. Parent involvement was measured by teacher reports of involvement, child reports of how involved their parents were in checking homework, and parent reports of how often they volunteered in

the classroom. Similar to others' findings (Wilder, 2014), parental volunteering in the classroom was least likely to impact positive behavioral outcomes when compared to teacher report and home-based involvement. Hoover-Dempsey (1995) also explained that children's likelihood of developing a strong sense of school-related self-efficacy increases if parents are more involved when compared to parents who are less involved in their child's education. This may influence a student's beliefs about their ability to successfully complete academic tasks and meet the academic goals and demands that schools have for students.

Not only do family and school connections increase positive student outcomes, but they also improve school climate and promote positive parenting skills and parent support (Epstein et al., 2002). Additionally, Fish (2008) explained that the development of effective educational programming for students is dependent on parent involvement and leads to positive outcomes for students.

Educational programming, as Fish (2008) described, can occur for both general and special education students. However, when considering students who receive special education services, it is important to discuss the differences between the educational programming, laws, and services that they receive compared to their general education peers. Additionally, as Angell et al. (2009) and Epstein, Munk, Bursuck, Polloway, and Jayanthi (1999) explained, the more parents are involved in team meetings, the more likely their student's are to be successful in academic settings. There have been indications that parents who are more involved in team meetings are more likely to have successful students (Angell, Stoner, & Sheldon, 2009; Epstein, Munk, Bursuck, Polloway, &

Jayanthi, 1999), making parent involvement an important consideration for school personnel.

Special Education Law and the Individualized Education Program Meeting

Children with disabilities are served under different educational laws than their typical peers. The Individuals with Disabilities Education Act (2004) governs special education. Along with the difference in law comes a difference in the process of educating children with disabilities, which allows them equal access to academic information. Currently, this process, the Individualized Education Program (IEP) process, consists of multiple steps including referral, evaluation, an IEP meeting, and monitoring student progress. The IEP meeting can be defined as follows:

The IEP meeting serves as a communication vehicle between parents and school personnel and enables them, as equal participants, to jointly decide what the child's needs are, what services will be provided to meet those needs, and what the anticipated outcomes will be. (Federal Register 1981, 5462)

A critical component of the IEP process and special education law is the mandated inclusion of parents as members of the interdisciplinary team throughout the evaluation and IEP process (IDEA, 2004). The Individuals with Disabilities Education Act explained that parents of a child with a disability must be included in any group that makes decisions about the student and that parents are a significant part of the special education process (Jacob & Hartshorne, 2007; Jarmuz-Smith, 2011).

After the referral and evaluation process, the multidisciplinary team meets to develop a written document, the IEP, for the student which must include: areas of need, measurable goals and objectives for the current year, present level of the student's academic performance, and how progress will be measured (Fish, 2008; IDEA, 2004).

The goal of this meeting is for the multidisciplinary team to develop an education plan and determine the appropriate educational placement for the student (Fish, 2008) as well as to serve as a critical point for collaboration among parents and school staff (Reiman, Beck, Coppola, & Engiles, 2010). These decisions are based on the strengths and needs of the child and should be based on input from all members of the team, including school professionals and parents. Researchers acknowledge that collaboration among all team members is critical in an IEP meeting, and it is critical for creating an effective education plan for the student (Fish, 2008; Garriott, Wandry, & Snyder, 2000; Simpson, 1996). Fish (2008) explained that the IEP meeting “provides the ideal opportunity to facilitate equal collaboration between educators and parents (p. 8)”.

Discrepancy Between Theory and Law

Despite the body of evidence that exists supporting the positive impacts of parent involvement in their student’s education (Epstein & Sheldon, 2002; Hoover-Dempsey, 1995; Hoover-Dempsey et al., 2005; Neymotin, 2014; Wilder, 2014) and the legal mandates for parent involvement via the IEP process, all too often parents are merely present at special education team meetings, limited to signing paperwork and receiving information rather than being active participants (Fish, 2008). The good intention of the law to include parents in educational decisions, unfortunately, is not always realized and leaves a gap between the spirit of the law and practice (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004; Stoner et al., 2005).

One of the original studies aimed at examining the early ramifications of mandated parent involvement in IEP meetings provided information about the discrepancy between the reality and spirit of IDEA (Goldstein et al., 1980). The

researchers observed 14 IEP meetings and recorded topics of discussion, who was speaking, and who was being spoken to for the duration of the meeting. For all 14 meetings, parent comments consisted of less than 25% of all contributions, with the special education teacher speaking more than twice as often as the parents (Goldstein et al., 1980). Additionally, parents were the recipients of 63% of the comments in the meeting, which is consistent with much later research that explained that parents often feel “talked at,” rather than included in IEP discussions (Zeitlin & Curcic, 2013). The majority of the observed IEP meetings consisted of the special education teacher reviewing an already developed IEP with the parents; only one meeting consisted of the joint development of the IEP and annual goals between parents and school staff (Goldstein et al., 1980).

Eight years after Goldstein et al.’s, (1980) study, Vaughn et al. (1988) conducted a similar study that focused on observing 26 IEP meetings and recording the type of comments that parents made during the course of the meeting (i.e., questions, responses to other team member questions, and parent-initiated comments). Of the total amount of time spent in the meetings, parents verbally participated only 14.8% of the time, with the majority of time consisting of comments, rather than questions (Vaughn et al., 1988). This translates to 6.5 minutes of parent participation in an, on average, 41-minute meeting (Vaughn et al., 1988). Vaughn et al.’s (1988) results were similar to Goldstein et al.’s (1980), indicating that despite the amount of time between the two studies, there were still relatively low levels of parent participation in IEP meetings. Vaughn et al. (1988) also explained that despite the high-stakes decisions made at IEP meetings and the

amount of information presented, parents asked very few questions (9% of the total meeting time).

Although relatively dated, these studies speak to the gap between the intentions of parent involvement in even the earliest versions of IDEA and the actuality of practice in students' IEP meetings. In addition to actual practice and the actual number of times parents verbally participate in IEP meetings, there is a large body of literature related to parent perceptions of their children's IEP meetings, which can influence parent and school collaboration and relationships. The spirit of IDEA (2004) acknowledges the importance of and encourages collaboration between home and school, but parent perceptions of IEP meetings frequently differ from the intention of the law (Blue-Banning et al., 2004; Fish, 2008; Mueller, 2009).

Parent Perceptions of Individualized Education Program Meetings

Given the discrepancy between the spirit and implementation of IDEA (2004) and the sometimes-strained nature of parent and educator relationships (Stoner et al., 2005), it is important for practitioners and researchers alike to understand parent perceptions of IEP meetings. Despite the spirit of IDEA, parents have reported feelings of not only not being involved, but also being depersonalized during the IEP process (Zeitlin & Curcic, 2013). In a study by Zeitlin and Curcic (2013), it was common for parents to feel like they did not matter in the context of the meeting. Similarly, parents often felt invisible and as if they were viewed as an obstacle in the process, rather than as a meaningful and valued member of the multidisciplinary team. Parents typically felt included at the meetings only because school staff spoke to them, rather than being included as an active

part of the decision-making process (Zeitlin & Curcic, 2013). The number of opportunities for parents to contribute was limited, and often parents were encouraged to remain passive participants during the meeting (Zeitlin & Curcic, 2013).

Although the goal of the IEP meeting is to develop a plan to support student growth, it can also be a very emotional and intense experience for parents, where their child's difficulties are often the highlight (Fiedler, 2000; Zeitlin & Curcic, 2013). Parents have reported feelings of frustration, dissatisfaction, and being overwhelmed by the IEP process (Zeitlin & Curcic, 2013). Additionally, Stoner et al. (2005) and Zeitlin and Curcic (2013) reported that parents tend to express feelings of confusion during their child's IEP meeting. Parents reported feeling "totally lost" (Stoner et al., 2005, p. 45) and unable to process information that was being presented during their child's IEP meetings. Stoner et al. (2005) argued that parental feelings of confusion lead to higher levels of dissatisfaction and increased parental concern.

A common theme for parents who have children in special education is the notion of self-education (Fish, 2008; Stoner et al., 2005). Parents explained that the majority of information that they obtained about IEP meetings and the special education process was obtained through written special education materials, attending advocacy and training workshops, joining support groups, and working with advocates and consultants (Stoner et al., 2005). Parents who participated in a study by Zeitlin and Curcic (2013) also echoed the need for self-education. Of the 20 parents who were interviewed for the study, the majority of them believed that in order to hold decision-making power in an IEP meeting, they needed to become authorities on their child's disability (Zeitlin & Curcic, 2013). The amount of self-education that some parents undertake is very time

consuming and costly, but is viewed as necessary when working with educators who, more often than not, have much more experience with the special education process. Despite the large amount of self-education in which the parents engaged, Fish (2008) reported that parents strongly desire more information about special education law. Additionally, parents have expressed a desire to work collaboratively with schools in order to gain information about additional supports and resources to assist their children, rather than being left on their own to seek out other information (Blue-Banning et al., 2004).

Another frequently documented feeling that parents have during IEP meetings, and the special education process in general, is a lack of trust, despite the importance of trust in developing positive collaborative relationships from the perspectives of both parents and educators (Blue-Banning et al., 2004). In particular, parents lost trust in IEP team members when there was a disagreement on the services that would best meet their student's needs (Stoner et al., 2005). When trust is decreased, parents tend to become more diligent in monitoring other team members' actions and decisions (Stoner et al., 2005). This also speaks to the role of an advocate that parents frequently feel they need in order to get the services they believe their child needs. One parent, in particular, explained, "My role is to be my daughter's advocate, first and foremost, but also a collaborator with the team, if they allow it" (as cited in Zeitlin & Curcic, 2013, p. 380), indicating that the role of being an advocate and fighting for services takes precedent over team collaboration.

As indicated by IDEA (2004), the role of parents in an IEP meeting is to be equal participants and team members with the student's teachers and school professionals.

Parents are meant to be included in any decision that is made regarding their child and, at the very minimum, must be notified of meeting times, locations, and the reason for the meetings (IDEA, 2004). Despite the desired roles that parents have in IEP meetings and the special education process, researchers have identified several factors that can become barriers to parent involvement, which can introduce conflict and stress into the IEP process and home-school relationships.

Barriers to Parent Involvement

Barriers to parent involvement can frequently arise between parents and members of the school staff, particularly when high-stakes decisions regarding special education programming are being discussed. These barriers to involvement can lead to conflict between parents and school staff during the IEP process. In a study completed by Lake and Billingsley (2000), parents with children in special education identified numerous factors that contribute to increasing or decreasing conflict between parents and school personnel.

Numerous researchers pinpoint communication as a critically important part of effective relationships, in general, and for parent and school relationships, in particular (Angell et al., 2008; Blue-Banning et al., 2004; Deslandes, 2001; Esquivel, Ryan, & Bonner, 2008; Epstein et al., 1999; Lake & Billingsley, 2000). Communication between parents and teachers is a foundational component of the school environment (Epstein et al., 1999) that can be translated to the special education and problem-solving team process as well. Epstein et al. (1999) explained that parents and educators share the responsibility for communicating about concerns and successes of their students.

Both parents and teachers identified the frequency of communication as an important factor to promoting collaboration (Angell et al., 2009; Blue-Banning et al., 2004; Lake & Billingsley, 2000). In addition to frequency of communication, honest communication seems to be an important factor for parents as well (Blue-Banning et al., 2004; Esquivel et al., 2008). Parents acknowledged that addressing issues surrounding their children in special education can be difficult and that conversations can be challenging for both school personnel and parents alike, and given this, parents desire direct communication that does not sugar-coat difficult topics (Blue-Banning et al., 2004). There are consistently high-stakes decisions made regarding students, and all parties involved have a significant investment in the student. It appears that honest communication is the most valuable in these situations (Angell et al., 2009, Epstein et al., 1999). Parents seem to prefer honest, straightforward, and knowledgeable discussions about their child as an individual (Angell et al., 2009; Blue-Banning et al., 2004; Epstein et al., 1999; Esquivel et al., 2008).

In addition to honest communication, parents identified basic inter-personal skills to be a factor that increases or decreases conflict during team meetings (Lake & Billingsley, 2000). School personnel not listening or not fully understanding what parents were attempting to communicate increases conflict and decreases trust (Lake & Billingsley, 2000). Simply using basic communication skills like attentive listening, summarizing, reflecting, and validating what parents are experiencing and communicating could greatly increase the positive relationship between schools and parents.

According to Lake and Billingsley (2000), one of the factors that created the largest amount of conflict between parents and schools is differing views on a child's needs, or the child as an individual. Parents tended to hold perceptions that the school did not view their child as an individual with unique strengths; instead, parents perceived the school as viewing the child as part of a diagnostic category (Blue-Banning et al., 2004; Esquivel et al., 2008; Lake & Billingsley, 2000). The discrepancy of how each group viewed the child caused considerable conflict and, in turn, decreased parents' trust in school personnel (Esquivel et al., 2008; Lake & Billingsley, 2000). Additionally, Spann, Kohler, and Soensken (2003) explained that it is critically important for parents to believe that the school team is addressing not only their child's individual needs, but their child's most pressing and relevant needs. Similarly, parents from numerous studies explained that viewing their child from a strengths-based perspective greatly increased family and school collaboration and trust between the two parties (Esquivel et al., 2008; Lake & Billingsley, 2000).

Trust, or lack thereof, is a critical component of creating positive or negative interactions between parents and schools, particularly with regard to students in special education. Mothers with children in special education indicated that the more they trusted the teachers and service providers who were working with their children, the more they supported the teachers' decisions and valued their opinions (Angell et al., 2009). Without trust in the service providers, parents were less supportive, which could cause parents to lack confidence in the knowledge and expertise that school service providers display (Lake & Billingsley, 2000). In particular, parents appeared to value knowledge of the problem-solving process and general knowledge of disabilities and education.

Without that knowledge, parents experienced feelings of inadequacy (Lake & Billingsley, 2000).

Many parents reported instances of “power struggles” with school teams in which parents are fighting for what they believe is the best for their child and, in turn, the school fights back, creating a negative cycle of arguments (Lake & Billingsley, 2000). When these arguments continue and when parents lose trust in the school personnel, parents monitoring and negotiating of services increases, which, in turn, creates more conflict with the school (Angell et al., 2009; Stoner et al., 2005). Fish (2008) explained that adversarial relationships could be decreased if IEP teams treat parents as equals and allow parents to have an equal say in educational decisions. This allows parents to positively affect their child’s education and feel valued in a corporative relationship (Fish, 2008).

In addition to an imbalance of knowledge, an imbalance of power can cause conflict between parents and school personnel. An imbalance of power is created when there is a hierarchical system in which educators are the most powerful and parents are inferior (Blue-Banning et al., 2004; Lake & Billingsley, 2000). The lack of experience with many issues in special education creates a power and knowledge differential between schools and parents. This puts parents at a disadvantage if school personnel do not recognize this differential (Fish, 2008).

