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THE CONGRUENCE OF PARENT-TEACHER RELATIONSHIPS FOR STUDENTS WITH

AUTISM: THE ROLE OF TEACHER EFFICACY AND SCHOOL CLIMATE

MORGAN E. JOHNSON

150 Pages

Ecological Systems Theory (Bronfenbrenner, 1979) can be used as a framework to examine the importance of communication and collaboration among parents and teachers as both are important stakeholders in the field of education. Parent-teacher relationships are critical for autistic students particularly due to individualized education plans and the provision of special education services (IDEA, 2004). The current study examined relationships between parentteacher dyads in terms of congruence, the degree to which both parties are in agreement about their relationship. This study was unique in its mixed methods design, combining quantitative and qualitative data, as well as its use of dyadic data. Wave 1 acquired quantitative data regarding a predictive model, with school climate and teacher efficacy as the predictor variables and relationship congruence as the outcome variable. School climate, and parent trust in particular, was found to significantly predict parent-teacher relationship congruence, but teacher efficacy did not predict congruence. Additionally, Wave 2 acquired qualitative data further describing the parent-teacher relationship. Notable findings include key components of positive parent-teacher congruence (e.g., collaboration and realistic expectations), barriers to positive parent-teacher congruence (e.g., adversarial attitudes and access to services), and additional contextual themes (e.g., communication logistics). Implications for educators and school psychologists are discussed, including professional development and school wide practices.

KEYWORDS: parent-teacher relationships; congruence; autism; teacher efficacy, school climate

THE CONGRUENCE OF PARENT-TEACHER RELATIONSHIPS FOR STUDENTS WITH AUTISM: THE ROLE OF TEACHER EFFICACY AND SCHOOL CLIMATE

MORGAN E. JOHNSON

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

DOCTOR OF PHILOSOPHY

Department of Psychology

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THE CONGRUENCE OF PARENT-TEACHER RELATIONSHIPS FOR STUDENTS WITH AUTISM: THE ROLE OF TEACHER EFFICACY AND SCHOOL CLIMATE

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CHAPTER I: THE PROBLEM AND ITS BACKGROUND

Statement of the Problem

According to the Ecological Systems Theory (Bronfenbrenner, 1979), parents and teachers are important stakeholders in the education of students. Therefore, it is important for these stakeholders to communicate and collaborate for the betterment of the student. Parentteacher relationships are even more critical for students with disabilities, particularly due to individualized education plans and the provision of special education services (IDEA, 2004). The Individuals with Disabilities Education Act (IDEA) is a U.S. federal law that promotes an inclusive model of classroom participation and mandates that schools include parents as integral members of the IEP team. Collaboration with parents is pertinent for students with disabilities because successful interventions need to meet the needs of the child as well as the family (Fettig, Schultz, & Ostrosky, 2013). However, research suggests some gaps in effective collaboration, including parents not feeling like valued and equal members of the IEP team (Fish, 2006), and teacher reported barriers such as communication being overly time intensive (Josilowksi, 2019). Research also suggests that parents and teachers feel uncomfortable in their interactions, for example, feeling apprehensive regarding parent-teacher conferences due to poor communication and anxiety regarding interpersonal relationships (Minke & Anderson, 2003). The relationship between parents and teachers in the special education process can also be described as adversarial due to parents having to utilize due process (i.e., hire attorneys and advocates to help the family fight for services) (Wellner, 2012). Special education services, particularly for autistic students, is believed to be the "most litigated area in education" (Katsiyannis & Herbst, 2004, p. 106) and compared to families of students with other disabilities, families of autistic students are significantly more likely to use due process (Burke & Goldman, 2015). Additionally, in

analyzing special education litigation cases from 1993 to 2006, students with autism spectrum disorder (ASD) accounted for almost one third of total cases (Zirkel, 2011). Additionally, there is limited research utilizing dyadic data to examine the perceptions of both parents and teachers, important stakeholders in the education of all children, but especially those with disabilities such as autism spectrum disorder.

Acknowledging a gap in the literature regarding dyadic data and the importance of parent-teacher relationships for positive student-level outcomes (Garbacz et al., 2016), this study presents a mixed-methods approach to analyzing parent-teacher congruence in perceptions of their relationship, including teacher efficacy and school climate as predictor variables. Congruence was defined as agreement between two parties: in this case, agreement between parents and teachers regarding their interpersonal relationship, including aspects of communication, expectations, collaboration, and trust. This study utilized a mixed-methods approach, combining quantitative and qualitative data. Wave 1 included quantitative data regarding the relationship between school climate and teacher efficacy. Additionally, Wave 1 examined a predictive model, determining whether school climate and teacher efficacy predict parent-teacher congruence. Lastly, Wave 2 acquired qualitative details regarding key components of success, barriers, and changes to be made from interviews with parents and teachers who are classified as having a highly congruent relationship and a low congruence relationship. Overall, these findings help inform best practices regarding home-school collaboration, helping ensure parents and teachers are working together to support autistic students and their academic, behavioral, and social needs.

CHAPTER II: REVIEW OF THE LITERATURE

Autism Spectrum Disorder

According to the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition, Text Revision (DSM-5-TR), autism spectrum disorder (ASD) is a neurodevelopmental disorder organized into two core domains: (a) deficits in social communication and social interaction and (b) restricted and repetitive patterns of behavior, interests, or activities (American Psychiatric Association, 2022). The first domain, social communication and interaction, is divided into three symptoms: (a) deficits in social-emotional reciprocity, (b) deficits in nonverbal communication, and (c) deficits in developing, maintaining, and understanding relationships. The second domain, the presence of restricted and repetitive patterns of behaviors, interests, or activities, is comprised of four types of behaviors: (a) stereotyped or repetitive motor movement, use of objects, or speech, (b) inflexible adherence to routines and insistence on sameness, (c) abnormal fixated interests, and (d) hyperactivity or hyperreactivity to sensory input. The current prevalence rate for ASD is 1 in 44, with ASD being 4.2 times more common in boys than girls (Maenner et al., 2021).

The diagnostic criteria have changed drastically over the years, with the latest edition, the *DSM-5-TR*, combining four previously separate disorders (autistic disorder, Asperger's disorder, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified). ASD is viewed as a spectrum, in which symptoms and behaviors vary from person to person, ranging from mild to severe. Severity is broken down into three levels to assist with eligibility of services. Level 1 is defined as "requiring support," level 2 is defined as "requiring substantial support," and level 3 is defined as "requiring very substantial support" (American Psychiatric Association, 2022). Diagnoses are usually made during the preschool period (ages 2-

3), but noticeable deficits begin as early as age one (Mash & Wolfe, 2016). There are two methods to receive services for ASD: a medical diagnosis and educational eligibility (Burnette, 2012). A medical diagnosis is provided by a medical professional (i.e., doctor or psychologist) using the *DSM-5* (American Psychiatric Association, 2013) and is often used to receive outside services (i.e., private-pay services not provided by the school) such as Applied Behavioral Analysis (ABA) therapy. Symptoms must be impacting overall functioning, but this is to be interpreted broadly. Educational eligibility is determined by the school team when the concerns are impacting the student's learning and school experience (Burnette, 2012). The school team may use a variety of assessment tools to assess eligibility such as rating scales, classroom observations, and family interviews. ASD is one of the 13 categories included in the Individuals with Disabilities Education Act (IDEA, 2004) used to determine eligibility for special education services. It is possible for a student to have a medical diagnosis of ASD under the *DSM-5* but not qualify for educational services under IDEA. The opposite is also true (Burnette, 2012).

Language Preferences

This study recognizes the growing body of research examining the differences in identity first language (IFL; e.g., autistic person) versus person first language (PFL; e.g., person with autism). PFL is commonly used in professional settings and scholarly writing in order to emphasize the person over the disability. In contrast, IFL places the disability at the focus of an individual, as the disability is viewed as integral to the individual's identity (APA, 2019). A recent study analyzed language preferences across a variety of autism stakeholders. Results demonstrated that a majority of autistic adults preferred IFL, professionals were more likely to use PFL, and parents, family, and friends reported similar opinions regarding both PFL and IFL (Taboas, 2022). Given that the current study was formulated to reach a wide audience, this study

followed advice from the American Psychological Association Style Manual (2019), using PFL and IFL interchangeably to support and validate a wide audience of autistic stakeholders.