Collaboration and cooperation between team members also impacts parents’ perceptions of the special education process. Collaboration among team members can contribute to educators’ knowledge, which, as indicated by parents with children in special education, is a factor that can either increase or decrease conflict between parents

and school personnel (Lake & Billingsley, 2000). Parents' trust and perceptions of school staff can be increased if team members are prepared, knowledgeable, and on the same page during problem-solving meetings. Blue-Banning et al. (2004) found that educators' skills and expertise contribute to a positive home-school partnership. Parents desired working with professionals who could use their unique skills to solve problems and provide effective support for their children (Blue-Banning et al., 2004). Should special education and general education teachers fail to collaborate and effectively communicate, additional conflict can arise between them, which, in turn, affects the climate of the problem-solving team. Esquivel et al. (2008) explained that parents perceive team meetings as negative if there is conflict between staff members, whether that conflict is overt or not. By fostering appropriate collaboration and communication between staff members, school personnel can model effective communication with parents and increase parent participation in team meetings. Arguably, providing a positive foundation for communication will assist in increasing parent participation in the problem-solving team.

Given what has been established about the benefits of parent involvement and the barriers to involvement that can lead to conflict, it is critical for educators to begin to recognize these factors. Developing methods for meaningful parent participation in the special education process is imperative. As discussed above, barriers to parent involvement include a discrepant view of the student, lack of communication, an imbalance of power, and a lack of trust. Given this, a particular type of meeting format, Making Action Plans (MAPS) (Forest & Lusthaus, 1989), may address many of the concerns and barriers to parent involvement that have been identified in prior research.

Person-centered Planning and Making Action Plans

Despite the passing of legislation to mandate education for children with disabilities, prior to the 1980s, children were often not fully included in the educational environment, and their full potential was not being realized. Beginning in the early 1980s, a movement towards improving the quality of life and experiences of individuals with disabilities began (O'Brien & O'Brien, 2002). By 1985, *person-centered planning* became the term that was used to encompass multiple methods aimed at better supporting individuals with disabilities (O'Brien & O'Brien, 2002). Although there are multiple methods that make up person-centered planning, they all share four key components:

1) see individuals as people first rather than use diagnostic labels; 2) use ordinary language and images rather than professional jargon; 3) actively search for a person's gifts and capacities in the context of community life; and 4) strengthen the voices of the person and of those who know the person best in accounting for his or her history, evaluating his or her present condition, valued experiences, and defining changes in his or her life. (O'Brien & O'Brien, 2002, p. 6)

Person-centered planning was originally developed for use with individuals with more-severe developmental disabilities, those who may have been receiving supports from multiple and different community agencies (O'Brien & O'Brien, 2002). Person-centered planning attempted to provide the individual with more meaningful, individualized, and rich life experiences. Additionally, person-centered planning had goals of aiding in transitions for children and adults with disabilities from schools to adult life, employment, and community involvement (O'Brien & O'Brien, 2002).

One particular branch of person-centered planning, Twenty-Four Hour Planning, focuses exclusively on community involvement for individuals with severe disabilities

and valuing the opinions and expertise of those who love the individual (O'Brien & O'Brien, 2002). Twenty-Four Hour Plans were developed to specifically plan out how individuals with severe disabilities would lead as independent and fulfilling lives as possible. Loved ones in an individual's life are given a unique voice in order to provide the individual with the most meaningful and worthy community experience (O'Brien & O'Brien, 2002). Twenty-Four Hour Planning has been adopted for use in nursing and physical, speech, and occupational therapies to support clients with complex needs (O'Brien & O'Brien, 2002) and coordinate support from multiple service providers.

Seeing the benefits of Twenty-Four Hour Planning in therapeutic settings encouraged practitioners to expand their ideas about settings in which person-centered planning could be beneficial. Making Action Plans (MAPS) (Forest & Lusthaus, 1989) was developed from Twenty-Four Hour Planning in order to address similar needs for children in school settings (O'Brien & O'Brien, 2002). O'Brien and Forest (1989) focused on how schools can welcome and include students with disabilities and give them an environment in which to thrive.

Person-centered planning, in particular, the MAPS model, is a child-focused method of parent/school interaction that can be used in the special education process. Making Action Plans is a planning process that allows parents, family members, and, in some cases, friends of the student to share their goals, dreams, and nightmares for the student. Although MAPS was first developed as a tool used to promote full inclusion models (Wells & Sheehey, 2012), using person-centered planning and MAPS establishes an "environment where parents and the student feel empowered, increasing their sense of equal participation with professionals" (Wells & Sheehey, 2012, p. 34). Additionally,

Fiedler (2000) argued that MAPS has a much broader utility than being used as an inclusion tool. He explained that MAPS can be a tool to allow parents and schools to develop a shared plan, a vision, and educational goals that far outreach inclusion alone (Fiedler, 2000).

Making Action Plans is used as a road map for a student's future and utilizes brightly colored graphics and writing to detail the group's ideas (O'Brien & O'Brien, 2002). Typically, a MAPS meeting is conducted prior to the IEP meeting, involves any person who has a stake in the student's education and wellbeing, and typically lasts around one hour (Forest & Pearpoint, 1992; O'Brien & O'Brien, 2002). When the team gathers for a MAPS meeting, a facilitator encourages discussion and participation and records the group's responses to the eight MAPS questions on a large, often colorful, poster board (Turnbull & Turnbull, 2001). This allows all members of the meeting to see each other's opinions and ideas in an engaging way. Forest and Pearpoint (1992) explained eight key questions that make up the MAPS process. The purpose of these questions is to encourage a dynamic conversation in which all members of the child's life can share their opinions, insights, and hopes for the student (Turnbull & Turnbull, 2001).

Making Action Plans Questions

The questions included in the MAPS process address the following:

Questions 1 and 2: What is the student's story and important life events?

Question 3: What are your dreams for your child?

Question 4: What are your nightmares for your child?

Question 5: Describe the student.

Question 6: What are your child's strengths?

Question 7: What are your child's weaknesses?

Question 8: Plan of action to build on dreams and avoid fears.

These questions encourage parents and team members to think about more than just academic goals and to view the student as a unique individual. Additionally, these questions encourage parent involvement by valuing their personal perspectives about their child's future, which can easily get overlooked in the legal jargon of an IEP meeting. Each member is encouraged to participate, which gives a unique perspective about the child (Forest & Pearpoint, 1992). The information from these questions can directly inform components of the IEP, which encourages parent input to be a valuable piece of the IEP. By using MAPS, teams can actively encourage parent participation in the IEP meeting. Making Action Plans also allows for parents to provide information about their *whole* child and focus on strengths, rather than on their academic struggles only. This information allows teams to get a comprehensive picture of the student, which makes the development of an IEP much more meaningful. Additionally, MAPS develops a system of support for the student and their family and builds cohesiveness among team members (O'Brien & O'Brien, 2002).

Turnbull and Turnbull (2001) provided guidelines and suggestions for incorporating the MAPS process into a student's IEP meeting. It is recommended that the MAPS process be reviewed at the beginning of the child's IEP meeting in order to remind the team of the information that was shared during the MAPS process. This can motivate the team and encourage team members to think about the student as a whole, rather than just his or her disability or difficulties. Turnbull and Turnbull (2001) explained that school personnel often believe that the MAPS process contributes

positively to the IEP meeting and encourages them to view the child in light of his or her strengths, while keeping in mind the parents' dreams and hopes for their child.

By utilizing MAPS during the IEP process, teams can develop an environment that empowers families and encourages involvement, which builds strong home-school relationships and improves student outcomes. Additionally, MAPS and person-centered planning can help build cohesiveness among multidisciplinary teams and encourage team members to adopt new perspectives and views about the student and the rest of the team (O'Brien & O'Brien, 2002). Sharing a common goal and vision for the student can have powerful effects on the team members and create a strong sense of community (Kincaid & Fox, 2002). Use of a person-centered planning model can also provide information to directly inform intervention and accommodation recommendations. Information can be gathered that points to specific areas of need from the perspectives of those who care the most about the student (Kincaid & Fox, 2002).

As explained, researchers have outlined numerous benefits and positive influences that MAPS has on parent-school interactions and on effective team collaboration (Kincaid & Fox, 2002; O'Brien & O'Brien, 2002; Wells & Sheehay, 2012), but as previously mentioned, MAPS was originally developed as a tool to promote full inclusion (Wells & Sheehay, 2012) and has more recently been used as a tool to support transition planning (O'Brien & O'Brien, 2002). Although Turnbull and Turnbull (2001) provided guidelines for incorporating MAPS into the IEP process, no known research has been conducted about MAPS' use as a tool to promote parent involvement in IEP meetings. The current study aimed to use the research conducted about MAPS' usefulness in encouraging positive parent-school relationships (Kincaid & Fox, 2002; O'Brien &

O'Brien, 2002; Wells & Sheehay, 2012) to determine if MAPS is an effective tool to promote positive parent involvement.

Summary

Despite the shift in educational legislation that mandates parent involvement (IDEA, 2004) and the well-established benefits of parent involvement on academic and emotional outcomes (Epstein & Sheldon, 2002; Hoover-Dempsey, 1995; Hoover-Dempsey et al., 2005; Neymotin, 2014; Wilder, 2014), too often parents are viewed as less-important team members and frequently remain passive in the IEP process (Zeitlin & Curcic, 2013). Additionally, researchers have identified several barriers to parent involvement (Esquivel et al., 2008; Fish, 2008; Lake & Billingsley, 2000), which widens the gap between the spirit and actuality of IDEA. Given what is known about barriers to parent involvement and the importance for parent involvement, using a meeting format such as MAPS may help bridge the gap between the frustrations that can arise between parents and schools and the benefits of productive parent involvement. The current study aimed to determine if parents who participate in a MAPS meeting prior to their student's IEP meeting contribute more rich, developed, and meaningful information in the IEP meeting, rather than passively participating or responding only in a limited nature to prompts by school staff, as prior research has suggested (Goldstein et al., 1980; Vaughn et al., 1988; Zeitlin & Curcic, 2013).

CHAPTER III

METHODOLOGY

The purpose of this study was to investigate the effects of a Making Action Plans (MAPS) meeting on the rich participation of parents, which includes verbal and non-verbal participation. A non-experimental design was used. This chapter will detail the methodology, participants, data collection methods, and data analysis that were used to address the purpose of the study.

Participants

Convenience sampling was used to obtain participants. The *N* of the study was 19 participants. The unit of analysis consisted of the students' special education team. Depending on the school, the members of the special education team differed, but generally, this included a general education and special education teacher, additional service providers (physical therapists, occupational therapists, etc.), a representative from the school (school psychologist, school social worker, principal, etc.), and the students' parents. The participants were recruited from two demographically similar schools located in the Front Range region of Colorado and included parents of students who were already receiving special education services and had either an annual review or tri-annual reevaluation meeting during the time of data collection. Students with initial evaluation meetings were excluded due to the fact that their parents would have had no prior experience with the IEP process. Additionally, if both parents of the student attended the

IEP meeting, the child's mother was the target participant. The student's mother was chosen based on previous research on participation of mothers and fathers in educational meetings, which tends to focus on the mother's perspective (Mueller & Buckley, 2014). However, as Mueller and Buckley (2014) argued, fathers often have valuable, but overlooked experiences and participation in special education. Including fathers as target participants may be an important future direction for this line of research. Along with parents of students, their respective IEP teams were included as participants in the study.

A small rural school district in the Front Range region of the United States was approached to participate in the current research study. Upon administrative approval, two elementary schools in the district were recruited to participate. The two schools from which participants were recruited were chosen based on their demographic similarities and their willingness to participate in the current research study. Prior to the start of the study, this researcher trained a graduate student research assistant in the MAPS process, using the MAPS manual developed by Furney (n.d.). Additionally, the graduate student had received coursework in which the MAPS process was discussed. One school (School X) was chosen as the designated intervention pool, and all participants originating from that school participated in a MAPS meeting prior to their students' IEP meeting. A second school (School Y) was selected as the comparison pool, and their IEP meetings were run as usual. The two schools were matched on the number of students receiving free and reduced lunch, enrollment size, type of school (elementary, middle, or high school), and ethnicity breakdown of students.

Variables and Measures

This section will include information and definitions for the independent and dependent variables as well as measures used to assess these variables. Treatment integrity and inter-observer agreement will also be discussed.

Independent Variable

The independent variable for this study was the MAPS meeting intervention. The graduate student research assistant who was trained in the MAPS process facilitated all of the MAPS meetings for participants at School X. Additionally, the facilitator was provided with a copy of a MAPS facilitation manual (Furney, n.d.) in order to ensure their familiarity with the MAPS process for the current study. The researcher reviewed this manual with the facilitator prior to the start of the study and then periodically throughout the research study in order to insure the intervention was delivered as intended.

Dependent Variables

The dependent variables for this study were the levels of rich participation exhibited by parents in their child's IEP meeting. One method of measuring rich participation was observational recordings of parents' non-verbal attention during the IEP meeting. The non-verbal attention of parents was observed using a 10-second partial interval time sample to observe four categories of attention behaviors including: (a) looking at the speaker, (b) looking down at paper, (c) looking away, and (d) talking. Observations of parent attention were conducted after the meeting, using the video recording of the IEP meeting. Additionally, more in-depth definitions of behavior and specific behavior codes can be found in Appendix A.

Partial interval recording requires observers to record if a target behavior is occurring at a predetermined point in time. For the current study, at 10-second intervals, the observer recorded which of the behavior options (looking at speaker, looking at document, looking away, or talking, for example) were present. Observations began once all meeting participants were present and introductions had been made. Observations then continued at 10-second intervals for a 30-minute period, or until the end of the IEP meeting.

Thematic Coding

In addition to coding parents' non-verbal attention during the IEP meetings, this researcher also developed categories from parents' verbal behaviors during the meeting. This was done after the fact using video recording and transcripts from the meetings. Coding (Merriam, 2009) was conducted on a randomly selected subset of meeting transcripts and included six transcripts, or until saturation in themes was met. These categories provided added information about the type of parent involvement that took place in the meetings. This added depth to previous observational research of IEP meetings, which has solely focused on frequency counts of parent verbalization (Goldstein & Turnbull, 1982; Jones & Gansle, 2010). Some predicted parent categories consisted of: (a) asking questions, (b) telling a story about their child, (c) providing examples and experiences from home, (d) expressing concern about their child, and (e) clarifying information.

In addition to developing categories using videotapes of the IEP meetings, the researcher also tallied a word count of parents' responses in order to add another measure of depth to parent comments. Even though word count alone does not provide the full

context of rich parent involvement, arguably, parents who speak more could be thought to have participated in a deeper way than simply providing one-word responses. Leech and Onwuegbuzie (2007) explained that word count is frequently used in qualitative school psychology research to evaluate meaning and determining an individual's participation. The researchers argued that word count is especially useful with focus groups (Leech & Onwuegbuzie, 2007), which have a similar structure to an IEP team meeting and can provide information about who participates in the meetings and the amount of participation from each member. Although qualitative in nature, the prior use of word count in school psychology specific research supports its use for the current quantitative study.

Teacher Questionnaire

Prior to the start of the MAPS and IEP meetings, special education teachers were asked to complete a short questionnaire regarding their perceptions of each parent participant. These questions aimed to gauge teacher perceptions of past parent participation, conflict between special education team and parents, and the home-school relationship. This was intended to get an idea of parents' previous levels of involvement and the home-school relationship prior to participation in the study. The scores from the questionnaire were totaled in order to gain an overall score for teachers' perceptions of past parent participation. This information was used to gain a better understanding of teachers' perceptions of parent involvement prior to the current IEP meeting. The teacher questionnaire form can be found in Appendix B.

Demographic Questionnaire

Parents were asked to complete a demographic questionnaire at the conclusion of their students' IEP meeting. The purpose of this questionnaire was to gain additional family information that could be pertinent to the study. Questions regarding parent level of education and socioeconomic status were asked, as these factors have been shown by previous researchers to have an effect on parent involvement (Jones & Gansle, 2010). Consistent with current research in the field, questions were asked regarding ethnicity, gender, parent occupation, child's diagnosis/educational identification, and number of years of experience with the special education process (Fish, 2008; Jones & Gansle, 2010). Additionally, there has been research supporting differing levels of parent involvement based on a student's diagnosis or educational identification, particularly for children diagnosed with an autism spectrum disorder (Stoner et al., 2005). There appears to be compounded conflict and difficulty for families with a student on the autism spectrum (Stoner et al., 2005), indicating that the type of disability may influence parent involvement. Finally, parents were asked if they had ever filed for mediation of an official complaint regarding their child's special education process. This information was used to further understand parents' participation if they have had a conflicted relationship with school staff in the past. This information was used to gain a general understanding of parents' past conflict, if any, with their child's special education teams. The parent demographic form can be found in Appendix C.

Post-Individualized Education Program Meeting Interview

Following the IEP meetings, six randomly selected parents were asked to answer several short questions designed to assess parents' experiences of the meeting (Appendix D). Parents were interviewed by the researcher and were asked questions about topics such as parents' satisfaction, their perceived opportunity for participation, past experiences of participation, and parents' perceived relationship with their student's special education team. The post-IEP interviews were compiled to determine an understanding of parents' level of satisfaction with their involvement in their child's IEP meeting. This interview was video recorded and coded at a later date.

Treatment Integrity and Inter- observer Agreement

In order to ensure treatment integrity, all MAPS meetings were video recorded as well as observed by the researcher. This researcher noted that the MAPS questions and meeting format were followed as outlined by Furney (n.d.) in the MAPS facilitation manual. This observation was recorded on the MAPS Meeting Check-List which was developed for this study. Additionally, prior to the MAPS meeting, the facilitator was provided with the MAPS manual to ensure her familiarity with the MAPS process as it was intended for the current study.

Inter-observer agreement was calculated for the in-meeting non-verbal behavior observations, which was recorded by this researcher. A second observer used the video recordings to observe non-verbal behavior, and inter-observer agreement was calculated from this. A point-by-point agreement ratio was used to calculate inter-observer reliability (Kazdin, 2011). This method allowed for a calculation of the number of times

two observers agreed on the occurrence (or non-occurrence) of the target behavior for each interval (Kazdin, 2011). This was calculated as follows: the number of agreements of the observers on each interval divided by the number of agreements *plus* disagreements, then multiplied by 100 in order to yield a percent. If both observers recorded the same behavior as occurring, an “agreement” was tallied. If the observers recorded different behaviors as occurring, a “disagreement” was tallied (Kazdin, 2011).

Traditionally, an acceptable level of reliability is .80, or 80% (Kazdin, 2011). For the current study, the desired level of reliability was .80 or above. Before the start of the study, the researcher and graduate assistant practiced observing parent behavior in IEP meetings by observing recorded mock IEP meetings, with the goal of obtaining a .80 inter-observer agreement prior to the start of the study, which was achieved.

Research Design

A quasi-experimental design was used for the study due to the fact that random assignment of schools was not utilized, but the MAPS intervention was manipulated between the treatment and comparison groups. Because random assignment was not possible, it was critical for schools in both groups to be as similar as possible. Demographic information was collected for each school prior to the study in order to best match the treatment and comparison groups.

Procedures

University of Northern Colorado IRB approval (Appendix E) was obtained prior to contacting potential participants and beginning the study. Additionally, administrative approval (Appendix F) was gained through the school district to which the treatment and comparison groups belonged. This researcher contacted parents of students who had

either an annual or tri-annual evaluation meeting that would take place during the time of data collection to solicit their participation in the study. Initial verbal consent to participate was gained, and parents were given the chance to have any questions answered. Parents and their respective special education teams were given numbers and pseudonyms in order to protect their confidentiality, and they were informed of all of the potential risks and benefits of the study prior to signing consent forms. Consent forms were signed at the time of the MAPS or IEP meeting, with the understanding that parents could withdraw participation at any time. Both parents and school staff were asked to sign consent (Appendix G and H) forms for video-taping the MAPS and IEP meetings. All participants were informed of the purely research based nature of the information gained during the IEP meetings, and that the videos were not a part of the child's educational record. The videos and all transcripts were destroyed at the conclusion of the research. Prior to the start of data collection in the meetings, special education teachers were asked to complete the Teacher Rating Form of Parent Involvement.

Making Action Plans (MAPS) Group (School X)

After verbal consent was obtained from both parents and school staff, a one-hour MAPS meeting was scheduled with this researcher for no more than two weeks prior to the student's IEP meeting. This ensured that what was covered in the MAPS meeting was still current when they reconvened for the IEP meeting. As mentioned previously, parents and staff formally completed consent forms prior to the start of the MAPS meeting. Prior to the MAPS meeting, the facilitator was provided with a copy of a MAPS manual (Furney, n.d.) to ensure their familiarity with the MAPS model, and they were informed that the researcher would be observing the MAPS meeting to determine if

all of the MAPS steps were completed as intended. The facilitator's role in the meeting was to record participants' responses, keep the meeting flowing, and introducing the eight MAPS questions. Ideally, all members of the multidisciplinary team who would be attending the IEP meeting were also in attendance at the MAPS meeting. If all members of the team were not able to attend the MAPS meeting, the student's parents and at least one member of the special education team had to have been present at the MAPS meeting in order to continue participation. The MAPS meeting was video recorded and was observed by this researcher. Participants were informed that the meeting was video recorded for research purposes only. All information recorded by the facilitator on the MAPS poster was saved in order to keep a record of what was discussed in the meeting. The MAPS poster board was then displayed in the meeting room where the IEP meeting took place to serve as a visual reminder of information discussed in the MAPS meeting.

The multidisciplinary team reconvened for the student's IEP meeting, where the researcher began the meeting by briefly reviewing what was discussed at the MAPS meeting and pointing out the MAPS poster. The IEP meeting continued without further intervention or deliberate commentary regarding the MAPS process. The IEP meeting was video recorded in order to complete observation recording and word-count recording after the meeting. After the conclusion of the IEP meeting, parents were given the demographic questionnaire to complete and, if randomly selected, were asked to complete the post-meeting interview with the researcher.

Comparison Group (School Y)

The IEP meetings that took place at the comparison group school were conducted without any intervention and as they were typically conducted. There were no MAPS

meetings prior to the IEP meetings and, therefore, no MAPS poster boards to which the teams could refer. There was no intervention, added commentary, or information from the researcher in the IEP meetings. The meetings were also video recorded, and the same observational and coding method was used as was used in the intervention condition meetings. Similar to the teachers in the MAPS condition participant group, teachers were asked to complete the Teacher Rating Form of Parent Involvement prior to the start of the IEP meeting. Additionally, parents were asked to complete the demographic questionnaire, and three randomly selected parents were asked to complete the post-IEP meeting interview with the researcher.

Data Analysis

Prior to the start of data collection, an analysis of demographic information provided by the Colorado Department of Education (2014) was conducted to determine the level of similarity between the two possible schools. The schools were matched based on the number of students receiving free and reduced lunch, enrollment size, type of school (elementary, middle, or high school), and ethnicity breakdown of students.

Prior to conducting the primary statistical analyses, descriptive and frequency information were calculated to check the assumptions of the analysis method. The demographic information from families was used to analyze descriptive and frequency information.

The primary statistical analyses that were used were multiple linear regressions. These were chosen due to multiple linear regression's ability to predict dependent variables based on multiple independent variables (Remler & Van Ryzin, 2015). Given that previous research has indicated that parent socioeconomic level and education

influence parent participation in IEP meetings (Jones & Gansle, 2010), these factors were included as covariates in the multiple linear regressions, which provided more specific information about the MAPS meeting on parent participation. For the current study, this allowed the researcher to analyze the predictive ability of a MAPS meeting while controlling for parent education and socioeconomic status on parent involvement in their child's IEP meeting. Because these two factors have already shown to affect parent participation levels, they were not primary variables in the current study.

Research Questions

- Q1 Do parents who participate in a MAPS meeting prior to their student's IEP meeting have richer participation and comments during the IEP meeting than parents who do not participate in a MAPS meeting?

This research question was answered using the thematic coding of parents' verbal participation during their student's IEP meeting. This researcher transcribed the IEP meetings and developed codes in order to determine the substance of parents' comments. These categories were then compared between parents who participated in a MAPS meeting and those who did not.

- Q2 Does parent participation in a MAPS meeting predict the number of words spoken in an IEP meeting over and above the influence of parent education level and type of student disability?

This research question was analyzed using a multiple linear regression. The number of words spoken was the dependent variable in the model, and the independent variable was participating in MAPS condition. Additionally, parent education level and student's disability category were included in the model to control for the potential effects of these variables.

Q3 Does parent participation in a MAPS meeting affect parent attention in an IEP meeting?

This research question was answered using a multiple linear regression. The number of active attention behaviors (any behavior measured that was active participation, excluding passively looking away or looking at an electronic device) from the IEP meeting observations were tallied to create the dependent variable, and the predictor variable was participation in MAPS meetings.

Using both qualitative coding and observational data allowed this researcher to address unanswered questions and provide information that had previously not been addressed in IEP meeting research. Additionally, non-verbal participation was analyzed, which is an aspect of participation area that has been largely overlooked in previous research.

CHAPTER IV

RESULTS

The purpose of this study was to investigate the effects of a Making Action Plans (MAPS) meeting on the participation that parents demonstrate in their child's individualized education program (IEP) meeting, as measured by the number of words spoken by parents in the meeting and the level of attention that parents maintain during the meeting. Additionally, the categories of parents' comments during their child's IEP were examined in order to further address parent participation. The methodology used to answer the research questions was a non-experimental design. This chapter will detail the individual research questions and the results for each question.

Participants

Schools

A small rural school district in the Front Range region of the United States consented to participate in the study. There are five schools in the district, two of which are elementary schools serving students grades preschool through fifth grade. Overall, the district is classified as a Title 1 school district, which provides additional funding for schools with a large number of students receiving free and reduced lunch. The two schools were matched for participation based on number of students receiving free and reduced lunch, enrollment size, and the ethnicity breakdown of students (Colorado Department of Education, 2014) (see Table 1 for comparison of school demographics).

To assess for any reported conflict in the special education process between parents and the school district, the due process and state complaints for the last three years were obtained. These reports were for the school years of 2011, 2012, and 2013, which were the most current statistics available. For the most recent period of three years, the district in this study was not involved in any due process or state complaints made by parents (Colorado Department of Education, 2011a, 2011 b; 2012 a, 2012b; 2013a, 2013b), indicating that the relationship between the district and parents with students in special education had not been recently contentious.

Table 1

Comparison of Demographics Between School X and School Y

Demographic	School X	School Y
Free and reduced lunch (FRL)		
Enrollment	545	583
% FRL	80.63%	81.30%
Ethnicity breakdown		
American Indian/Alaskan Native	3	2
Asian	0	0
Black or African American	1	1
Hispanic or Latino	530	522
White	124	112
Native Hawaiian	0	0

Parents

Parents who participated ($n = 19$) in the study were parents of students receiving special education services for at least one year and whose annual or tri-annual reevaluation meeting was scheduled during the data collection period. Of parents who participated in a MAPS meeting, 60% of parents had a high school degree only. Ten percent of the IEP meetings from the MAPS condition were attended by both the student's mother and father, while 20% were attended by a legal guardian, which in both cases, happened to be the students' grandmother. Of parents who participated in a MAPS meeting, 70% of the IEP meetings were attended by only the student's mother.

Of parents who did not participate in a MAPS meeting, and had their IEP meetings run as usual, all parents had only a high school degree as their highest level of education. Eleven percent of the IEP meetings were attended by both the student's mother and father, while 89% of the meetings were attended by the student's mother only. No IEP meetings from the non-MAPS condition were attended by a legal guardian.

The percentage of parents with a degree above a high school diploma for this sample is not necessarily representative of the education level of the Colorado population as a whole. As of 2014, per the United States Census, 90.4% of person's age 25 and older in the state of Colorado had obtained a high school diploma (United States Census, 2014). Of the 19 parent participants, none reported a previous history of conflict or having previously filed a due process complaint against the school district, which is consistent with state reports (Colorado Department of Education, 2011a, 2011b, 2012a, 2012b, 2013a, 2013b) (see Table 2 for additional parent demographic information).

Table 2

Parent Demographics Number in Sample

Parent Demographic	Number
Relationship to student	
Mother	17
Other	2
Ethnicity	
Caucasian	14
Hispanic	5
Education level	
High school	16
College	3
Spouse education level	
High school	11
College	7
Graduate	1
Disability category of child	
Learning disabilities	10
Autism spectrum disorder	3
Serious emotional disability	1
Other	5
Years of child's special education services	
1-2	9
2-4	4
4-6	2
6+	4

School Staff

In addition to parents, school special education teams were also included in the unit of analysis. In order to participate in the study, at the minimum, a parent and special education provider were required to attend the meetings. Other school staff that attended

the IEP and MAPS meetings included general education teachers, speech language pathologists, school psychologists, and an occupational therapist.

To determine the level of perceived previous parent participation, the special education teacher involved in each meeting was asked to complete the Teacher Rating Form of Parent Involvement prior to the student's IEP meeting. The Teacher Rating Form of Parent Involvement is a five-item questionnaire that was developed for this study and is scored based on a Likert-type scale of 1 = *Never*, and 5 = *Always* (higher scores indicated higher levels of perceived parent involvement). After reverse coding items were corrected, a total was obtained for the questionnaires. The majority of teachers scored parents as having high levels of involvement and limited conflict in the past. Surprisingly, teachers from School X and School Y rated parents at their schools exactly the same on the Teacher Rating Form of Parent Involvement (School X average = 23.4/25; School Y average = 23.4/25), indicating that in addition to school demographics, both School X's and School Y's teachers had extremely similar relationships with the parents at their schools. Additionally, the home/school relationship at both School X and School Y appeared to be a positive one. This demonstrates that results obtained in the study were not because of inherent differences between the two schools.

Individualized Education Program Meetings

All meetings were either annual reviews or triannual reevaluations. Of the IEP meetings that included parents who had participated in a MAPS meeting, the average length of the IEP meetings was 38:23 minutes. The minimum meeting length time for MAPS IEP meetings was 15:04 minutes, and the maximum was 52:20 minutes. Of the IEP meetings that were conducted without a MAPS meeting, the average length of the

IEP meetings was 26:11 minutes. The minimum length of the IEP meeting without a MAPS meeting was 16:08, with the maximum time being 63:20 minutes.