School Services

IDEA, amended in 1997 and renamed in 2004 [as The Individuals with Disabilities Education Improvement Act (IDEIA)], is a groundbreaking federal law that mandates equity in the education of students with disabilities, establishing their right to attend public schools. IDEA (2004) includes three key components: free and appropriate public education (FAPE), individualized education plans (IEPs), and least restrictive environment (LRE). FAPE requires all public educational services to be provided free of cost to families, including services for students with disabilities. IEPs are legal documents written for each child with a disability indicating present level of performance, goals and short-term objectives, progress and reporting requirements, services to be offered, general education involvement, and dates and times of services, to name a few (Gartin & Murdick, 2005). Lastly, LRE requires that children with disabilities be placed in the general education classroom to the greatest extent possible in order to learn alongside peers with and without disabilities (i.e., mainstreaming).

The increase in prevalence of ASD has led to an increase in demand for schools to provide services (Burnette, 2012). In fact, during the 2017-2018 school year 11% of students (age 3-21 years) who received services under IDEA were eligible under ASD (NCES, 2020). Mandell et al., (2005) documented the receipt of school services for individuals diagnosed with ASD versus other disabilities. In their sample 16.9% of children with other disabilities received school services, in contrast to 25.5% of students with ASD and 32.0% of students with Asperger's Disorder. These findings resulted in an odds ratio of 4.55, indicating students with ASD were 4.55 times more likely to receive school services than peers with other disabilities.

Various school services are provided in the domains of social, academic, and behavioral needs. Additional services such as speech therapy, physical therapy (PT), and occupational therapy (OT) also may be provided. Speech and language therapy was reported to be the most common service provided to students with ASD across all age groups (i.e., elementary – 85.2%, middle – 84.6%, and high school – 66.8%; Wei et al., 2014). Depending on need, students may also receive support from a paraprofessional. The number of school services varies across families and individual needs, but parents of school-age autistic children reported receiving between 3.65 – 4.67 services, on average (Wei et al., 2014). Services also differ with age as different needs become more apparent or goals are met. For example, research demonstrates a declining need for speech and language therapy and occupational therapy over time (Wei et al., 2014).

Family Involvement

Research has determined that family involvement leads to positive outcomes such as increases in academic achievement and social-emotional skills and reductions in problem behaviors (Garbacz et al., 2016). Parents and providers (e.g., teachers) are both important stakeholders in the success of children with ASD. ASD is a lifelong condition and thus individuals often need support over the course of their academic career and beyond (Garbacz et al., 2016). Family involvement is critical for families of children with ASD because of the importance of generalizability. Generalizability is defined as promoting what is learned in one setting to another setting (Autism Ontario, 2012). In the case of autistic students, it is critical that the skills taught in school translate to other settings such as home. For example, a student with ASD may work on tying their shoes in occupational therapy (Autism Ontario, 2012). The goal would be for this skill to not only be taught in the school setting, but also reinforced at home in order to maximize learning and generalizability across settings. It is also critical to use consistent

strategies across settings. Children often display similar behaviors across home and school. If parents and teachers are using different strategies to reduce maladaptive behaviors, then the child can become confused, and success may not be achieved. By working together to formulate common strategies towards the same goal, consistency is achieved, and optimal success can be obtained (Autism Ontario, 2012).

Research also demonstrates differences in parent satisfaction in school-based services for autistic preschoolers versus other IDEA (2004) disabilities. In particular, parents of children with ASD reported less satisfaction in the number of services received, amount of time spent in the special education setting, and amount of time spent with typically developing peers (Bitterman et al., 2008). This sense of dissatisfaction may be one reason parents of autistic children are more likely to utilize due process (Zirkel, 2011; Goldman & Burke, 2019). Due process is a process parents can utilize when disagreements arise between the family and the school. For example, parents may dispute educational eligibility, services to be provided, and placements (e.g., time in the general education classroom). Due process is intended to ensure the rights of FAPE and LRE. It is suggested that the best method to avoid due process hearings is to collaborate in order to reduce disagreements, resolve differences in opinion, and find solutions that adhere to the best interests of the child (Wiener, 2009).

Stakeholders

Ecological Systems Theory

Ecological Systems Theory was proposed by Bronfenbrenner (1979) as a framework to understand the interactions in a child's environment. He describes an individual at the center of their environment with five concentric circles surrounding them. These circles represent microsystems, mesosystems, exosystems, macrosystems, and chronosystems. Microsystems are

defined as the immediate environment with which an individual is directly exposed (e.g., family and school). A mesosystem is described as the interconnections between microsystems (e.g., interactions between parents and teachers). An exosystem is defined as institutions of society that indirectly affect an individual (e.g., parent's workplace or an individual's neighborhood/community). A macrosystem is defined as a larger cultural system that impacts an individual (e.g., government and the educational system). Lastly, the chronosystem analyzes events and transitions over time. Ecological Systems Theory (1979) is a framework commonly used in the field of school psychology, as it allows school psychologists to fully examine the environment of a child by analyzing all five systems plus changes over time (Burns, 2013). The proposed study attempts to analyze the microsystems of home and school by analyzing these systems in a mesosystemic manner, specifically by analyzing the relationships between parents and teachers of students with ASD.

Learning begins at home (Gestwicki, 2007). In fact, parents are often regarded as a child's first and most important teacher (National Head Start Association, n.d.). Head Start is a national early childhood program for low-income families created to promote school readiness. According to the Office of Head Start, school readiness is defined as "children possessing the skills, knowledge, and attitudes necessary for success in school and for later learning and life" (Illinois School Readiness Initiative, 2016). Prior to the onset of school, including pre-school programs such as Head Start, parents and caregivers have a critical role of helping children develop school readiness skills. For example, parents can help develop their child's language and literacy skills by reading to their child. Once children begin school, parents and teachers share responsibility in teaching children. On average, children are in school 6.5 hours per day for 180 days per year (U.S. Department of Education, 2008). Thus, in childhood, students spend a

significant amount of time in school. As a result, both teachers and parents are influential in teaching students academically, behaviorally, and socially. The interactions of these two sets of stakeholders are particularly important for students with disabilities where learning needs to be reinforced across settings or children may not be able to speak up for themselves (e.g., they are non-verbal or have difficulties remembering what homework assignments to complete).

Parents

Children live with and are raised by a diverse group of people, including parents (biological, step, adoptive, and foster), grandparents, legal guardians, and other family members. Acknowledging the diversity of children's home situations, the present paper refers to any primary caregiver/guardian as a "parent."

Parent involvement in education is a highly researched topic with important implications for student academic, behavioral, and social-emotional success (Garbacz et al., 2015).

Involvement is also shown to benefit parents, as parents can acquire ideas on how to support their child and become more involved with their child's schooling (American Federation of Teachers, 2007). Parental involvement differs across studies, but is most often comprised of advocacy, collaborative partnerships (e.g., mutual respect, trust, shared decision-making), homeschool communication, and school-based participation (e.g., volunteering) (Goldman & Burke, 2019). A literature review conducted by Goldman and Burke (2019) analyzed 37 studies and all four types of parent involvement with parents of school-age autistic children. Results demonstrated that higher levels of parental involvement were significantly related to increased satisfaction with school services (Burke & Goldman, 2015; LaBarbera, 2017; Renty & Roeyers, 2006; Slade et al., 2018). Additionally, a significant negative correlation was found between parent involvement and child age. To elaborate, parent involvement and satisfaction with

involvement (e.g., involvement during IEP meetings) decreased as children got older (Goldman & Burke, 2019). Another study found that parents of older children were least satisfied with their schools, in part due to less frequent home-school communication and parental initiation of communication (Woods et al., 2018).