Inter-observer Agreement of Parent Attention Observations

Inter-observer agreement was calculated for the in-meeting non-verbal behavior observations, which was recorded by this researcher. A second observer used the video recordings to observe non-verbal behavior, and inter-observer agreement was calculated from this. A point-by-point agreement ratio was used to calculate inter-observer reliability (Kazdin, 2011). This method allowed for a calculation of the number of times two observers agreed on the occurrence (or non-occurrence) of the target behavior for each interval (Kazdin, 2011). This was calculated as follows: the number of agreements of the observers on each interval was divided by the number of agreements *plus* disagreements and then multiplied by 100 in order to yield a percent. If both observers recorded the same behavior as occurring, an “agreement” was tallied. If the observers recorded different behaviors as occurring, a “disagreement” was tallied (Kazdin, 2011). The overall inter-observer reliability for the current study was .93, indicating acceptable levels of reliability between the two observers.

Data Analysis

Q1 Do parents who participate in a MAPS meeting prior to their student’s IEP meeting have richer participation and comments during the IEP meeting than parents who do not participate in a MAPS meeting?

To answer this question, six (three from each school) randomly selected video recordings of IEP meetings were coded to determine the topics of conversation that were present in parents’ comments, following the data analysis and coding processes laid out by Merriam (2009), which resulted in categories that spanned the unique comments made

by each condition of participants. The six recordings were randomly selected using a random number generator and resulted in three coded meetings from School X and three from School Y. Categories were identified for each separate set of transcripts, corresponding to IEP meetings that consisted of parents who participated in a MAPS meeting (School X) and those who did not (School Y.). Richness of parent comments was determined using the predefined term of richness, which was developed for the current study. Rich participation was defined as any parent participation in their student's IEP meeting that exceeded a simple one-utterance comment ("yes," "no," "okay," etc.), or basic clarification of information (where to sign on an IEP document) that did not add additional meaning or information to the IEP meeting. The results are presented as categories from School X and categories from School Y.

Parents Who Participated in a Making Action Plans Meeting

Of the three meetings randomly selected from the MAPS condition, the average IEP meeting length was 43 minutes. All of the meetings were annual reviews. Overall, the categories that were identified for this condition were: (a) simple words and phrases, (b) stories from home, (c) academics, (d) concerns, (e) progress and strengths, and (f) MAPS references.

Simple Phrases and Clarifications

This category comprised parent comments that were simple one- or two-word utterances like "yes/no" and comments that pertained to the clerical portion of the IEP meeting. For example, one parent asked a question about where she needed to sign the IEP and if she could take a copy of the IEP home with her that day. This same parent

asked a clarifying question about the amount of occupational therapy time that her son would be receiving compared to previous years. Another parent asked a question about her son's class schedule when he moved to middle school the following school year. Generally, parent contributions that made up this theme were thought to be comments that contributed to meeting the legal requirements of the IEP documents, but otherwise did not add any rich information to the IEP meeting. Given this, comments from this category were considered parent comments that did not indicate rich participation, as they were comments that did not add additional meaning to the IEP meeting.

Stories from Home

A frequent contribution from parents was stories and accounts from home about their child. Depending on which meeting was being considered, these stories ranged from positive accounts to stories about parent concerns from home. For example, one mother described a large family gathering where her son, who was identified with autism, preferred to stay inside and play by himself, rather than joining his family. She expressed that she was concerned that the social gains her son had made at school were not yet generalizing to the home environment. She described, "We had a family party, and [student] just wanted to stay inside. The big crowd still bothered him, but it was just our family." Alternatively, another parent from School X shared that she had noticed her son reading more at home and that his homework routine had improved over the last year. Both accounts were valuable and rich stories from home about each student's present level of skill, but one was a concern, compared to the other, which was a story of progress.

Academics

All three parents who were selected from School X commented about their student's academic concerns and progress. To one parent, in particular, who participated in a MAPS meeting, her son's academic progress seemed to be a source of stress. She expressed, "I just want him to do okay in school. What else can we do at home?" All three parents asked about how their children were doing academically. The conversation about student academic progress comprised the bulk of the conversation, as first and foremost, an IEP is an academic plan. A common characteristic between the academic comments from parents from School X was that they were almost all questions directed at school staff. One parent commented that she had seen at home the same academic improvements her daughter was having at school, but the remainder of her academic comments were in the form of questions. This may indicate that, despite parents' generally high levels of participation, they still attributed their student's academic progress to the school environment and, therefore, perceived themselves as less of an authority on their student's academics. Parents were more apt to share their perspectives about home-related topics where academic topics were addressed in the form of questions. Comments from this category were determined to be examples of rich parent participation, as they added meaning to the student's IEP meeting and were more than simple "yes" or "no" utterances. Although parents may have been less confident in their important role in their student's academic progress, posing questions about their child's academics still adds to the meaning of the IEP meeting.

Non-academic Concerns

This category consisted of parents' contributions to their child's IEP meeting that were centered on concerns they had for their child. Depending on the family, the concerns were from both home and school. One mother explained that at home, she had noticed her son being more distractible and inattentive, and she was concerned that he was displaying that same type of behavior at school. This particular concern was related to her son recently discontinuing his medication. Another mother expressed concern about her son moving on to middle school the following year. She was worried about her son's special education service and how he would handle the transition, and she also expressed her own concern as a parent having to acclimate to a different school building.

Progress/Strengths

As part of this category, all three parents from School X commented on their student's strengths, in part, because this is a section that must be answered on a student's IEP. Despite varying levels of academic progress between each of the three students, all parents from School X mentioned something about their student's growth over the annual IEP period. These strengths included improved homework completion at home, building more positive social skills, and improving math skills.

MAPS Reference

A category that is specific to School X parents was the mention of their student's MAPS meeting. Of the parents who participated in a MAPS meeting, two parents referenced their student's strengths from the MAP when discussing strengths during the IEP. One parent expressed that a strength of her daughter's was "her ability to be a caring person, to her friends and to me. She cares about everyone, you know, we talked

about that on her poster.” Additionally, the same parent referenced the “dreams” section of her daughter’s MAP when discussing a concern for her daughter. She explained, “My dream for her is to stay herself, like I said in the other meeting, so I always worry that her learning slower will change how she feels about herself. I teach her to not care and be herself, so I hope she can.” Discussion of strengths on the IEP seemed to be the area where MAPS had the most influence, with both parents who discussed their child’s MAP in the IEP meeting referencing the strengths section. Although strengths is a section that is required on a student’s IEP, by making it a required component of the document, it may take away from the authentic nature of describing the student as a whole, as the addition of strengths in the IEP is intended. It could be argued that discussion of the whole student and making their strengths a focus in a MAPS meeting allows for more authentic discussion, which provides more rich information and engagement from parents.

Parents Who Did Not Participate in a Making Action Plans Meeting

Of the three meetings randomly selected from the control condition, the average IEP meeting length was 38 minutes. One meeting was a triannual evaluation, while the remaining two were annual reviews. Overall, the categories that were identified for this condition were: (a) simple words and phrases, (b) stories from home, (c) academics, (d) concerns, and (e) progress and strengths.

Simple Phrases and Clarifications

Similar to the simple phrases and clarification category for parents from School X, this category from School Y included parent comments that were simple one- or two-

word utterances like “yes/no” and comments that pertained to the clerical portion of the IEP meeting. One parent asked if the copy of parent procedural safeguards was hers to keep, but similar to those in the School X group, these were comments that could be viewed as necessary to keep the meeting flowing and to meet the legal requirements of an IEP.

Stories from Home

Parents from School Y also contributed stories and accounts from home. One parent shared that her son struggled with spelling, as did his siblings, which made a connection to home. Additionally, another mother shared a story concerning home behavior for which she was requesting support. A third parent shared that in the previous few months, her son had been talking more loudly at home, which had been a concern that both she and the school shared during his previous IEP. All the stories shared from School Y’s IEP meetings were examples of rich participation from parents, despite some of the stories being more strengths-based compared to stories that were of concern from the parents.

Academics

As student academic progress is the central part of an IEP meeting, it can be expected that many of the parents’ contributions revolved around academics. There were parents from School Y who discussed their student’s academic successes throughout the year and parents who were concerned with their child’s academic progress. One mother shared that she had seen a big improvement in her son’s attitude towards school and that he was applying himself much more than she had seen in the past. Alternatively, another parent expressed that, given her son’s academic and cognitive difficulties, she was

apprehensive about her son's academic growth over the annual IEP period. Similar to previous categories, the instance of a "positive" or "negative" contribution seemed to be contingent on the particular student or family, rather than on participation in a MAPS meeting. As categories from both School X and School Y contained "positive" and "negative" contributions, it was determined that the instances of positive or negative contributions were not attributed to participation in a MAPS meeting.

Non-academic Concerns

This category consisted of parents' expressed concerns for their child. This ranged from concerns about their child's academic progress to concerns about their student's service time. Parents from School Y shared that they were concerned about the upcoming school year, including which teacher their child would get, moving up a grade level, and the amount of school work their child would have. One parent from School Y expressed a specific concern about the amount of support her child was receiving and requested that additional service time be added to her child's IEP.

Progress/ Strengths

Similar to parents from School X, parents from School Y were asked to answer questions about their student's strengths for the completion of their IEP. However, of the three parents selected from school Y, only one parent elaborated on her child's strengths above and beyond the basic question asked on the IEP. This parent expressed that "[her son] has matured a lot this year. He will come home and practice spelling now. I ask him, [student] what are you doing? And he says he has to practice for his tests." Other parents adequately answered the question about strengths and student likes on the IEP,

but did not offer any other child strengths, which seems to differ from responses of parents at School X.

Comparison of School X and School Y

Overall, categories from School X and School Y were similar. In both meetings from School X and School Y, frequent contributions from parents were stories and accounts from home. These ranged from positive stories, including that of one parent who explained that her daughter had taken more responsibility for her homework in the last year, to concerns about how their student's disability was affecting their family's ability to participate in certain events. A story from home was considered to be positive if it was an example of student growth, strength, or progress. A negative story was considered to be an example of a concern or difficulty. The stories from home did not differ in terms of positive or negative stories between School X and School Y parent participation in MAPS meetings. It did not appear that MAPS influenced parents to share more positive stories as opposed to challenging ones; the nature of the parent story from home was more closely related to the specific student's and family's needs. Additionally, each meeting that was randomly selected had at least one story from home, indicating that the MAPS meeting did not influence parents to share stories about their child more or less frequently.

There were parents from both School X and School Y who discussed their student's academic successes throughout the year, and parents from both groups were concerned with their child's academic progress. Of the six participants chosen, all expressed some type of concern for their students' academic growth, which arguably, could be expected, given that their children were receiving special education services.

Although this was an important theme for parents, it did not appear that participation in a MAPS meeting influenced parents to contribute more or less about their child's academics. Academic discussion was a component of each group's IEP meetings.

Parents from both schools shared concerns they had for their child. This ranged from concerns about their child's academic progress to concerns about their student's service time as well as concern about home-based behavior. Although the content of the concern differed, all of the six parents expressed some level of concern for their child.

Although the categories from both schools were extremely similar overall, there did appear to be differences between parent contributions in the areas of progress and strengths. Of the five categories that were identified, discussion of strengths seemed to be the area where MAPS had the most influence. As mentioned previously, two of the three randomly selected parents from School X referenced the strengths section of their child's MAP during their IEP meeting. Additionally, one parent referenced the "Dreams" question from her student's MAP when discussing her concerns for her daughter. It is also notable that all three parents who participated in a MAPS meeting elaborated on their child's strengths, above what is required for the basic IEP paperwork. Despite varying levels of academic progress between each student from School X, all parents from School X mentioned something about their student's growth and strengths over the annual IEP period. Of parents who did not participate in a MAPS meeting, only one parent elaborated on her son's strengths. This suggests that the required strengths component of an IEP, although well-intended, may take away from the comprehensive nature of describing the student as a whole. It could be argued that discussion of the whole student and making their strengths a focus in a MAPS meeting allows for more

comprehensive discussion, rather than simply fulfilling an IEP requirement, thereby providing more rich information and engagement from parents.

- Q2 Does parent participation in a MAPS meeting predict the number of words spoken in an IEP meeting over and above the influence of parent education level and type of student disability?

To analyze this question, a normal multiple regression was performed with parental participation (as measured by number of words spoken) as the dependent variable and participation in a MAPS meeting as the independent variable, with length of meeting, parental education, and student disability category included as covariates. Parental education and student disability category were included based on previous research that suggests that parent education and student disability impact the level of parental participation (Jones & Gansle, 2010; Stoner, et al., 2005).

Descriptive statistics of the variables of interest were obtained, as shown in Tables 3 and 4. The two tables are divided into decriptives for the MAPS condition, and the non-MAPS condition.

Table 3

Descriptive Statistics of Variables of Interest in the MAPS condition

	Mean	Standard Deviation	Range	Skewness	Kurtosis
Words Spoken	1882.40	1747.58	530 - 5898	1.75	2.43
Active Intervals (Percentage)	98.00	2.356	92.77 - 100.00	-1.28	1.54
Time (Minutes)	38.39	15.190	15.09 - 61.42	-.05	-1.26

Table 4

Descriptive Statistics of Variables of Interest in the Non-MAPS Condition

	Mean	Standard Deviation	Range	Skewness	Kurtosis
Words Spoken Active Intervals (Percentage)	508.75	322.01	59 - 947	-.29	-1.40
Time (Minutes)	97.23	5.43	84.44 - 100.00	-2.37	5.80
	26.75	15.89	13.90 - 63.33	2.11	5.00

Evaluation of the assumptions in the regression model included analysis of residual plots and P-P plots to assess for normality of the sample. Analysis of these plots indicated no large outliers and did not show substantial threats to the assumptions of normality or homoscedasticity. Collinearity of the model was also checked using variance inflation factor (VIF) values to determine if a high correlation existed between the predictor variables used and their effects on the dependent variable (Brace, Kemp, and Snelgar, 2013). The generally accepted cut-off for VIF values is 10 (Freund, Wilson & Sa, 2006). All collinearity values were acceptable and fell under 2.0, indicating no concerning violation of the collinearity assumptions. Should there have been substantial threats to the assumptions, a count regression was considered an analysis option, but due to the assumptions being satisfied, the analysis was completed using a normal multiple regression.

Due to the small sample size ($n = 1$), the Serious Emotional Disability (SED) category was removed from the analysis, which had no significant impact on the overall

results. Parent education level and student disability category were coded in order to be included in the regression. Partial correlations were also obtained for the independent variables, which included: type of student disability, parent education level, participation in MAPS, and the length of the IEP meeting. Length of the IEP meeting was included in the analysis in order to rule out increased number of words spoken as a function of longer meetings. These correlations are presented in Table 5.

Table 5

Partial Correlation of Student Disability, Parent Education, Meeting Length, Participation in a MAPS meeting, on Number of Parent Words Spoken.

Construct	<i>B</i>	<i>Standardized B</i>	<i>T</i>	<i>p</i>	Partial Correlation
Constant	-206.630		-.253	.804	
Learning Disability	-12.345	-.004	-.018	.986	-.005
Parents' Education	713.137	.208	.834	.419	.225
Autism	877.022	.229	.860	.406	.232
Length of Meeting	27.769	.308	1.287	.220	.336
MAPS	479.513	.171	.642	.532	.175

The model was not found to be significantly different from zero, $F(5,13) = 1.98$, $p = .15$ with $R = .43$). Together, the model explained 21% of the variance in parent participation ($R^2 = .214$). Although these results are not determined to be significantly different from zero, the size of R^2 suggests potential practical significance in the model, which may be detected with a larger sample size. Effect size was derived from the

standardized and unstandardized beta coefficient of a MAPS meeting, which can be used as an effect size measure for a multiple linear regression, specifically when controlling for other factors, as in the current study (Rosenthal & DiMatteo, 2001). For this particular sample, the unstandardized beta coefficient effect of participating in a MAPS meeting was parents contributing 479.50 more words to their child's IEP meeting compared to parents who did not participate in a MAPS meeting. Using a standardized beta measure, the effect of a MAPS meeting on the number of words spoken by parents was $B = 0.171$, which was a small effect, compared to the effects of other variables. Although not significant, the addition of roughly 480 words may pragmatically be an important addition to a student's IEP meeting, particularly given the result of Research Question 1, which found that parents who participated in a MAPS meeting seemed to contribute more about their student's strengths. This could be considered rich parent participation. If parents who participate in a MAPS meeting are contributing 480 more words, *and* discussing their student's strengths more than their non-MAPS counterparts, this could be a valuable contribution to student IEP meetings.

Q3. Does parent participation in a MAPS meeting affect parent attention in an IEP meeting?

To analyze this question, a normal multiple regression was performed between parental attention (as measured by the percentage of observed "active participation" intervals) as the dependent variable, and MAPS participation, with parental education and student disability category included as covariates. Active participation intervals were defined as any interval in which parents were participating, including looking at a document, talking, and looking at a speaker. Similar to research question two, the SED disability category was removed due to the low sample size ($N = 1$). This had no

significant impact on the overall results. Additionally, as shown in Tables 3 and 4, descriptive statistics were obtained for all variables of interest. To evaluate the assumptions of the regression model, PP and residual plots were analyzed. Analysis of these plots indicated no large outliers and did not show any substantial threats to assumptions of normality or homoscedasticity. Collinearity of the model was also checked using variance inflation factor (VIF) values, to determine if a high correlation existed between the predictor variables used and their effects on the dependent variable (Brace, Kemp, and Snelgar, 2013). The generally accepted cut-off for VIF values is 10 (Freund, Wilson & Sa, 2006). All collinearity values were acceptable and fell under 2.0, indicating no concerning violation of the collinearity assumptions.. Partial correlations were also obtained for the independent variables and percentage of observed active participation intervals, which included: type of student disability, parent education level, participation in MAPS, and the length of the IEP meeting. Length of the IEP meeting was included in the analysis in order to rule out increased number of words spoken as a function of longer meetings. These correlations are presented in Table 6.

Table 6

Partial Correlations Student Disability, Parent Education, Meeting Length, Participation in a MAPS meeting, on Percentage of Observed Active Participation

Construct	<i>B</i>	<i>Standardized B</i>	<i>T</i>	<i>p</i>	Partial Correlation
Constant	94.520		51.954	<.001**	
Learning Disability	3.875	.522	1.944	.072	.461
Parents' Education	-.513	-.056	-.206	.840	-.055
Autism	3.395	.334	1.193	.253	.304
MAPS	1.116	.150	.520	.611	.138

The model was not found to be significantly different than zero, $F(4,14) = 1.19$, $p = .36$, with $R^2 = .25$ and $R^2_{adj} = .04$. Together, the model explained 4% of the variance in parent attention during IEP meetings.

Of IEP meetings observed in this sample, there was a remarkably high level of parent attention in both the MAPS and control school meetings, causing there to be limited variance within the sample. Many participants were observed as actively attentive for 95% of the observed intervals, or more. Of parents who participated in a MAPS meeting, the average percentage of intervals observed where parents were actively attending was 98%. Parents who did not participate in a MAPS meeting had an average of 97.1% of intervals observed where they were actively attending during the IEP meeting.

Summary

To summarize, for the current sample, participation in a MAPS meeting did not significantly increase the number of words spoken or the amount of active attention for parents in their students' IEP meetings, as the results from these analyses were not found to be statistically different from 0. In a qualitative analysis of parents' contributions during their child's IEP meetings, parents in this sample tended to provide similar contributions to their students IEP meetings, including stories about their child, their child's strengths, their concerns, and their child's academics. However, parents who participated in a MAPS meeting referenced their discussions from the MAPS process in their student's IEP meeting. Additionally, parents who participated in a MAPS meeting tended to contribute more information about their student's strengths, as opposed to only one parent of the selected School Y parents who elaborated on her student's strengths. This suggests that participating in a MAPS meeting may more intentionally emphasize student strengths and encourage more authentic discussion, which provides more rich participation by and engagement from parents. By utilizing MAPS during the IEP process, teams can develop an environment that empowers families and encourages involvement and a sense of community, which builds strong home-school relationships and improves student outcomes (Kincaid & Fox, 2002; O'Brien & O'Brien, 2002). Additionally, MAPS and person-centered planning can help build cohesiveness among multidisciplinary teams and encourage team members to adopt new perspectives and views about the student and the rest of the team (O'Brien & O'Brien, 2002).

CHAPTER V

DISCUSSION

The purpose of the current study was to investigate the effects of a Making Action Plans (MAPS) meeting on rich parent participation in their students' individualized education program (IEP) meetings by evaluating the types of parent communication, number of words spoken, and attention levels in IEP meetings. The Individuals with Disabilities Education Act (IDEA) (2004) has mandated parent involvement in the IEP process, yet despite this mandate, parent involvement has continued to be passive and remains an area of discrepancy between legislative mandates and practice in schools (Goldstein et al., 1980; Goldstein & Turnbull, 1982; Vaughn et al., 1988). Additionally, there has been limited research that investigates potential interventions for increasing parent involvement, despite the well-established benefits of parent involvement in their children's education, including increased academic achievement and attendance (Epstein & Sheldon, 2002; Wilder, 2014), improved grades (Hoover-Dempsey et al., 2005), decreased behavioral concerns (Neymotin, 2014), and an increased sense of self-efficacy (Hoover-Dempsey, 1995). More specifically, Angell et al. (2009) and Epstein et al. (1999) explained that the more parents are involved in team meetings (such as an IEP meeting), the more likely their students are to be successful in academic settings. There have been indications that parents who are more involved in these meetings are more likely to have more successful students with more positive outcomes (Angell et al., 2009;

Epstein et al., 1999; Fish, 2008), making parent involvement a critical consideration for school personnel. Therefore, the current study aimed to determine the effects of an intervention on increasing parent involvement in IEP meetings, given the numerous beneficial outcomes associated with parent involvement in schools.

Categories of Parent Contributions in Individualized Education Program Meetings

The current study aimed to understand the nature of parent contributions in IEP meetings. Previous research has investigated components of parent contributions like the percentage of time parents were speaking (Goldstein et al., 1980) as well as whether parents asked questions, initiated comments, or responded to questions (Vaughn et al., 1988). However, there has not been a recent study that investigated the nature of parent comments.

Six overall categories were identified to encompass parent contributions, and they were very similar between School X and School Y. These categories were: (a) simple phrases and clarifications, (b) stories from home, (c) academics, concerns, (d) progress/strengths, and (e) MAPS reference. Although the topics of parent contributions were very similar between both schools, parents who participated in a MAPS meeting referenced the MAPS poster or the MAPS discussion during their student's IEP meeting, indicating that the MAPS meeting made an impact on parents. Typically, the MAPS meeting was held roughly one week prior to the IEP meeting, so the MAPS discussion was impactful enough to be remembered and referenced a week later. Despite this, it did not appear, for this sample, that participating in a MAPS meeting increased the number of rich comments in most areas that were made by parents. However, participating in a

MAPS meeting did seem to influence the richness of parent comments regarding their students' strengths. Despite varying levels of academic progress among students from School X, two of the three parents from School X mentioned something about their student's growth and strengths over the annual IEP period. Of parents who did not participate in a MAPS meeting, only one parent elaborated on her son's strengths. This suggests that the MAPS format, which makes student strengths a focus, may allow for more comprehensive strengths-based discussion, which provides rich information and engagement from parents. This is an area that needs to be studied in more depth in the future in order to determine if MAPS has a significant impact on the "strengths" portion of a student's IEP for populations other than the current sample.

For other identified categories, both parents who participated in a MAPS meeting and those who did not contributed rich stories from home, expressed concerns, and discussed academics. Additionally, all parents also contributed simple phrases and questions that go along with completing IEP documents, which was what previous research has categorized as the primary contributions that parents make during IEP meetings (Vaughn et al., 1988). It appears that the current samples contributions, as a whole, indicated richer participation than previous research has suggested. A potential reason for this may be the established positive home/school relationship that appeared to exist with participants in the sample, which may have encouraged an environment that fostered rich participation.

Parents' Words Spoken in Individualized Education Program Meetings

Overall, there was no significant difference found between the number of words spoken by parents who participated in a MAPS meeting and parents who did not. However, while controlling for parent education level and student disability type, which have been shown to affect parent involvement (Jones & Gansle, 2010; Stoner et al., 2005) as well as the length of the IEP meeting, parents who participated in a MAPS meeting spoke roughly 480 more words than those who did not participate. These results trended in the hypothesized direction, but did not reach a level of significance for the sample participants. This could be due to the small sample size of the study ($n = 19$), which impacted the power of the statistical analyses used. Although not significant, the addition of strengths-based comments from parents who participated in a MAPS meeting, which could be considered rich participation, may have pragmatic applications in the field of special education. Parents have explained that viewing their child from a strengths-based perspective greatly increased family and school collaboration and trust between the two parties (Esquivel et al., 2008; Lake & Billingsley, 2000).

Parent Attention in Individualized Education Program Meetings

Previous research on parent involvement in IEP meetings has focused solely on the frequency of parent comments as the outcome measure of parent involvement (Goldstein & Turnbull, 1982, Jones & Gansel, 2010, Vaughn et al., 1988). The current study aimed to expand that understanding of parent involvement by including thematic coding of parent contributions discussed earlier as well as a measure of parent attention

during their students' IEP meeting in order to assess parents' non-verbal participation, which is an aspect of parent involvement that has not yet been investigated. The percentage of active attention (looking at the speaker, looking at a document, and talking) intervals observed was used to determine if parents who participated in a MAPS meeting were more actively engaged in their child's IEP meeting. Overall, there was no significant difference in percentage of active attention intervals between parents who participated in a MAPS meeting and those who did not. Interestingly, in the sample for the current study, parents from both School X and School Y had extremely high levels of active attention during the observation period, the majority of them attending during at least 95% of intervals. The limited variability in the sample made it difficult to detect differences between the two groups as both groups had very high levels of observed active attention. Although this was troublesome for the analysis, these high levels of active involvement speak positively to the sample of parents and the relationships that they have built with the school teams. This positive home/school relationship will be discussed later in more depth as it seems to have impacted many of the analyses performed for the current study.

Parent Post-Individualized Education Program Interviews

A final piece of data was collected to further assess parents' perceptions of their child's IEP meeting and their level of participation. Six parents (three from School X and three from School Y) were randomly chosen and asked a series of five questions about their experience with their child's IEP meeting. These six parents were different parents than those who contributed to the development of categories of parent contributions in

their students' IEP meetings, which allows for more comprehensive understanding of parents in the sample. The questions were surrounding parents' perceptions of how the meeting went, their participation in the current meeting and in previous meetings, and the relationship they had with their child's special education team. Similar to previous findings in the current study, all parents that were interviewed expressed very positive relationships with their students' special education team, one parent even saying that her son's special education teacher was "like one of my best friends. She is family. [my son] wouldn't be where he is today without her." Although this was the most enthusiastic expression of a positive relationship between parent and school staff, all of the other parents interviewed expressed positive relationships with their students' special education teachers and staff. This is consistent with parents' contributions on the demographic questionnaire, where all 19 parents endorsed never having filed a due process complaint against their students' school district.

Additionally, all six parents who were interviewed expressed that they participated as much as they would have liked to and that they felt like their students' IEP meetings went well. Given that all six parents expressed such positive feelings about their child's IEP meeting and special education team, it can be concluded that participating in a MAPS meeting did not impact the experience of the IEP meeting for parents, but this is likely due to the already strong positive home/school relationship in the study's sample.

Interestingly, this is contradictory to the bulk of research on parent perceptions of IEP meetings, which have highlighted parents' feelings of being depersonalized (Zeitlin & Curcic, 2013), frustrated, and confused (Stoner et al., 2005; Zeitlin & Curcic, 2013).

Additionally, in previous research, parents have reported feeling a lack of trust with their special education teams (Stoner et al., 2005), despite the critical role trust plays in developing positive relationships among parents and educators (Blue-Banning et al., 2004). However, participants from the current study seemed to be exemplifying Blue-Banning et al.'s (2004) understanding of establishing trust between team members, which seems to contradict much of the research about the frustration that parents experience with the IEP process, including a lack of communication and trust (Blue-Banning, et. al, 2004).

Parent and Teacher Perceptions of a Making Action Plans Meeting

Parents' perceptions of their MAPS meetings were not something that was formally collected, but as the current study progressed, an interesting theme amongst parents' and teachers' perceptions of the MAPS process emerged. Multiple parents who participated in a MAPS meeting expressed how much they enjoyed the meeting and the discussion that was facilitated. One mother and father expressed that they wished all of their child's IEP meetings could be run in a MAPS format, which is what person-centered planning endorses (Wells & Sheehey, 2012). All nine participants who went through a MAPS meeting expressed some level of appreciation of the meeting, and many explained that the MAPS topics were a refreshing change of pace from the sometimes routine nature of IEP meetings. Several parents asked to take their child's MAP home with them. One parent asked for the eight MAPS questions to take home and have her daughter answer to see if her perspectives matched her daughters.

The special education team at School X who participated in the MAPS meetings was also extremely receptive to the MAPS process. All of the special education teachers asked for the MAPS format to use with their parents in the future, and they all expressed enjoying the process, despite the additional time commitment of the MAPS meeting. Although the quantitative analyses did not show statistically significant results regarding parent words spoken or attention, it is worth noting that both parents and teachers had an extremely positive reaction to the MAPS meeting, and it was something that they felt enhanced the IEP process. Fiedler (2000) explained that MAPS can be used as a tool to allow parents and schools to develop a shared plan for students and increase their sense of collaboration, which according to parent and teacher anecdotal accounts, was achieved in this study.