Parental involvement is further emphasized for families of students with disabilities, as parents often view themselves as primary care coordinators because of the work they do with their child in the home setting (Carbone et al., 2010). Parents coordinate a plethora of services, including coordination between physicians and school (Carbone et al., 2010). Because of the crucial importance of parental involvement in service delivery, parents are considered integral members of the IEP team. IDEA (2004) ensures that parents have a legally mandated right to participate in all aspects of the IEP, including development and revision. Parents have a right to receive a copy of the IEP, including all written material, at least three days before a meeting in order for the parent to be a "fully-informed team member" (ISBE, 2020, p. 37). IEP meetings cannot be held without notifying parents and allowing them an opportunity to attend the meeting. If the time and date does not work for parents, parents have the right to request a different time and date (ISBE, 2020). Benefits of parent participation include school staff's increased understanding of the child and their environment, parent's increased understanding of the child's school setting, improved home-school communication, and increased likelihood of mutually agreed upon goals (Smith, 2001). Despite these legal safeguards, parents often do not feel like valued and equal members of the IEP team (Fish, 2006). Qualitative interviews have found that parents of autistic students feel as though their input is unwelcomed and that the IEP meeting is viewed by educators "simply as a formality" (Fish, 2006, p. 66). Parents also report viewing the meeting as a one-way exchange of information, with parents being informed about their child,

rather than collaborating to best assist the child (Garriott et al., 2000). Other negative interactions surrounding the IEP include parents feeling as though they have to fight for services, contact from the school solely for disciplinary purposes rather than a discussion of strengths, and a lack of prioritization surrounding ensuring parents fully understand the IEP process (Woods et al., 2018). Overall, parents are integral members of the IEP team and have a legal right to make decisions regarding their child's education. Despite IDEA's (2004) emphasis on parent-teacher collaboration, parents still report feeling inadequately included in the process, indicating an important area of reform (Azad et al., 2018; Esquivel et al., 2008).

Teachers

Teachers, including general and special educators, play an integral role in educating all children. General educators are prepared to teach students using curriculum and standards in the areas of reading, writing, science, history, and mathematics. They attend to the social, emotional, and academic needs of their students in a classroom that may or may not include students with disabilities. Due to IDEA (2004) and the importance of educating children in the least restrictive environment, more and more students with disabilities are receiving instruction in the general education classroom. Special educators possess specialized knowledge on the education of students with disabilities, designing accommodations, assisting with differentiation of instruction, utilizing behavior management strategies, and implementing evidence-based instructional strategies (American Academy of Special Education Professionals, 2006).

Additionally, special educators possess knowledge on disability law and the education system, often serving as case managers who lead the IEP team (Council for Exceptional Children, 2015).

Collaboration between these two types of educators in the general education setting is

recommended for student success based on the notion that each type of educator possesses specialized knowledge (Van Garderen et al., 2012).

Collaboration with parents is one aspect of a teacher's job that permeates throughout the child's entire schooling. For example, when writing an IEP, it is important to involve parents to help identify the purpose of behaviors, effective strategies to reduce problem behaviors, and students' strengths, weaknesses, likes, and dislikes (Fettig et al., 2013). It is also pertinent to understand the child's home environment in order to learn more about the student's needs (e.g., what is going on in the child's home life that may be impacting their behavior at school). In a previous study, 80% of the sample of general and special education teachers reported collaborating with parents (Johnson, 2020). Collaboration has been shown to have numerous teacher-reported benefits, including feelings of support (Lohrmann & Bambara, 2006) and increased morale (American Federation of Teachers, 2007). Collaboration can also increase student learning, by bridging the gap between home and school (Loughran, 2008). Activities can be shared to be completed at home, strategies can be used across settings, and material can be reinforced multiple times throughout the day, regardless of whether or not the child is in the school setting (Josilowski, 2019).

Despite the benefits of home-school collaboration, barriers exist. A qualitative interview study involving teachers of autistic children found that teachers reported home-school communication as time intensive (Josilowski, 2019). Teachers communicate in a variety of ways including phone calls, text messages, e-mails, communication notebooks, and extensive conversations. Scheduling difficulties can also arise, resulting in teachers needing to "make an extra effort to find time to communicate" (Josilowski, 2019, p. 3014). Other challenges include parents being in denial regarding their child's diagnosis and motivating parents to become more

involved in their child's schooling (Josilowski, 2019). Research has also found that teacher training programs and certification requirements do not prioritize parent involvement (Krizman, 2013; Shartrand et al., 1994). These teacher-reported barriers to home-school collaboration influence the relationship between parents and teachers, recognizing an area of continuous research and reform.

Parent-Teacher Congruence in Relationships

Many studies have examined the quality of parent-teacher relationships by focusing on one point of view (i.e., including either the teacher or the parent as the respondent). Although individual perceptions are important, relationships are a two-way street; and thus, in order to truly understand the quality of the relationship, it is advantageous to analyze the relationship based on perspectives of both stakeholders. Newer research has focused on the shared perceptions of parents and teachers (i.e., dyad research examining perspectives of both parents and teachers; Garbacz, et al., 2015; Minke et al., 2014) based on Bronfenbrenner's Ecological Systems Theory (1979). Shared perceptions and relational congruence are terms used to define the agreement between parents and teachers regarding their relationship, including sharing the same beliefs regarding the importance of their relationship and various aspects of their relationship such as communication and collaboration (Minke et al., 2014). Relational congruence is important because positive student-level outcomes are achieved when schools and families are in agreement about the needs of the child and the manner in which the child should be supported. For example, relational congruence is related to improved academic achievement (Sheridan et al., 2004), engagement with learning (Sheridan et al., 2004), and social competence (Iruka et al., 2011). In contrast, a lack of congruence marked by a mismatch in beliefs across home and school (i.e., incongruence) can have a detrimental impact on student learning,

including academic underachievement and concerns regarding mental health (Phelan et al., 1998). Overall, congruence assesses the degree to which two parties are in agreement. In the school system when working with students with disabilities, parent-teacher congruence is important. Parents and teachers need to be in agreement regarding IEP goals and communicate and collaborate effectively in order for the child to achieve positive student-level outcomes such as academic achievement and behavioral and social gains.

Dyad Research

Few studies have researched parent-teacher relationships using dyadic data, which allows us to examine shared perceptions and the impact both stakeholders have on student outcomes (Minke et al., 2014). A preliminary study assessed parent-teacher relationships by having parents and teachers of kindergarten students complete a three-item questionnaire about their relationship, including aspects of trust, communication, and agreement. Results demonstrated a correlation of .22 for parent and teacher perceptions of their relationship (Iruka et al., 2011). This correlation indicates a "fair degree of incongruence between parents' and teachers' views of the same relationship" (Minke et al., 2014), indicating the need for more dyadic data to further explore this relationship.

Only two studies to date have analyzed parent-teacher relationship congruence using dyadic data and the *Parent Teacher Relationship Scale* (*PTRS-II*; Vickers & Minke, 1995). These studies examined the quality of parent-teacher relationships by levels of congruence, defined as the level of agreement between parents and teachers regarding their interpersonal relationship. The *PTRS-II* includes aspects of communication, expectations, collaboration, and trust. Minke et al. (2014) analyzed a sample of 175 elementary school students who were engaging in Conjoint Behavioral Consultation (CBC), an ecological intervention that emphasizes

parent-teacher collaboration (Sheridan & Kratochwill, 2008). Congruence was defined by using three "exclusive and exhaustive" categories for the mean scores from the PTRS-II composite scale (Minke et al., 2014, p. 534). Positive congruence was defined by both parents and teachers reporting PTRS-II mean scores greater than or equal to 4.00 on the 5-point Likert scale. Nonpositive congruence was defined by mean PTRS-II scores below 4.00 for both parents and teachers. Lastly, incongruence was defined by parent and teacher PTRS-II mean scores falling into different categories of the 5-point Likert scale. Overall, 62.3% of the dyads were classified as positive congruent, 9.7% were nonpositive congruent, and 28.0% were incongruent (Minke et al., 2014). More positive student-level outcomes (i.e., teacher report social skills) were found for dyads classified as having a positive, congruent relationship. Results also found that parents who reported higher levels of communication between home and school were more likely to be classified as having a positive, congruent parent-teacher relationship; thus, demonstrating the importance of communication in developing positive congruent relationships (Minke et al., 2014). This study focused on parent efficacy (i.e., how parents feel regarding their ability to help their child learn), rather than teacher efficacy. The researchers hypothesized that teacher efficacy (i.e., how teachers feel regarding their ability to help students learn) may have an even greater impact on congruence than parent efficacy and recommended that future studies analyze the impact of teacher efficacy on parent-teacher congruence (Minke et al., 2014).

Garbacz, Sheridan, Koziol, Kwon, and Holmes (2015) also utilized the *PTRS-II* to analyze congruence in parent-teacher communication for parent-teacher dyads of K-3 children (i.e., 166 children and their parents and 74 general education teachers) involved in CBC. This study specifically used the Communication-to-Other subscale of the *PTRS-II*. Congruence was defined using a distance formula in which higher scores indicated more distance between parent

and teacher ratings (i.e., low parent-teacher congruence). Three types of congruence were calculated: high congruence (i.e., 1 SD below the sample distance mean), average congruence (i.e., sample distance mean), and low congruence (i.e., 1 SD above the sample distance mean). Results demonstrated that parent-teacher congruence regarding communication significantly impacted the effectiveness of CBC on student social skills, as reported by teachers (Garbacz et al., 2015). CBC was found to be more beneficial when congruence regarding communication was low initially, as CBC requires both stakeholders to engage in collaborative problem-solving and communicate often (Garbacz et al., 2015). Thus, the congruence of parent-teacher communication may be an important area of intervention, given the benefits it may have for student outcomes. Importantly, both of these studies analyzed congruence in a CBC sample, indicating the presence of a targeted intervention for behavioral concerns that promotes collaboration between teachers and parents. Congruence may differ with other concerns, such as academic concerns (Garbacz et al., 2015).

Teacher Efficacy

The concept of teacher efficacy is rooted in the work of Albert Bandura's social cognitive theory. Bandura (1977) defined self-efficacy as an individual's belief in their ability to perform to a certain level of attainment. Self-efficacy has important implications as it influences behavior, including how people feel, think, and motivate themselves. For example, someone with low self-efficacy may avoid a task, believing they are incapable of achieving success, while someone with high self-efficacy may be more likely to engage with the task, believing they have the ability to achieve success.

Teacher efficacy is defined as a teacher's belief in their ability to effectively teach and promote student engagement and learning (Tschannen-Moran & Hoy, 2001). Teacher efficacy

has important implications for student success, including academic achievement and student self-efficacy. Additionally, teacher efficacy influences the effort teachers put into teaching, their willingness to meet the needs of their students, their persistence in face of difficulties, their likelihood of referring students with difficulties for assessment to determine special education eligibility, and their commitment and enthusiasm for teaching (Tschannen-Moran & Hoy, 2001).

Teacher efficacy is comprised of many components, including education, experience, and support (Johnson, 2020). Support is particularly important to the analysis of parent-teacher relationships, as parents are a source of support for teachers. Since parents are important stakeholders in the education process, parents can be used as a source of support to better understand family goals, behavioral antecedents, effective strategies, and students' strengths, weaknesses, likes, and dislikes. A quality intervention fits the needs of the child as well as the family (Fettig et al., 2013) and thus, it is critical to consider the opinions of family members who assist in the implementation process. Furthermore, parental support has been linked to teacher efficacy. In a study conducted by Lohrman and Bambara (2006) teachers noted that parental feedback increases teacher efficacy by allowing teachers to feel reassured that parents believe they are doing a good job. Another study found that higher levels of teacher-efficacy were associated with more parental involvement (Krizman, 2003). Two different explanations were provided for this finding. First, it is possible that teachers are less hesitant to include parents when they are more efficacious. These teachers are confident in their teaching abilities and thus do not question their impact as a teacher. Second, teachers may view parents as assets to the educational process, leading to positive results in the classroom, in turn increasing teacher efficacy.

School Climate

School climate is a multi-dimensional construct describing the environment created by those who interact with, work in, and attend school (i.e., parents, teachers, principals, other school staff, and students; Loukas, 2007). One of the most all-encompassing definitions of school climate describes school climate as the "the quality and consistency of interpersonal interactions within the school community that influence children's cognitive, social, and psychological development" (Haynes et al., 1997, p. 322). According to Loukas (2007), school climate is comprised of three dimensions: the physical dimension (e.g., availability of resources and ratio of students to teachers), the social dimension (e.g., quality of interpersonal relationships and equitable treatment), and the academic dimension (e.g., quality of instruction). Climate may be experienced differently by different members of the school, indicating the importance of assessing multiple perspectives (Loukas, 2007). A supportive school climate is shown to have many benefits, including student academic achievement, student behavior, and emotional difficulties (Loukas, 2007). School connectedness is believed to be the mechanism linking school climate and student-level outcomes; a positive school climate can result in students feeling like they belong and are accepted by the school (Loukas, 2007). School-connectedness is particularly important for students with disabilities including autism, who may feel like they are treated differently by school staff and peers due to their disability. School climate also has important implications for teachers, as school climate has been shown to impact teacher retention and job satisfaction (Mattingly, 2007). Since school climate is a broad and multidimensional construct, there is no one instrument that fully captures all aspects of school climate (Loukas, 2007). Thus, studies operationally define school climate in different ways. This study operationally defines

school climate based on the social dimension discussed by Loukas (2007), including teachers' collective efficacy and components of trust.

Collective Efficacy

One key component of school climate is the relationships among teachers and other school staff, which has been described as professional teacher behavior by Hoy, Smith, and Sweetland (2002). Professional teacher behavior involves "mutual cooperation and support of colleagues" (Hoy et al., 2002, p. 42). Collective efficacy is a similar construct that includes several critical components. Specifically, collective efficacy involves communication, collaboration, shared responsibility, ability to create a positive climate, and support (Abedini et al., 2018). Collective efficacy is similar to teacher efficacy, but focuses on the collective school unit, rather than individual beliefs. Collective efficacy is defined as teachers' beliefs regarding the school's collective ability to influence student achievement and learning, describing relationships within the school as a whole (e.g., teacher to teacher and teacher to principal; Tschannen-Moran & Barr, 2004). Collective efficacy is also believed to be a component of and influenced by school climate and culture (Donohoo et al., 2018; Tschannen-Moran et al., 1998; Tschannen-Moran & Barr, 2004).

Teachers do not work in isolation, particularly when working with autistic students, as numerous school staff have key roles in teaching these students in a variety of domains (e.g., academic, behavioral, and social). Thus, collective efficacy is a critical component of school climate, affecting the manner in which school staff work together and collectively believe in their ability to impact student-level success. Collective efficacy impacts teacher behavior, including instruction, classroom management, and motivation (Tschannen-Moran & Barr, 2004); in turn, impacting student academic achievement (Donohoo et al., 2018; Tschannen-Moran &

Barr, 2004). Schools with high levels of collective teacher efficacy promote a culture of academic achievement regardless of barriers (e.g., disability status and low SES), challenge and support students, and promote collaboration across school staff and families (Tschannen-Moran & Barr, 2004). Collaboration and shared responsibility are critical aspects of teaching students with disabilities.

Trust

Trust is one of the foundational components of school climate, as trust impacts collaboration and positive relationships among those in the school community (Robinette, 2016). Trust is defined as "an individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open" (Hoy & Tschannen-Moran, 1999, p. 189). In the school system, trust is formed among many members, but two critical areas of trust include levels of trust between parents and teachers, and levels of trust between teachers and principals, colleagues, students, and parents.