Limitations

The largest limitation found in this study was the small sample size of 19 participants, which impacted the statistical results of the analyses. The small sample size in this study affected the power of the statistics used to determine differences between the outcome variables and the effect of participating in a MAPS meeting. With a small sample size, and therefore, decreased power, the analyses used may have had a decreased ability to detect effects in the sample, in turn not finding statistically significant results (Remler & Van Ryzin, 2015). Unfortunately, due to the small sample size, it was difficult to detect if the MAPS meeting had a genuine effect on parent involvement,

Another limitation in the current study was the established high level of positive home/school relationships between the sample as a whole. Both schools were matched based on similar demographic information, but there was also a generally high level of

things like parent attention and previous levels of home/school conflict. As mentioned previously, there was little to no pre-existing conflict between the schools and parents, as noted by the lack of due process complaints against the district (Colorado Department of Education, 2011, 2012, 2013), teachers' reports of positive relationships with parents, and parents' reports of positive relationships with school staff. All of these things are very positive for the educational culture of the schools involved (Angell et al., 2009; Epstein et al., 1999; Fish, 2008), but it created limited variability in the qualitative responses of parents in their child's IEP meeting. For example, many parents from both schools demonstrated over 95% active attention intervals during the IEP meeting observation. While very positive practically speaking, it makes it difficult to detect any differences between the MAPS and control groups when the baseline level of attention amongst parents is consistently high.

Implications and Future Research

The limited sample size and the consistently high level of positive factors that impact the home/school relationship as well as other factors from the current study lead to avenues for future research on this topic. Given the importance of parent involvement in the educational setting and the results of the current study, future research is critical to developing increased understanding of parent involvement in student IEP meetings.

Investigating the effects of a MAPS meeting on parent involvement with a larger sample size would be an important step to determining if MAPS has a significant effect on the measure of parent involvement in IEP meetings. Having a larger sample size in a study would allow the true effects of a MAPS meeting on parent involvement to be detected, rather than the inconclusive effects that were demonstrated in the current study.

Investigating the effects of MAPS with both qualitative and quantitative designs would build on the current study and allow for a broader view of parent involvement in research which has historically measured parent involvement only as the number of words spoken. The current study attempted to broaden this view by including qualitative categories of parent comments as well as parents' non-verbal participation, which could be continued with future research.

In order to remedy the experimental limitation of a consistently positive home/school relationships, investigating the MAPS model with parents who had known conflict with educators in the past would be interesting, particularly as that was the theoretical base of the current study, despite the overall positive relationship demonstrated in the sample. The current study's participants were not recruited based on a previous level of conflict, which impacted the results of the study. Using MAPS with parents who have displayed prior conflict with their students' special education team may address the theoretical perspective of MAPS as a tool to bring parents and schools together. Furthermore, using a pre-post design with parents who have previously had conflict with the school would be an interesting design to further investigating MAPS. For example, future research could measure parent level of involvement or conflict prior to implementing a MAPS meeting, implement a MAPS meeting for the following year's IEP, and then measure the change in parent involvement or conflict. This would require a design which spanned at least one year's time as IEP meetings happen only once annually.

Additionally, conducting a similar study in a larger school district may provide more insights than the current study sample was able to. With a larger district, the

likelihood for home/school conflict arguably increases, which would provide more variability in the study sample. The school district that participated in the current study was relatively small (roughly 2,400 students) and has a culture that reflects that. Given the smaller size and close knit culture of the district, many of the barriers to parent involvement that were outlined in Chapter II may not have been as impactful as they may be in a larger school district, where there are more layers of administration and procedure.

The current study built on the already established understanding that the type of student disability impacts the level of parent involvement, particularly with students diagnosed with an autism spectrum disorder and downs syndrome (Stoner, et al., 2005). The current study used student disability category as a covariate to control for these already known influences, but the number of participants with students in each disability category was not considered. Given this, a next step for future research may involve balancing participants among student disability group, so that each disability group has an equal number of participants. Additionally, purposefully selecting a sample of parents who all have a child with autism or an intellectual disability may be a next step for future research. This may allow for exploration into a MAPS meeting's effect on parents of students in different disability categories, which may impact educators' implementation of MAPS in practice. Perhaps if parents with students in certain disability categories or parents who have experienced conflict in the past respond more to a MAPS meeting than others, schools could implement a MAPS meeting with just those families. MAPS, as implemented in the current study, does require an additional meeting, so by targeting the

most impacted families, schools could get the most increased involvement for their very valuable extra time, or more bang for their buck, so to speak.

Additionally, investigating the roles and definition of “parent” in regard to IEP meetings is an important area for future research. The current study defined “parent” as the student’s mother, which is where the bulk of past research on educational meetings has centered (Mueller & Buckley, 2014). For the purpose of this study, words spoken and attention observations were taken only from the student’s mother, which is consistent with previous research, but left out perspectives of other parental figures that sometimes joined the meetings. Only 10.5% of the IEP meetings in the current study were attended by both the students’ mother and father, but as Mueller and Buckley (2014) argued, research about parents in IEP meetings needs to expand past the traditional role of mothers’ perspectives only and start to include fathers’ and other family members’ perspectives. In the current study, there may have been valuable information missed because fathers were not included in the analysis, and unique perspectives that may be being overlooked by not including fathers in this type of educational research (Mueller & Buckley, 2014).

In addition to including fathers in future research, including other family members may be impactful as well, especially given the changing face of the typical nuclear family. In the current study, 10.5% of the IEP meetings were attended by the students’ legal guardian, which in both cases, happened to be the student’s grandmother. As the structure of families changes, schools have more students with grandparents as legal guardians who, although they may act in a parental fashion, may provide different

perspectives and types of involvement in their grandchildren's special education process than parents might.

Finally, continuing research on interventions to increase parent involvement in IEP meetings is critical. Of the few studies conducted, including the current one, there have been inconclusive findings on the effects of these interventions (Goldstein & Turnbull, 1982; Jones & Gansle, 2010). The findings of these studies have been inconsistent, but provide important and unique information to continue to understand how educators can increase parent involvement in IEP meetings. By continuing research in this area, educators and researchers can continue to broaden this understanding with the intention of providing educators practical tools to increase parent involvement.

The current study furthers the understanding of the discrepancy between mandated parent involvement and the experience of parents in their students' IEP meetings. Although the quantitative results were not statistically significant, the positive reception of the MAPS process from both parents and educators, the rich participation of School X parents when discussing student strengths, and the practical significance of the increased number of words spoken by MAPS parents indicated that MAPS may have had a positive impact on the educators and families who participated in the current study. Additionally, the increased number of words spoken, and the nature of parent's strengths based comments, show promise for the use of MAPS in the IEP process. These factors support that MAPS is a straightforward and practical process for educators and school psychologists to implement into their daily practice to add rich information to their IEPs and to build positive relationships and collaboration with parents.

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APPENDIX A
DEFINITIONS AND CODES OF OBSERVED PARENTAL
NON-VERBAL ENGAGEMENT

The following definitions and codes will be used when observing parents non-verbal engagement in their student's IEP meeting.

Attention Definitions

Looking at Speaker (LS) is coded when the parent is looking at whoever is speaking. This should be coded if the parent is making eye contact with the speaker, or if the parent's eye gaze is on the speaker. Looking at Speaker should not be coded if the parent is only physically oriented toward the speaker but not actually looking at them.

Looking at Document (LD) is coded when the parent is looking at or attending to a document or paper that is provided to them during the meeting. It is common in IEP meetings for parents to get copies of reports, the IEP, and other paperwork that they may read or be signing. Looking at Document should only be coded if the document or paperwork pertains to the meeting.

Looking Away (LA) is coded when the parent is looking at or attending to anything else in the meeting besides the speaker or provided documents. This includes looking at a technological device, artwork or other aspects of the meeting room, anyone in the meeting who is not the speaker, looking down at their hands or lap, and generally not attending to the topic or activity that is occurring in the meeting.

Talking (T) is coded when the parent is speaking about something related to the IEP meeting. This should be coded if the parent is verbally speaking about anything related to the topic of conversation. Talking should not be coded if the parent is talking about an unrelated topic, or having a side conversation. In the instance of a side conversation, Looking Away should be coded. If, during a time interval, the parent is

talking while also engaging in another coded behavior (Looking at the Speaker), Talking should be coded.

APPENDIX B

TEACHER RATING FORM OF PARENT INVOLVEMENT

Teacher Rating Form of Parent Involvement

Please rate your perception of the parents participating in this meeting, on a scale from 1 to 5.

1	2	3	4	5
Never	Rarely	Sometimes	Most of the time	Always

1. These parents have participated in their student's IEP meeting in the past.

1	2	3	4	5
---	---	---	---	---

2. There has been conflict between these parents and the special education team in the past.

1	2	3	4	5
---	---	---	---	---

3. I feel like meetings with these parents are productive.

1	2	3	4	5
---	---	---	---	---

4. Generally, I look forward to meetings with this student's parents.

1	2	3	4	5
---	---	---	---	---

5. I feel like these parents understand where I am coming from, and I understand where they are coming from.

1	2	3	4	5
---	---	---	---	---

APPENDIX C
PARTICIPANT DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

Please answer the following questions as they best describe you or your child.

1. Relationship to student (check one)

- Mother
 Father
 Legal guardian
 Other relative: _____

2. Ethnicity

- African American
 Asian American
 Caucasian
 Hispanic/Latino
 Middle Eastern
 Other: _____

3. What is the highest level of education that *you* have obtained?

- High School
 College or University
 Graduate

4. If applicable, what is the highest level of education that *your spouse* has obtained?

- High School
 College or University
 Graduate

5. Under which category does your child's identification/diagnosis fall?

- Learning Disability
 Autism Spectrum Disorder
 Serious Emotional Disability
 Physical Disability
 Other: _____

6. How many years has your child been receiving special education services?

- 1-2
 2-4
 4-6
 6 + years

7. Have you ever filed an official complaint or sought mediation due to dissatisfaction with your child's IEP process?

- Yes No

8. What is your occupation?

APPENDIX D
POST IEP PARENT INTERVIEW QUESTIONS

Post-IEP Parent Interview Questions

1. Tell me about the IEP meeting. How do you think it went?
2. Do you feel like you were given the opportunity to participate as much as you wanted to?
3. Was your level of participation in today's meeting similar to past meetings?
4. Was there anything that you felt like you were not able to share during the meeting?
5. How would you describe your relationship with your child's special education team?

APPENDIX E
INSTITUTIONAL REVIEW BOARD APPROVAL



Institutional Review Board

DATE: June 24, 2015

TO: Lauren Deese
FROM: University of Northern Colorado (UNCO) IRB

PROJECT TITLE: [745436-2] An Evaluation of Making Action Plans: The Effects on Parent Involvement in Individual Education Program Meetings

SUBMISSION TYPE: Amendment/Modification

ACTION: APPROVED

APPROVAL DATE: June 24, 2015

EXPIRATION DATE: June 24, 2019

REVIEW TYPE: Expedited Review

Thank you for your submission of Amendment/Modification materials for this project. The University of Northern Colorado (UNCO) IRB has APPROVED your submission. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on applicable federal regulations.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of June 24, 2019.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Sherry May at 970-351-1910 or Sherry.May@unco.edu. Please include your project title and reference number in all correspondence with this committee.

Lauren -

APPENDIX F
PARENT PARTICIPANT CONSENT FORM



CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Project Title: An Evaluation of Making Action Plans: The Effects on Parent Involvement in Individual Education Program Meetings

Researcher: Lauren Hangge, B.A.

Research Advisor: Michelle Athanasiou, Ph.D.

Phone Number: (303) 249-1417

Email: dees3281@bears.unco.edu

I am researching parents of children in special education and their student's Individual Education Program (IEP) teams to better understand parent participation in IEP meetings. Should you choose to participate, you and your child's IEP team may be asked to participate in an additional meeting prior to your student's IEP meeting, which focuses on your specific desires and goals for your child. Additionally, your student's IEP meeting will be observed and video recorded in order to better understand the group dynamics during these meetings. Your participation will either consist of your already scheduled IEP meeting, or participating in the additional meeting, depending on which condition you are apart of.

After you complete the meetings, all identifying information will be removed to protect your privacy. This includes your name, your child's name, all team member names, and your school location. All data will be kept in a locked file cabinet at the researcher's home and on a password protected computer. All video recordings and data will be destroyed three years after the conclusion of the study, and are for the sole purpose of this research study. By signing this consent form, you are acknowledging that the videos and data from the study will not be used in any complaints regarding the IEP process, meeting, or staff, and that you understand the purely research based nature of the data collected.

Risks to you are minimal, however an additional time commitment for an additional meeting may be requested of you should you agree to participate. The benefits to you may include gaining a better understanding of the IEP process and more opportunities to be involved in your child's IEP meeting.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Sherry May, IRB Administrator, Office of Sponsored Programs, 25 Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

Lauren Hangge, B.A. Date

Parent Participant Date

APPENDIX G

TEACHER PARTICIPANT CONSENT FORM

APPENDIX H
SUMMARY OF STUDY IN ARTICLE FORM

An Evaluation of Making Action Plans: The Effects on Parent Involvement in
Individualized Education Program Meetings

Lauren Hangge

University of Northern Colorado

Abstract

Over the course of extensive research, researchers have acknowledged the positive effects of parent involvement on student's education, including positive academic and social emotional outcomes. Despite this, particularly for parents of students in special education, parents continue to be passive participants in their students Individualized Education Program meetings, and hold negative perceptions of IEP meetings, which negatively effects parent involvement. This study investigated the effects of a Making Action Plans (MAPS) meeting on parent involvement in an IEP meeting, using a non-experimental design, and qualitative analysis and multiple linear regressions to analyze research questions. Although some positive effects were noted, overall, results were not considered significant with the study's sample. Despite this, MAPS showed promise as a potential intervention for increasing parent involvement, and may be an effective tool for school districts to provide consultation around with their special education teams.

Key Words: Parent involvement, Individualized Education Programs, Making Action Plans, Participation.

Introduction

Parent involvement has been an area of extensive research and review for some time, with researcher's collectively acknowledging the positive effects that parent involvement has on a student's education. It has been well established that parental involvement benefits children's general academic outcomes and that parent's attitudes, beliefs, and actions regarding their children's education impact academic and emotional success (Hoover-Dempsey & Sandler, 1997; Hoover-Dempsey, et al., 2005) Specifically, parental involvement has been shown to increase academic factors such as student achievement, teacher's perceptions of student competence, attendance (Epstein & Sheldon, 2002) and student grades (Hoover-Dempsey et al., 2005), as well as behavioral factors, which also impact children in the school setting (Jarmuz-Smith, 2011). These positive outcomes have been observed across all ethnicities and genders (Jeynes, 2003 2005). Additionally, research has also demonstrated that parent involvement can influence teacher perceptions of student's ability, which as been consistently shown to impact student's actual ability and achievement (Hughes, Gleason, & Zhang, 2005). Not only do family and school connections increase positive student outcomes, but they also improve school climate and promote positive parenting skills and parent support (Epstein, et al., 2002). Additionally, Fish (2008) explained that the development of effective educational programming for students is dependent on parent involvement and leads to positive outcomes for students.

For students in special education, educational programming consists of the development of an Individualized Education Program (IEP). A critical component of the IEP process and special education law is the mandated inclusion of parents as members

of the interdisciplinary team throughout the evaluation and IEP process (IDEA, 2004). The Individuals with Disabilities Education Act (2004) explains that parents of a child with a disability must be included in any group that makes decisions about the student and that parents are a significant part of the special education process (Jacob & Hartshorne, 2007; Jarmuz-Smith, 2011). Researchers acknowledge that collaboration among all team members is critical in an IEP meeting, and is critical for creating an effective education plan for the student (Fish, 2008; Garriott et al., 2000; Simpson, 1996). Fish (2008) explained that the IEP meeting “provides the ideal opportunity to facilitate equal collaboration between educators and parents (p. 8)”.

Despite the body of evidence that exists supporting the positive impacts of parent involvement in their student’s education (Epstein & Sheldon, 2002; Hoover-Dempsey, 1995; Hoover-Dempsey et al., 2005; Neymotin, 2014; Wilder, 2014) and the legal mandates for parent involvement via the IEP process, all too often parents are merely present at special education team meetings, limited to signing paperwork and receiving information rather than being active participants (Fish, 2008). The good intention of the law to include parents in educational decisions unfortunately is not always realized, and leaves a gap between the spirit of the law and practice (Blue-Banning et al., 2004; Stoner et al., 2005). Goldstein et al (1980) and Vaughn, Bos, Harrell & Lasky (1988)’s research on parent involvement in IEP meetings revealed that parents tended to comment less than 25% of all IEP meeting contributions with limited verbal contribution.

It has been hypothesized that perhaps, the limited amount of parent involvement in IEP meetings may be contributed to negative perceptions and experiences that parents have encountered in their students IEP meeting. Despite the spirit of IDEA (2004),

parents have reported feelings of not only not being involved, but also being depersonalized during the IEP process (Zeitlin and Curcic, 2013). Parents have reported feelings of frustration, dissatisfaction, and being overwhelmed by the IEP process (Zeitlin and Curcic, 2013). Additionally, Stoner et al., (2005) and Zeitlin and Curcic (2013) reported that parents tend to express feelings of confusion during their child's IEP meeting.

Given what has been established about the benefits of parent involvement and the negative perceptions and experiences parents have reported in their students IEP meetings, it is imperative to investigate ways to increase parents involvement in IEP Meetings. Additionally, understanding methods of increasing parent involvement is an important topic for school districts to provide consultation around, to increase this competency in their special education teams. For the current study, a particular type of meeting format, Making Action Plans (MAPS, Forest & Lusthaus, 1989), may address many of the concerns and barriers to parent involvement that have been identified in prior research. Additionally, MAPS tends to be a straightforward, simple process, making it ideal for school districts to consult around. MAPS requires no extensive additional training for staff and no additional financial resources, making it a viable intervention option for school districts and teams.

Making Action Plans (MAPS) Meetings

Making Action Plans (MAPS, Forest & Lusthaus, 1989) was developed from Person Centered Planning in order to address factors like inclusion, coordinating services and valuing children and families for children in special education(O'Brien & O'Brien, 2002). The MAPS model, is a child-focused method of parent/school interaction that can

be used in the special education process. MAPS is a planning process which allows parents, family members, and in some cases friends of the student, to share their goals, dreams, and nightmares for the student. Although MAPS was first developed as a tool used to promote full inclusion models (Wells & Sheehey, 2012), using person-centered planning and MAPS establishes an “environment where parents and the student feel empowered, increasing their sense of equal participation with professionals (Wells & Sheehey, 2012, p. 34)”. Additionally, Fiedler (2000) argues that MAPS has a much broader utility than being used as an inclusion tool. He explains that MAPS can be a tool to allow parents and schools to develop a shared plan, vision, and educational goals that far outreach inclusion alone (Fiedler, 2000). Forest and Pearpoint (1992) explained eight key questions that make up the MAPS process. The purpose of these questions is to encourage a dynamic conversation in which all members of the child’s life can share their opinions, insights, and hopes for the student (Turnbull & Turnbull, 2001).

MAPS Questions

- 1 & 2: What is the student’s story and important life events?
- 3: What are your dreams for your child?
- 4: What are your nightmares for your child?
- 5: Describe the student.
- 6: What are your child’s strengths?
- 7: What are your child’s weaknesses?
- 8: Plan of action to build on dreams and avoid fears.

This study aimed to use the research conducted about MAPS’ usefulness in encouraging positive parent-school relationships (Kincaid & Fox, 2002; O’Brien & O’Brien, 2002;

Wells & Sheehay, 2012) to determine if MAPS was an effective tool to promote positive parent involvement. Additionally, this study aimed to build on the understanding of parent involvement, which has previously relied solely on the frequency count of parent comments in IEP meetings (Goldstein & Turnbull, 1982; Jones & Gansle, 2010), which does not allow for a comprehensive understanding of the type of parent comments made during an IEP meeting. For example, when using a frequency count, parents who contribute a “yes” or “no” are effectively being counted the same as parents who provide a detailed story about their student (termed “rich participation for this study), which misses the important essence of what parents are communicating. For the purpose of this study, the term “rich participation” or “rich comments” refers to parent participation that exceeds a simple “yes or no” response, and may include self-initiated comments and questions (Vaughn et al., 1988), stories about the student, examples from the student’s home environment, student’s strengths and weaknesses, etc. The use of rich participation in this study is an attempt to address the limitation of frequency counts of parent participation that has primarily been used in previous research. Research questions included:

- 1) Do parents who participate in a MAPS meeting prior to their student’s IEP meeting have richer participation and comments during the IEP meeting, than parents who do not participate in a MAPS meeting?
- 2) Does parent participation in a MAPS meeting predict the number of words spoken in an IEP meeting over and above the influence of parent education level and type of student disability?
- 3) Does parent participation in a MAPS meeting affect parent attention, in an IEP meeting?

Method

A non-experimental design was used to investigate the effects of parent participation in MAPS meeting on parent's rich participation, number of words spoken, and observed parent attention.

Participants

Convenience sampling was used to obtain participants (N = 19) from a small rural school district in the Front Range region of the United States. The unit of analysis consisted of the student's special education team. Depending on the school, the members of the special education team differed, but generally this included a general education and special education teacher, additional service providers (physical therapists, occupational therapists, etc.), a representative from the school (school psychologist, school social worker, principal etc.), and the students' parents. The participants were recruited from two demographically similar schools located in the Front Range region of Colorado, and included parents of students who were already receiving special education services and had either an annual review or tri-annual reevaluation meeting during the time of data collection. Students with initial evaluation meetings were excluded due to the fact that their parents would have had no prior experience with the IEP process. Additionally, if both parents of the student attended the IEP meeting, the child's mother was the target participant.

(Insert Table 1 Here) school demographics

Variables and Measures

Independent Variable. The independent variable for this study was the MAPS meeting intervention. A research assistant who was trained in the MAPS process facilitated all of the MAPS meetings.

Dependent Variables. The dependent variables for this study were the level of rich participation exhibited by parents in their child's IEP meeting. One method of measuring rich participation was observational recordings of parent's non-verbal attention during the IEP meeting. The non-verbal attention of parents was observed using a 10-second partial interval time sample to observe four categories of attention behaviors including, looking at the speaker, looking down at paper, looking away, and talking. Observations of parent attention were conducted after the meeting, using the video recording of the IEP meeting.

In addition to coding parent's non-verbal attention during the IEP meetings, this researcher also developed categories from parent's verbal behaviors during the meeting. This was done after the fact using video recording and transcripts from the meetings. Coding was conducted on a randomly selected subset of meeting transcripts and included six transcripts (three from each school). These categories provided added information about the type of parent involvement that took place in the meetings. This added depth to previous observational research of IEP meetings, which has solely focused on frequency counts of parent verbalization (Goldstein & Turnbull, 1982; Jones & Gansle, 2010). In addition to developing categories using videotapes of the IEP meetings, this researcher also tallied a word count of parent's responses in order to add another measure of depth of parent comments. Even though word count alone does not provide the full context of rich parent involvement, arguably parents who speak more could be thought to have

participated in a deeper way than simply providing one-word responses. Leech and Onwuegbuzie (2007) explained that word count is frequently used in qualitative school psychology research to evaluate meaning and determining individual's participation.

Teacher Questionnaire

Prior to the start of the MAPS and IEP meetings, special education teachers were asked to complete a short questionnaire regarding their perceptions of each parent participant. These questions aimed to gauge teacher perceptions of past parent participation, conflict between special education team and parents, and the home-school relationship. This was intended to get an idea of parents' previous levels of involvement and the home-school relationship, prior to participation in the study. The scores from the questionnaire were totaled in order to gain an overall score for teachers perceptions of past parent participation.

Demographic questionnaire

Parents were asked to complete a demographic questionnaire at the conclusion of their student's IEP meeting. The purpose of this questionnaire was to gain additional family information that may be pertinent to the study. Questions regarding parent level of education and socioeconomic status were asked, as these factors have been shown to have an effect on parent involvement by previous researchers (Jones & Gansle, 2010). Additionally, questions about student's identified disability were included, as there has been research supporting differing levels of parent involvement based on a student's diagnosis or educational identification, particularly for children diagnosed with an Autism Spectrum Disorder (Stoner, et al., 2005).

Procedures

After gaining IRB approval, IRB approval was obtained by the selected school district in the Front Range Region of the United States, and two elementary schools were approached about participating and gave consent. The first school (School X) was deemed the MAPS condition school, and all participants from this school completed a MAPS meeting prior to their student's IEP meeting. The alternate school (School Y) conducted their IEP meetings as usual.

MAPS Group (School X). After verbal consent was obtained from both parents and school staff, a one-hour MAPS meeting was scheduled with this researcher for no more than two weeks prior to the student's IEP meeting. In order to continue participation, at least the student's parents and one member of the school staff on the IEP team were in attendance. The MAPS meeting was video recorded and was observed by this researcher. All information was recorded on the MAPS poster, which was brought to the IEP meeting for reference. Prior to the IEP meeting, teachers were asked to complete the Teacher Rating Form of Parent Involvement. IEP team reconvened for the IEP meeting, and the IEP meeting continued without further intervention or deliberate commentary regarding the MAPS process. After the conclusion of the IEP meeting, parents were given the demographic questionnaire to complete and, if randomly selected, were asked to complete the post-meeting interview with the researcher.

Comparison Group (School Y). The IEP meetings that took place at the comparison group school were conducted without any intervention and as they are typically conducted. There were no MAPS meeting prior to the IEP meeting and therefore no MAPS poster board for the team to refer to. There was no intervention, added commentary, or information from the researcher in the IEP meetings. The meetings were

also video recorded, and the same observational and coding method was used as was used in the intervention condition meetings. Similar to the MAPS condition participants, teachers were asked to complete the Teacher Rating Form of Parent Involvement prior to the start of the IEP meeting. Additionally, parents were asked to complete the demographic questionnaire, and three randomly selected parents were asked to complete the post IEP meeting interview with the researcher.

Data Analysis

The primary statistical analysis that was used was multiple linear regression. Given that previous research has indicated that parent socioeconomic level and education influence parent participation in IEP meetings (Jones & Gansle, 2010), these factors were controlled for using covairates in the multiple linear regression. Additionally, qualitative coding (Merriam, 2009) was used to determine categories of parent contributions made during the IEP meetings.

Results

The purpose of this study was to investigate the effects of a Making Action Plans (MAPS) meeting on the participation that parents demonstrate in their child's Individualized Education Program (IEP) meeting, as measured by the number of words spoken by parents in the meeting, and the level of attention that parents maintain during the meeting. Additionally, the categories of parent's comments during their child's IEP were examined in order to further address parent participation. The methodology used to answer the research questions was a non-experimental design.

IEP Meetings

All meetings were either annual reviews or triannual reevaluations. Of the IEP meetings that consisted of parents who had participated in a MAPS meeting, the average length of the IEP meeting was 38:23 minutes and ranged from 15:04 to 52:20 minutes. Of the IEP meetings that were conducted without a MAPS meeting, the average length of the IEP meeting was 26:11 minutes, and ranged from 16:08 to 63:20 minutes.

Inter-Observer Agreement of Parent Attention Observations

Inter-observer agreement was calculated for the in-meeting attention behavior observations. A second observer used the video recordings to observe non-verbal behavior for 20 percent (4 meetings) of the total recorded meetings. Inter-observer agreement was calculated from this. A point-by-point agreement ratio was used to calculate inter-observer reliability (Kazdin, 2011). This was calculated as follows: the number of agreements of the observers on each interval divided by the number of agreements *plus* disagreements, multiplied by 100 in order to yield a percent (Kazdin, 2011). The overall inter-observer reliability for the current study was .93, indicating acceptable levels of reliability between the two observers.

Parent Contribution Categories in IEP Meetings. To answer this question, six (three from each school) randomly selected video recordings of IEP meetings were coded to determine the topics of conversation that were present in parents comments, following the data analysis and coding processes laid out by Merriam (2009), which resulted in categories that spanned the unique comments made by each condition of participants.

Parents who participated in a MAPS Meeting (School X)

Of the three meetings randomly selected from the MAPS condition, the average IEP meeting length was 43 minutes. All the meetings were annual reviews. Based on the definition of “rich participation” for the current study, all categories other than simple words and phrases were considered rich participation.

Simple Phrases and Clarifications

This category comprised parent comments that were simple one-or-two-word utterances like “yes/no” and comments that pertained to the clerical portion of the IEP meeting. For example, one parent asked a question about where she needed to sign the IEP and if she could take a copy of the IEP home with her that day. Generally, parent contributions that made up this theme were thought to be comments that contributed to meeting the legal requirements of the IEP documents, but otherwise did not add any rich information to the IEP meeting.

Stories from Home

A frequent contribution from parents was stories and accounts from home about their child. Depending on which meeting was being considered, these stories ranged from positive accounts to stories about parent concerns from home. For example, one mother described a large family gathering, where her son, who was identified with Autism, preferred to stay inside and play by himself, rather than joining his family. Alternatively, another parent from School X shared that she had noticed her son reading more at home, and that his homework routine had improved over the last year. Both accounts were valuable and rich stories from home about each student’s present level of skill, but one was a concern, compared to the other, which was a story of progress.

Academics

All three parents that were selected from School X commented about their student's academic concerns and progress. From one parent in particular, who participated in a MAPS meeting, her son's academic progress seemed to be a source of stress. She expressed "*I just want him to do okay in school. What else can we do at home?*" All three parents asked about how their children were doing academically. A common characteristic of the academic comments from parents from School X is that they were almost all questions. This may indicate that, despite parent's generally high level of participation, they still attributed their student's academic progress to the school environment, and therefore perceived themselves as less of an authority on their student's academics.

Non-Academic Concerns

This category consisted of parent's contributions to their child's IEP meeting that were centered on concerns they had for their child. Depending on the family, the concerns were from both home and school. One mother explained that at home, she had noticed her son being more distractible and inattentive, and she was concerned that he was displaying that same type of behavior at school. Another mother expressed concern about her son moving onto middle school the following year.

Progress/Strengths

As part of this category, all three parents from School X commented on their student's strengths, in part, because this is a section that must be answered on the student's IEP. Despite varying levels of academic progress between each three students, all parents from School X mentioned something about their student's growth over the annual IEP period.

These strengths included improved homework completion at home, building more positive social skills, and improving math skills.