Parent Trust

Trust between parents and the school is critical because parents need to trust that the school is acting in the best interests of the child for the 6.5 hours children are in school per day (Hoy & Tschannen-Moran, 1999). Even more trust is placed upon the school system when students have an IEP and require specialized services. Thus, parents of children of autism place trust in the school in multiple ways: trust that the school will properly implement services, trust that the school staff are qualified and appropriately trained to provide those services (Prizant, 2008), and trust that the school is working with the best interests of the child in mind. Trust is also important in ensuring the implementation of services across home, school, and community settings (Azad et al., 2018). Trust is integral to building positive relationships that are defined by

a "sense of mutual respect, collaboration, and a willingness to move forward as partners in the journey" (Prizant, 2008, p. 34). Teachers can build trust with parents in a variety of ways. For example, teachers can build trust by demonstrating loyalty to the child, rather than the school (Prizant, 2008). In this regard, teachers should be advocates for the children in their school, providing services for the betterment of the child. When families do not feel like loyalty lies with them, families may be more likely to seek out legal services such as due process in relation to eligibility for services and implementation of IEPs (Prizant, 2008). Additionally, teachers can share progress with parents on a regular basis, demonstrating that they are abiding by the IEP and dedicated to assisting the child in making meaningful growth (Prizant, 2008). Furthermore, trust can be acquired by ensuring that all voices are heard during IEP meetings, allowing parents to be actively involved with goals and decision-making (Prizant, 2008). Overall, schools that have a positive school climate encourage trust and collaboration among all members of the school team, representing an important aspect of parent-teacher relationships.

Collective Trust

Collective trust is comprised of faculty members' trust in the principal, colleagues, parents, and students. Trust held by faculty members is critical to a healthy school climate because teachers need to feel supported by other members of the school team. For example, teachers need to feel confident that principals will act in the best interests of the school staff, feel confident that colleagues will be there to support them in times of distress, feel confident that parents are a system of support, and feel confident that students value their educational experience (Forsyth et al., 2011). Research suggest that trust is pervasive in the sense that trust with one person in the school system positively influences trust with others in the school system (Hoy & Tschannen-Moran, 1999). For example, teachers who trust their principal are more likely

to trust their colleagues as well (Hoy & Tschannen-Moran, 1999). Therefore, trust and collective efficacy are significantly correlated (Gray, 2016); when collective efficacy is high, trust is also high (Forsyth et al., 2011). Collective trust is also related to overall school effectiveness, student achievement, and collaboration with parents (Gray, 2016; Hoy & Tschannen-Moran, 1999).

Overview of the Study

The study utilized a mixed-methods approach, combining quantitative and qualitative data. A strength of the mixed-methods approach is the ability to acquire different perspectives while allowing participants to share their voice (Shorten & Smith, 2017). Wave 1 consisted of quantitative data and Wave 2 consisted of qualitative interviews.

Overall, this study is important to the fields of psychology and education for a multitude of reasons. There are very few studies that include both stakeholders (i.e., parents and teachers) by utilizing dyadic data to understand relationships. Acquiring data from one stakeholder is important but does not provide a complete view of the relationship experienced between parents and teachers of the same child. This study also focused on relationships surrounding students with ASD. Collaboration in the autistic community is highly valued, presenting a unique relationship to be further explored. Additionally, personal experiences in the field of school psychology have demonstrated both positive relationships between stakeholders and strains in the relationship due to a respect for family wishes while also providing services that the school has determined to be most appropriate and reasonable given school capabilities. Furthermore, the research to date has yet to examine the impact of teacher efficacy on parent-teacher congruence as recommended by Minke et al., (2014), indicating a gap in the literature. The study utilized a mixed-methods approach to explain parent-teacher congruence and provide practical implications for improving home-school collaboration and communication.

CHAPTER III: WAVE ONE

Wave 1 involved the acquisition of quantitative data from dyads of parents and teachers of K-12 students with ASD. Data was acquired regarding parent-teacher congruence. Wave 1 also examined a predictive model, determining whether school climate and teacher efficacy predict parent-teacher relationship congruence.

Research Questions and Hypotheses

Research Question 1: What is the relationship between school climate and teacher efficacy?

Hypothesis 1: It was hypothesized that there would be a positive relationship between school climate and teacher efficacy.

Research Question 2: Does school climate predict parent-teacher congruence?

Hypothesis 2: It was hypothesized that school climate would positively predict parentteacher congruence (i.e., a more positive school climate predicts higher congruence)

Research Question 3: Does teacher efficacy predict parent-teacher congruence?

Hypothesis 3: It was hypothesized that teacher efficacy would positively predict parentteacher congruence (i.e., higher teacher-efficacy predicts higher congruence).

Method

Participants

Participants in this study were 37 parents and 37 teachers of students diagnosed with autism spectrum disorder (ASD). A child-level medical (i.e., *DSM-5-TR*) or educational (i.e., IDEA) diagnosis of ASD was required for participation.

Parent participants were recruited first from a variety of locations including various ASD treatment centers, parent support groups, snowball sampling, and word of mouth. At the end of the survey parents were asked if they knew of any other parents who might be interested in

completing this study. These parents were then either contacted by the researcher or the parent participant forwarded the study invitation. All participants were recruited via an informational flyer either sent via organizational listservs, email, personal Facebook accounts, or physically posted flyers. Written site permission was acquired for all participating organizations. Across all recruitment methods, a script was utilized outlining the details of the study, including the purpose of the study, incentive upon completion, and researcher contact information. Criteria for inclusion required that each parent participant be a parent of a K-12 student with ASD and currently reside in the United States. Once parent consent was obtained, the researcher then asked the parent for school-level contact information in order to contact the child's teacher and determine if they were interested in participating in the study. Recognizing that children are taught by a plethora of teachers, particularly in special education and past the elementary level, parents were asked to provide information about the child's primary teacher, which was defined as the teacher with which the parent has primary contact.

Teachers were then contacted via email with a script outlining the details of the study, including the purpose of the study, incentive upon completion, child ID (first letter of the student's first name and first three letters of their last name), and researcher contact information. A child ID was created by the parent and used to link parent and teacher data. Reminder emails were sent approximately one week following the initial email invitation. In sum, the researcher received 55 completed parent surveys. Of those 55 completed surveys, 48 teachers were contacted. Seven of the possible 55 teachers were not contacted. Three teachers were not contacted due to an inability to contact the teacher via email (e.g., the email bounced back) and four were not contacted due to duplicate teachers or parents, given that participants were only

eligible to participate once. In sum, the researcher received 37 completed teacher surveys. Thus, the teacher response rate was 77.08%.

Participants were asked to complete a demographic questionnaire. Parents were also asked to provide demographic information for their child. Overall, 91.9% of parents were female, 78.4% were White, and 91.7% were not Hispanic or Latino. 89.2% of the child sample was male, 81.1% were White, and 94.4% were not Hispanic or Latino. The child sample ranged in age from 6-18 years, with a mean age of 11.86 years. 89.2% of the child sample had both an educational and medical diagnosis of ASD, and 64.9% had Level 1 diagnoses (i.e., requiring support). 89.2% of the child sample attended a public school, 59.5% were in general education 80% or more of the day, and 59.5% received paraprofessional support. In regard to the teacher sample, 75.7% were special educators, 97.3% identified as female, 94.6% were White, and 94.6% were not Hispanic or Latino. Additional descriptive statistics are reported in Tables 1, 2, and 3 to provide more information about the parent, student, and teacher sample, respectively.

Measures

Parent-Teacher Relationship Scale (PTRS-II)

The *Parent-Teacher Relationship Scale-II* was developed by Vickers and Minke (1995) to assess the parent-teacher relationship. The scale is comprised of 24 questions with two subscales: *Joining* and *Communication-to-Other*. The *Joining* subscale is comprised of 19 items describing parent-teacher affiliation, support, shared expectations, and beliefs (α = .97; Vickers & Minke, 1995). The *Communication-to-Other* subscale is comprised of five items describing the sharing of emotions and information. (α = .86; Vickers & Minke, 1995). Item responses include a 5-point Likert scale (1- *almost never* to 5- *almost always*). Nine items were reverse coded (i.e., Q2, Q4, Q8, Q9, Q11, Q12, Q14, Q16, and Q19). Internal consistencies for the total

score have been found to be high across both parent and teacher reports (α = .93-.95; Minke et al., 2014). Two versions of the scale are available (i.e., parent and teacher version) with parallel items for both respondents. A composite score, averaging all 24 items, was created to assess the overall relationship for parents and teachers. Parents and teachers were asked to complete this scale. The internal consistencies for my parent sample were as follows: *Composite PTRS-II* (α = .94), *Joining* (α = .96), and *Communication to Other* (α = .88), demonstrating adequate reliability. The internal consistencies for my teacher sample were as follows: *Composite PTRS-II* (α = .81), *Joining* (α = .67), and *Communication to Other* (α = .89), demonstrating adequate reliability. When Question 4 was removed from the *Joining* subscale, the subscale Cronbach's alpha increased to .71. We did not remove any of the items from the *Joining* subscale because data analysis focused on the composite score rather than subscale scores.

Congruence was measured using a distance formula commonly used in dyad research (Cronbach & Gleser, 1953; Garbacz et al., 2015; Kenny et al., 2006; Osgood & Suci, 1952).

| Parent PTRS II Composite - Teacher PTRS II Composite |

With distance scores, higher scores indicate more distance, which equates to low parent-teacher congruence. Lower distance scores indicated higher congruence. Congruence distances scores ranged from .00 to 2.33, with a mean difference of .43. Correlation and regression analyses, to be discussed below, were based on the distance scores as a continuous measure of congruence.

Using recommendations from Cohen and Cohen (1983) and Garbacz et al. (2015), we also sought to calculate three types of congruence to determine relationship congruence for inviting participants for Wave 2: high congruence, average congruence, and low congruence. Previous research analyzed standard deviations from the mean. Due to average *PTRS-II* scores being quite high for the current sample (Parents = 4.44, Teachers = 4.64), the distance formula

was unable to be used in the same manner as Cohen and Cohen (1983) and Garbacz (2015). I found that subtracting the standard deviation from the mean resulted in a negative score. Because distance scores could not be negative, I was not able to use a negative value to define the congruence groups. Instead, I calculated the scores for the 25th and 75th quartile to use to define the congruence groups for Wave 2 invitations. Congruence distance scores < .1250 (i.e., less than the 25th percentile) were defined as high congruence. Congruence distance scores > .6042 (i.e., greater than the 75th percentile) were defined as low congruence. Scores between .1250 and .6042 were defined as average congruence. In sum, 9 dyads were determined to be in the low congruent group and 9 dyads were determined to be in the high congruent group.

Teaching Students with Disabilities Efficacy Scale (TSDES)

The *Teaching Students with Disabilities Efficacy Scale (TSDES)* was developed by Dawson and Scott (2013) to assess teacher (pre-service and in-service) self-efficacy for teaching students with disabilities. The framework of the TSDES was built upon an existing instrument, the *Teacher Self Efficacy Scale* (TSES; Tschannen-Moran & Hoy, 2001) and uses a 9-point Likert rating scale for consistency (1- *certain I cannot do* to 9- *certain I can do*). The scale is comprised of 19 questions and five subscales that define efficacy, which have demonstrated adequate reliability: *Instruction* ($\alpha = .88$), *Teacher Professionalism* ($\alpha = .84$), *Teacher Support* ($\alpha = .85$), *Classroom or Behavior Management* ($\alpha = .88$), and *Related Duties* ($\alpha = .78$) (Dawson & Scott, 2013). A composite score, averaging all 19 item scores, was created to assess teacher efficacy for teaching students with disabilities. Higher scores indicate higher levels of teacher efficacy. The internal consistencies for my sample were as follows: *Composite Efficacy* ($\alpha = .83$), *Instruction* ($\alpha = .90$), *Teacher Professionalism* ($\alpha = .78$), *Teacher Support* ($\alpha = .63$), *Classroom Management* ($\alpha = .89$), and *Related Duties* ($\alpha = .73$), demonstrating adequate reliability. When

Question 11 was removed from the *Teacher Support* subscale, the subscale Cronbach's alpha increased to .69. We did not remove any of the items from the *Teacher Support* subscale because data analysis focused on the composite score rather than subscale scores.

School Climate

A school climate composite variable was created by combining the following scales. We combined the following three scales to create a composite school climate variable based on the theoretical rationale described above and the overall design of the study. Individual scale composite scores were converted to z-scores and then averaged. I calculated Cronbach's alpha to assess the internal consistency of the composite measure using the three scales ($\alpha = .46$). Although the Cronbach's alpha for the three scales was somewhat low, we used the Spearman-Brown Prophecy formula to predict the alpha score if we were to have had more than three items. We analyzed the proposed alpha score with 21 items, which resulted in a Cronbach's alpha of .86. Thus, the reliability of the scale increased from .46 to .86, when considering the possibility of additional items. Given that what we consider to be good reliability was originally developed based on 20 to 30 items, .46 with 3 items appears to be a good level of internal consistency due to it leading to .86 with 21 items.

Trust Scales. The *Faculty Trust Scale*, also known as the *Omnibus T-Scale*, was created to test three dimensions of faculty trust: 1) trust in the principal, 2) trust in colleagues, and 3) trust in parents and students (Hoy & Tschannen-Moran, 2003). It assesses five components of trust including benevolence, reliability, competence, honesty, and openness. The survey is comprised of 26 items using a 6-point Likert scale (1- *strongly disagree* to 6- *strongly agree*). Five items were reverse coded (i.e., Q4, Q8, Q11, Q23, and Q26). Cronbach's alphas for the three subscales range from .90 to .98, and the scale has been used in both elementary and

secondary schools (Hoy & Tschannen-Moran, 2003). A composite faculty trust score, averaging all 26 items, was created, and used for analysis. Higher scores indicate greater levels of trust. The internal consistencies for my sample were as follows: *Composite Faculty Trust* (α = .94), *Trust in Principal* (α = .94), *Trust in Colleagues* (α = .91), and *Trust in Parents and Students* (α = .93), demonstrating adequate reliability.

The *Parent Trust in School Scale* (PTS-Scale; Forsyth et al., 2011) assesses the same five components of trust examined in the Faculty Trust Scale (i.e., benevolence, reliability, competence, honesty, and openness). The scale is comprised of 10 items that assess parent perceptions of school personnel and uses an 8-point Likert scale (1- *strongly agree* to 8- *strongly disagree*). The original version of the scale was used, but the items were later reverse coded for ease of presentation to ensure consistency of direction across scales (1- *strongly disagree* to 8- *strongly agree*). Higher scores thus indicate greater levels of trust. The scale is considered to have excellent internal consistency (α = .95; Forsyth et al., 2011). A composite parent trust score, averaging all 10 items, was created, and used for analysis. The internal consistency for the *Composite Parent Trust Scale* in my sample was α = .98, demonstrating adequate reliability.

The Collective Teacher Belief Scale. The Collective Teacher Belief Scale was created by Tschannen-Moran and Barr (2004) to examine collective efficacy, the ability of all school staff to work together to influence student outcomes such as achievement. The scale is comprised of 12 items ($\alpha = .97$; Tschannen-Moran & Barr, 2004) and two subscales: Instructional Strategies and Student Discipline. The Instructional Strategies subscale is comprised of 6 items assessing staff abilities to promote learning ($\alpha = .96$; Tschannen-Moran & Barr, 2004). The Student Discipline subscale is comprised of 6 items assessing staff abilities to establishing rules and responding to maladaptive behaviors ($\alpha = .94$; Tschannen-Moran & Barr,

2004). Items are rated using a 9-point Likert scale (1- nothing to 9- a great deal). A composite collective efficacy score, averaging all 12 items, was created, and used for analysis. Teachers were asked to complete this scale. Higher scores indicate stronger trust. The internal consistencies for my sample were as follows: *Composite Collective Efficacy* (α = .94), *Instructional Strategies* (α = .90), and *Student Discipline* (α = .92), demonstrating adequate reliability.

Procedure

Exempt determination was obtained from the Illinois State University Institutional Review Board (IRB-2021-40), followed by site permission for recruitment of parents of children with ASD through area organizations serving families of children with ASD. Specific sites were selected through professional connections to local organizations and an analysis of additional organizations throughout the state of Illinois and Central Illinois region. Informed consent was obtained from both parents and teachers as part of the online administration. All scales were administered via Qualtrics, an online, secure software used to disseminate, collect, and analyze data. Parent participants were invited first, with teachers contacted next. Both parties had to consent to participate in the study in order to be included in analysis. Compensation was provided to both parents and teachers. Parents were asked to provide an email address to receive compensation. Parents were compensated with \$15 Amazon gift cards upon completion of the study and verification of teacher information. Teacher information was considered verified based on a school email address and/or the ability to look up the teacher on the school website to confirm contact information. Parents were compensated regardless of teacher participation. Teachers were also asked to provide an email address to receive compensation through a separate Qualtrics survey. Teachers were compensated with \$15 Amazon gift cards upon completion of

the study. All gift cards were sent via email at approximately the end of each month.