MAPS Reference

A category that is specific to School X parents was the mention of their student's MAPS meeting. Of the parents who participated in a MAPS meeting, two parents referenced their student's strengths from the MAP when discussing strengths during the IEP. One parent expressed that a strength of her daughter's was "...her ability to be a caring person, to her friends and to me. She cares about everyone, you know, we talked about that on her poster". Additionally, the same parent referenced the "dreams" section of her daughter's MAP when discussing a concern for her daughter. Discussion of strengths on the IEP seemed to be the area where MAPS had the most influence, with both parent's who discussed their child's MAP in the IEP meeting referencing the strength's section. Although strengths is a section that is required on a student's IEP, by making it a required component of the legal IEP document, it may take away from the authentic nature of describing the student as a whole. It could be argued that discussion of the whole student, and making their strengths a focus, in a MAPS meeting, allows for more authentic discussion, which provides more rich information and engagement from parents

Parents Who Did Not Participate in a MAPS Meeting (School Y)

Simple Phrases and Clarifications

Similar to parents from School X, this category from School Y comprised parent comments that were simple one-or-two-word utterances like "yes/no" and comments that pertained to the clerical portion of the IEP meeting.

Stories From Home

Parents from School Y also contributed stories and accounts from home. One parent shared that her son struggled with spelling, as did his siblings, which made a connection to home. Additionally, another mother shared a story about concerning home behavior that she was requesting support for. All the stories shared from School Y's IEP meetings were examples of rich participation from parents, despite some of the stories being more strengths based compared to stories that were of concern from the parents.

Academics

As student academic progress is the central part of an IEP meeting, it can be expected that many of the parent's contributions revolved around academics. There were parents from School Y who discussed their student's academic successes throughout the year, and parents who were concerned with their child's academic progress. One mother shared that she had seen a big improvement in her son's attitude towards school and that he was applying himself much more than she had seen in the past. Alternatively, another parent expressed that given her son's academic and cognitive difficulties, she was apprehensive about her son's academic growth over the annual IEP period. Similar to previous categories, the instance of a "positive" or "negative" contribution seemed to be contingent on the particular student or family, rather than participation in a MAPS meeting. As categories from both School X and School Y contained "positive" and "negative" contributions, it was determined that the instances of positive or negative contributions were not attributed to participation in a MAPS meeting.

Non-Academic Concerns

This category consisted of parent's expressed concerns for their child. This ranged from concerns about their child's academic progress to concerns about their student's service time. Parents from School Y shared that they were concerned about the following school year, including which teacher their child would get, moving up a grade level, and the amount of school work their child would have the following year.

Progress/ Strengths

Similar to parents from School X, parents from School Y were also asked to answer questions about their student's strengths for the completion of their IEP. However, of the three parents selected from school Y, only one parent elaborated on their child's strengths, above and beyond the basic question asked on the IEP. Other parents adequately answered the question about strengths and student likes on the IEP, but did not offer any other child strengths, which seems to differ from parents at School X.

Comparison of School X and School Y

Overall, categories from School X and School Y were similar. In the categories of simple words and phrases, stories from home, academic strengths, and non-academic concerns, there did not appear to be notable differences between parents contributions based on their participation in a MAPS meeting.

Although the categories from both schools were extremely similar overall, there did appear to be differences between parent contributions in the areas of Progress and Strengths. Of the five categories that were identified, discussion of strengths seemed to be the area where MAPS had the most influence. As mentioned previously, two of the three randomly selected parents from School X referenced the strengths section of their

child's MAP during their IEP meeting. Additionally, one parent referenced the "Dreams" question from her student's MAP when discussing her concerns for her daughter. It is also notable, that all three parents who participated in a MAPS meeting elaborated on their child's strengths, above what is required for the basic IEP paperwork. Despite varying levels of academic progress between each student from School X, all parents from School X mentioned something about their student's growth and strengths over the annual IEP period. Of parents who did not participate in a MAPS meeting, only one parent elaborated on her son's strengths. This suggests that the required strengths component of an IEP, although well intended, may take away from the comprehensive nature of describing the student as a whole. It could be argued that discussion of the whole student, and making their strengths a focus in a MAPS meeting, allows for more comprehensive discussion, rather than simply fulfilling an IEP requirement, which provides more rich information and engagement from parents.

Effects of a MAPS Meeting on Parent Words Spoken

To analyze this question, a normal multiple regression was performed with parental participation (as measured by number of words spoken) as the dependent variable and participation in a MAPS meeting as the independent variable, with length of meeting, parental education, and student disability category included as covariates. Descriptive statistics of the variables of interest were obtained, as shown in Tables 2 and 3, which are divided into descriptives for the MAPS condition and the non-MAPS condition. Evaluation of assumptions was conducted, and did not indicate any substantial threats to the assumptions of multiple linear regression.

(insert Tables 2 & 3 here)

Due to the small sample size ($n = 1$), the Serious Emotional Disability (SED) category was removed from the analysis, which had no significant impact on the overall results. Partial correlations were also obtained for the independent variables, which included: type of student disability, parent education level, participation in MAPS, and the length of the IEP meeting. Length of the IEP meeting was included in the analysis in order to rule out increased number of words spoken as a function of longer meetings. These correlations are presented in Table 4.

(insert Table 4 here)

The model was not found to be significantly different from zero, $F(5,13) = 1.98$, $p = .15$ with $R = .43$). Together, the model explained 21% of the variance in parent participation ($R^2 = .214$). Effect size was derived from the standardized and unstandardized beta coefficient of a MAPS meeting, which can be used as an effect size measure for a multiple linear regression, specifically when controlling for other factors, as in the current study (Rosenthal & DiMatteo, 2001). For this particular sample, the unstandardized beta coefficient effect of participating in a MAPS meeting showed parents contributing 479.50 more words to their child's IEP meeting compared to parents who did not participate in a MAPS meeting. Using a standardized beta measure, the effect of a MAPS meeting on the number of words spoken by parents was $B = 0.171$.

Effects of a MAPS Meeting on Parent Attention

To analyze this question, a normal multiple regression was performed between parental attention (as measured by the percentage of observed "active participation" intervals) as the dependent variable, and MAPS participation, with parental education and student disability category included as covariates. Active participation intervals were

defined as any interval in which parents were participating, including looking at a document, talking, and looking at a speaker. Similar to the previous analysis, the SED disability category was removed due to the low sample size ($N = 1$). This had no significant impact on the overall results. Additionally, as shown in Tables 2 and 3, descriptive statistics were obtained for all variables of interest. Evaluation of assumptions was conducted, and did not indicate any substantial threats to the assumptions of multiple linear regression.

Partial correlations were also obtained for the independent variables and percentage of observed active participation intervals, which included: type of student disability, parent education level, participation in MAPS, and the length of the IEP meeting. Length of the IEP meeting was included in the analysis in order to rule out increased number of words spoken as a function of longer meetings. These correlations are presented in Table 5.

(insert table 5 here)

The model was not found to be significantly different than zero, $F(4,14) = 1.19$, $p = .36$, with $R^2 = .25$ and $R^2_{adj} = .04$. Together, the model explained 4% of the variance in parent attention during IEP meetings. Many participants were observed as actively attentive for 95% of the observed intervals, or more. Of parents who participated in a MAPS meeting, the average percentage of intervals observed where parents were actively attending was 98%. Parents who did not participate in a MAPS meeting had an average of 97.1% of intervals observed where they were actively attending during the IEP meeting.

Discussion

The purpose of the current study was to investigate the effects of a Making Action Plans (MAPS) meeting on rich parent participation in their students Individualized Education Program (IEP) meetings by evaluating the types of parent communication, number of words spoken, and attention levels in IEP meetings. The Individuals with Disabilities Education Act (IDEA, 2004) has mandated parent involvement in the IEP process, yet despite this mandate, parent involvement has continued to be passive and remains an area of discrepancy between legislative mandates and practice in schools (Goldstein et al., 1980; Goldstein & Turnbull et al, 1982; Vaughn et al., 1988). Additionally, there has been limited research that investigates potential interventions for increasing parent involvement, despite the well established benefits of parent involvement in their children's education, including increased academic achievement and attendance (Epstein & Sheldon, 2002; Wilder, 2014), grades (Hoover-Dempsey et al., 2005), decreased behavioral concerns (Neymotin, 2014), and an increased sense of self-efficacy (Hoover-Dempsey, 1995). More specifically, Angell et al. (2009) and Epstein et al. (1999) explained that the more parents are involved in team meetings (such as an IEP meeting), the more likely their student's are to be successful in academic settings. There have been indications that parents who are more involved in these meetings are more likely to have more successful students with more positive outcomes (Angell et al., 2009; Epstein et al., 1999; Fish, 2008), making parent involvement a critical consideration for school personnel, as well as for school districts as a whole. Therefore, the current study aimed to determine the effects of an intervention on increasing parent involvement in IEP

meetings, given the numerous beneficial outcomes associated with parent involvement in schools.

Categories of Parent Contributions in IEP Meetings

Six overall categories were identified to encompass parent contributions, and they were very similar between School X and School Y. These categories were: simple phrases and clarifications, stories from home, academics, concerns, and progress/strengths, MAPS reference. Although the topics of parent contributions were very similar between both schools, parents who participated in a MAPS meeting referenced the MAPS poster or the MAPS discussion during their student's IEP meeting, indicating that the MAPS meeting made an impact on parents. Despite this, it did not appear, for this sample, that participating in a MAPS meeting increased the number of rich comments made by parents in most areas. However, participating in a MAPS meeting did seem to influence the richness of parent comments regarding their student's strengths. Despite varying levels of academic progress among students from School X, two of the three parents from School X mentioned something about their student's growth and strengths over the annual IEP period. Of parents who did not participate in a MAPS meeting, only one parent elaborated on her son's strengths. This suggests that the MAPS format, which makes student strengths a focus, may allow for more comprehensive strengths based discussion, which provides rich information and engagement from parents.

Parent's Words Spoken in IEP Meetings

Overall, there was no significant difference found in the number of words spoken between parents who participated in a MAPS meeting and parents who did not. However,

while controlling for parent education level and student disability type, which have been shown to affect parent involvement (Jones and Gansle, 2010; Stoner et al., 2005), as well as the length of the IEP meeting, parents who participated in a MAPS meeting spoke roughly 480 more words than those who did not. These results trended in the hypothesized direction, but did not reach a level of significance for this sample of participants. This could be due to the small sample size of the study ($n = 19$).

Parent Attention in IEP Meetings

Previous research on parent involvement in IEP meetings has focused solely on the frequency of parent comments as the outcome measure of parent involvement (Goldstein and Turnbull, 1982, Jones and Gansel, 2010, Vaughn et al., 1988). This study aimed to expand that understanding of parent involvement by including thematic coding of parent contributions discussed earlier, as well as a measure of parent attention during their student's IEP meeting, in order to assess parent's non-verbal participation, which is an aspect of parent involvement that had not yet been investigated. Overall, there was no significant difference in percentage of active attention intervals between parents who participated in a MAPS meeting and those who did.

Limitations

The largest limitation found in this study was the small sample size of 19 participants, which impacted the statistical results of the analyses. Unfortunately, due to the small sample size, it is difficult to detect if the MAPS meeting had a genuine effect on parent involvement.

Another limitation for this study is the established high level of positive home/school relationships between the sample as a whole. Both schools had a generally

high level of things like parent attention and previous levels of low home/school conflict. There was little to no pre-existing conflict between the schools chosen and their parents (Colorado Department of Education, 2011a, 2011b, 2012a, 2012b, 2013a, 2013b) and high levels of reported positive relationships between parents and teachers. Given that MAPS was intended to mediate some of these negative factors which have been reported by parents in previous research, the established positive home/school relationship among schools in this study may have impacted the analyses.

Implications and Future Research

Investigating the effects of a MAPS meeting on parent involvement with a larger sample size would be an important step to determining if MAPS has a significant effect on measures of parent involvement in IEP Meetings. Continued investigation of MAPS with both qualitative and quantitative designs would build on the current study and allow for a broader view of parent involvement. Additionally, investigating MAPS with families who have had a previous history of conflict with the school, or with parents who have a student with a disability identification that has been linked to increased conflict with schools (Stoner, et al., 2005), may allow for a better understanding of MAPS ability to mediate some of the negative perceptions of IEP meetings that parents have reported in the past. (Zeitlin and Curcic, 2013; Stoner et. al, 2005).

The current study furthers the understanding of the discrepancy mandated parent involvement and the experience of parents in their students' IEP meetings. Although the quantitative results were not statistically significant, the positive reception of the MAPS process from both parents and educators, the rich participation of School X parent's when discussing student strengths, and the practical significance of the increased number of

words spoken by MAPS parents, indicate that MAPS may have had a positive impact on the educators and families that participated in the current study. These factors support that MAPS is a straightforward and practical process for educators and school psychologists to implement into their daily practice to add rich information to their IEP's and to build positive relationships and collaboration with parents. Given the straightforward and practical nature of MAPS, school districts can consult with their special education teams in order to use MAPS as a potential tool to increase parent involvement. With school district consultation, special education teams can learn the MAPS model, and potentially increase their parent's IEP involvement, which given the positive implications of parent involvement, will increase positive school culture, student achievement, and community connections.

Table 1

Comparison of Demographics Between School X and School Y

	School X	School Y
Free and Reduced Lunch (FRL)		
Enrollment	545	583
% FRL	80.63%	81.30%
Ethnicity Breakdown		
American Indian/Alaskan Native	3	2
Asian	0	0
Black or African American	1	1
Hispanic or Latino	530	522
White	124	112
Native Hawaiian	0	0

Table 2

Descriptive Statistics of Variables of Interest in the MAPS condition

	Mean	Standard Deviation	Range	Skewnes s	Kurtosis
Words Spoken	1882.40	1747.58	530 - 5898	1.75	2.43
Active Intervals (Percentage)	98.00	2.356	92.77 - 100.00	-1.28	1.54
Time (Minutes)	38.39	15.190	15.09 - 61.42	-.05	-1.26

Table 3

Descriptive Statistics of Variables of Interest in the Non-MAPS Condition

	Mean	Standard Deviation	Range	Skewnes s	Kurtosis
Words Spoken	508.75	322.01	59 - 947	-.29	-1.40
Active Intervals (Percentage)	97.23	5.43	84.44 - 100.00	-2.37	5.80
Time (Minutes)	26.75	15.89	13.90 - 63.33	2.11	5.00

Table 4

Partial Correlation of Student Disability, Parent Education, Meeting Length, Participation in a MAPS meeting, on Number of Parent Words Spoken.

Construct	<i>B</i>	<i>Standardized B</i>	<i>T</i>	<i>p</i>	Partial Correlation
Constant	-206.630		-.253	.804	
Learning Disabled	-12.345	-.004	-.018	.986	-.005
Parents' Education	713.137	.208	.834	.419	.225
Autism	877.022	.229	.860	.406	.232
Length of Meeting	27.769	.308	1.287	.220	.336
MAPS	479.513	.171	.642	.532	.175

Table 5

Partial Correlations Student Disability, Parent Education, Meeting Length, Participation in a MAPS meeting, on Percentage of Observed Active Participation Levels

Construct	<i>B</i>	<i>Standardized B</i>	<i>T</i>	<i>p</i>	Partial Correlation
Constant	94.520		51.954	<.001	
Learning Disabled	3.875	.522	1.944	.072	.461
Parents' Education	-.513	-.056	-.206	.840	-.055
Autism	3.395	.334	1.193	.253	.304
MAPS	1.116	.150	.520	.611	.138

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