Additionally, at the end of the Qualtrics survey, participants were asked whether they were willing to be invited for the second wave of the study involving individual interviews.

Results

Results from the surveys were analyzed using the Statistical Package for the Social Sciences (SPSS) software, version 28.0.

Research Question 1

Research Question 1 assessed the relationship between school climate and teacher efficacy. In line with research from Hoy and Woolfolk (1993), I hypothesized that a positive, reciprocal relationship would exist between school climate and teacher efficacy (i.e., climate affects efficacy and efficacy affects climate). A Pearson correlation was calculated to assess this research question, r(34) = .19, p = .281, and Hypothesis 1 was not supported as no significant correlation was found between school climate and teacher efficacy. The individual scales that comprised the school climate composite variable (i.e., parent trust, faculty trust, and collective efficacy) were also not significantly correlated with teacher efficacy as a whole or its subscales. See Table 4 for a correlation matrix and descriptive statistics across all composite and subscale measures.

Research Questions 2 and 3

Research Question 2 focused on whether school climate predicted parent-teacher congruence. I hypothesized that school climate would positively predict parent-teacher congruence (i.e., a more positive school climate predicts higher congruence). Research Question 3 focused on whether teacher efficacy predicted parent-teacher congruence. I hypothesized that teacher efficacy would positively predict parent-teacher congruence (i.e., higher teacher-efficacy

predicts higher congruence). A multiple regression analysis was conducted to determine the relationship between the predictor variables and the outcome variable. The outcome variable was the continuous parent-teacher congruence variable based on results from the PTRS-II and creation of the distance score. Higher scores indicate more distance, which equates to lower parent-teacher congruence. Lower distance scores indicate higher congruence. The predictor variables were teacher efficacy (i.e., TSDES) and the school climate composite (i.e., Faculty Trust Scale, Parent Trust in School Scale, and The Collective Teacher Belief Scale). The results of the multiple regression analysis found that school climate and teacher efficacy did not explain a significant proportion of variance in parent-teacher congruence, $R^2 = .13$, F(2, 33) = 2.44, p =.103. School climate significantly predicted parent-teacher congruence, $\beta = -.34$, t(33) = -2.03, p = .05. Teacher efficacy did not significantly predict parent-teacher congruence, $\beta = -$.08, t(33) = -.47, p = .641. Thus, Hypothesis 2 was partially supported, but Hypothesis 3 was not supported. School climate, as a whole, was also significantly correlated with congruence, r (35) = -.35, p= .03, but parent trust was the only subscale of the overall composite that was significantly correlated with parent-teacher congruence, r(35) = -.72, p < .001. As school climate and specifically parent trust increased, the distance between parent and teacher reports of their relationship decreased, indicating that congruence increased. Neither the teacher efficacy composite nor the subscales were found to be significantly correlated with parent-teacher congruence. Furthermore, congruence was only significantly correlated with parent variables (i.e., PTRS-II Parent Composite, PTRS-II Parent Joining, and Parent Trust Composite), but not teacher variables. Parents were the primary point of contact during recruitment, and thus it is possible that the congruence variable was assessing alternate constructs such as parent trust, joining, or parent dissatisfaction. See Table 4 for more details about the correlation matrix.

Composite scores on *PTRS-II* were 4.44 for parents and 4.64 for teachers. The *PTRS-II* uses a 5-point Likert scale, with higher scores indicating more positive perceptions. Overall, mean perceptions across both groups of respondents (i.e., parents and teachers) were quite positive, and 32% of total dyads had higher parent scores in comparison to teacher scores (see Tables 6, 8, and 10). Interestingly, previous research found a correlation of .22 for parent and teacher perceptions of their relationship (Iruka et al., 2011). The current study found a correlation of .23 between overall parent and teacher composite scores on the *PTRS-II*, further emphasizing a "fair degree of incongruence between parents' and teachers' views of the same relationship" (Minke et al., 2014).

Correlational analyses were also conducted to assess the relation between demographic variables and perceptions of congruence in the parent-teacher relationship. The overall congruence composite was found to be negatively correlated with parent gender, r (35) = -.34, p = .039, indicating that moms reported greater congruence (with female teachers) than dads. Parent gender was also found to be negatively correlated with parent composite responses on the PTRS-II, r (35) = -.35, p = .032, indicating that moms provided lower relationship ratings than dads. The sample of dads was small in the current study, as 91.9% of parents were female. Additionally, 97.3% of the teacher sample were female. Lastly, the following demographic variables were found to be correlated with teacher composite responses on the PTRS-II: 1) teacher type, r (35) = .55, p = .000, 2) parent age, r (35) = .42, p = .009, and 3) child age, r (35) = .34, p = .041, indicating that special education teachers provided higher relationship ratings than general education teachers and that teachers provided higher relationship ratings for relationships involving older parents and older students. No other significant correlations were

found between demographic variables of interest and outcome variables. See Table 5 for the correlation matrix.

Discussion

The purpose of Wave 1 was to acquire quantitative data from dyad pairs of parents and teachers of K-12 students with ASD regarding parent-teacher congruence, teacher efficacy, and school climate. To date, there are very few studies that analyze the perceptions of education stakeholders in a dyadic format to understand the complexity of the parent-teacher relationship (Garbacz et al., 2015; Minke et al., 2014). Although analyzing perceptions of one stakeholder is important, relationships are a two-way street; and thus, a more complete view of the relationship is acquired when analyzing perceptions from parents and teachers of the same child. This study is unique in that it expands the limited literature base on dyadic data, analyzing parent-teacher congruence, defined as the level of agreement between parents and teachers regarding their interpersonal relationship.

I examined three research questions. First, I examined the relationship between school climate and teacher efficacy. School climate was operationally defined by the combination of collective efficacy and components of trust (i.e., faculty and parent trust). Teacher efficacy was defined as a teacher's belief in their ability to effectively teach and promote student engagement and learning (Tschannen-Moran & Hoy, 2001). The results did not demonstrate a significant correlation between school climate and teacher efficacy; thus, my first hypothesis was not supported. This finding is not consistent with previous research, which has demonstrated a positive, reciprocal relation between school climate and teacher efficacy (Hoy & Woolfolk, 1993). One possibility for the lack of a positive, reciprocal relationship is due to the current study's operational definition of school climate. School climate is described as a multi-

dimensional construct comprised of three dimensions: the physical dimension, the social dimension, and the academic dimension (Loukas, 2007). The current study operationally defined school climate solely based on the social dimension, incorporating teachers' collective efficacy and components of trust. Previous literature, including the significant study discussed above, have defined school climate differently. Hoy and Woolfolk (1993) defined school climate based on the social dimension (i.e., institutional integrity, principal influence, consideration, and morale) and academic dimension (i.e., resource support and academic emphasis). Although the internal consistency of this empirical combination was adequate in our sample, this combination of scales has never been previously used and thus may have impacted the current findings. Furthermore, it would be beneficial for school climate to be further defined specific to the parent-teacher relationship, as school climate alone is such a broad and multi-dimensional concept and researchers have not reached a clear understanding of "which dimensions are essential in measuring school climate, and the divergence and disagreement in the literature are evident (Berkowitz et al., 2017)" (Berkowitz et al., 2021, p. 398). The current study found that parent trust was the only subscale of the school climate composite that was significantly correlated with parent-teacher congruence. These results indicate that perhaps researchers need to not look at climate so broadly, and instead focus on more specific constructs that comprise climate. Although school climate alone was significantly correlated with parent-teacher congruence (p < .05), parent trust, a component of school climate, was more strongly correlated (p < .001). Future research should continue to examine parent trust as a significant component of school climate, as building trust between parents and the school leads to increased parent involvement (Adams & Christensen, 1998), and "parental involvement is considered an essential element of a school's climate" (Berkowitz et al., 2021, p. 395).

Second, I tested whether school climate (and teacher efficacy) predicted parent-teacher congruence. I found that the overall model was not significant. However, I did find that school climate individually predicted parent-teacher congruence. Thus, my initial hypothesis that school climate would positively predict parent-teacher congruence (i.e., a more positive school climate would predict higher congruence) was supported. Trust is one of the foundational components of school climate, as trust impacts collaboration and positive relationships among those in the school community (Robinette, 2016). Parent and faculty trust were included as components of school climate, but as discussed above, parent trust was the only subscale of the overall composite that was significantly correlated with parent-teacher congruence. Congruence, in general, also was only significantly correlated with the parent variables rather than teacher variables indicating our definition of congruence may have been skewed towards parent perceptions and more adequately capturing other constructs of interest such as parent trust, joining, and parent dissatisfaction. The significance of these findings is integral to an understanding of parent-teacher relationships due to the varying nature of school climate as a whole. Many children attend at least three schools during their K-12 education: elementary school, middle school, and high school. While this experience may differ for some students due to local education norms (e.g., some small towns house K-12 in one building), a majority of students and families will experience different perceptions of school climate across a variety of schools. These perceptions can also vary across each year of schooling with new teachers. Trust is broad in the sense that parents may have different feelings of trust towards their child's primary teacher versus the school system itself. Additionally, teachers may feel trust in the parent-teacher relationship, but not with other school staff, including fellow teachers and administration. The current study's definition of trust focused on the here and now. Parents were

asked to rate their feelings about their overall trust in their school, examining beyond their perception of their student's teacher, but their overall view of the school as a whole, including broader school practices. The faculty trust scale, in comparison, focused on trust in principal, trust in colleagues, and trust in students and parents. The school climate composite scale was also comprised of collective efficacy, the belief teachers have in their ability to work together as a school unit to impact student-level success. Collective efficacy, as an individual subscale, was not found to be significantly correlated with parent-teacher congruence. The importance of these findings as a whole point to parent trust as the most significant subscale within the school climate composite variable. Parent trust was found to be a key predictor of parent-teacher congruence. As school climate, and specifically parent trust increased, the distance between parent and teacher reports of their relationship decreased, that is, congruence increased. In fact, if the predictive model was assessed using solely parent trust, rather than as part of a broader school climate variable that also included faculty trust and collective efficacy, the significance of the predictive relationship dramatically increases ($\beta = -.73$, t(34) = -6.20, p < .001). This finding is important because it further adds to the literature base on parent trust as it relates to school climate. Definitions of school climate have been marked by disagreement across many researchers.

Students with autism demonstrate a variety of challenges throughout their schooling, including academic, social, and behavioral concerns. For many autistic students, school is difficult and perhaps not their favorite place to be. In order to target deficit areas and focus on student strengths, parents and teachers need to collaborate and find ways to make school meaningful for students. Previous research supports the notion that parent trust is positively and significantly correlated with parental involvement (Santiago et al., 2016). Interestingly, the

researchers found this to be true for parent trust in teacher, but not parent trust in school (Santiago et al., 2016). The current study responded to this gap in the literature by analyzing parent trust in school, more broadly. Parent trust in school, one subscale of the school climate composite, was found to positively predict parent-teacher congruence. Congruence as a whole, indicates a certain level of involvement as parents and teachers must collaborate in order to have a shared and equal understanding of where the student is academically, socially, and behaviorally. Other researchers have also found a link between parent trust and collaboration (Adams & Forsyth, 2007; Hoy & Tschannen-Moran, 1999). Adams and Forsyth (2007) stated, "when trust and collaboration are present, parents and school personnel are more inclined to work together, not against each other, to achieve desired objectives" (p. 21). By definition, trust is marked by five key components: openness, honesty, competence, reliability, and benevolence (Hoy & Tschannen-Moran, 1999). Those five components mean that trust lends itself to collaboration. Collaboration requires an openness to share information, honest parties who are open to accepting responsibility and making appropriate changes, competent staff who abide by special education law, reliable communicators, and benevolent people whose main goal is to aide in student success. When trust is present in the parent-teacher and parent-school relationship, collaboration becomes easier. In turn, when collaboration is present in the parent-teacher relationship, congruence is more likely because parents and teachers are in constant communication, aiding towards shared perceptions and beliefs. Future research should examine the differences between parent trust in teacher and parent trust in school as it relates to parentteacher congruence. These findings would add to an overall understanding of special education.

Third, I tested whether teacher efficacy predicted parent-teacher congruence. Teacher efficacy was defined as a teacher's belief in their ability to effectively teach and promote student

engagement and learning (Tschannen-Moran & Hoy, 2001). The research to date has yet to examine the impact of teacher efficacy on parent-teacher congruence as recommended by Minke et al. (2014), indicating a gap in the literature. The literature pointed to teacher efficacy as a significant predictor of parent-teacher congruence due to previous research finding an association between higher teacher efficacy and increased collaboration with parents (Roll-Peterson, 2008) and overall parental involvement (Krizman, 2003). The PTRS-II, which was used to create the congruence variable, is comprised of two subscales: *Joining* and Communication-to-Other. The Joining subscale described parent-teacher affiliation, support, shared expectations, and beliefs, and the *Communication-to-Other* subscale described the sharing of emotions and information. The overall PTRS-II Composite score for teachers was found to be significantly and positively correlated with teacher efficacy. Additionally, the PTRS-II Communication-to-Other subscale from teacher reports was also significantly and positively correlated with teacher efficacy. These findings are consisted with prior research demonstrating a positive association between teacher efficacy and communication (Azad et al., 2021; Ozkan et al., 2014). Regardless of significant correlations between the PTRS-II and teacher efficacy, a significant predictive relationship was not found between teacher efficacy and parent-teacher congruence. One possibility for the lack of findings is the manner in which congruence was assessed. Congruence is largely understudied. Of the few studies that have examined congruence, both have used different statistical methods to calculate congruence (Garbacz, et al., 2015; Minke et al., 2014). The method used in this study was based on empirical grounds, but the cut scores were specific to this data. It is possible that the manner in which congruence was assessed had some bearing on the current findings. Future research should continue to examine teacher efficacy and parent-teacher congruence in order to further assess their relationship.

Furthermore, the efficacy scale used in the current study has yet to acquire a large literature base (TSDES; Dawson & Scott, 2013). Newer scales have more recently been developed that focus specifically on teaching students with autism, rather than disability more broadly [i.e., Teacher Self-Efficacy for Students with Autism Scale (TSEAS; Love et al., 2019)]. Future research should examine the efficacy of these newer scales in conjunction with parent-teacher congruence.

In sum, the most important result from Wave 1 is in regard to research question two, which found that school climate significantly predicted parent-teacher congruence. School climate was a composite variable comprised of parent trust in schools, faculty trust, and teachers' collective efficacy. Interestingly, parent trust was the only subscale of the school climate composite that was significantly correlated with parent-teacher congruence, demonstrating parent trust as a significant predictor of parent-teacher congruence. Future research should continue to examine parent trust in order to aid teachers and schools in creating actionable ways they can improve the trust parents have in their child's schooling, perhaps also facilitating positive parentteacher relationship congruence. Furthermore, it is pertinent to examine the differences in dyads in terms of both race/ethnicity and age. Two dyads in the low congruence group differed in terms of race and ethnicity. No significant correlations were found in the current sample between race/ethnicity and congruence/PTRS-II scores, but previous research has examined cross-cultural collaboration, including cultural differences and challenges (Agboka, 2018). Dyads in the high congruence group were also more similar in age, in comparison to the low congruence group, and there are a variety of generational differences in the teaching profession that may impact congruence (e.g., technology). Both parent age and child age were found to be significantly positively correlated with teacher composite responses on the PTRS-II, meaning that teachers

provided higher relationship ratings when describing relationships with older parents and older students. Future research should examine the manner in which cultural and generational (i.e., age) trends and the patterns of similarity and difference impact parent-teacher congruence.

CHAPTER III: WAVE TWO

Wave 2 consisted of qualitative interviews with a subsample of parents and teachers who participated in Wave 1. Qualitative interviews were conducted to obtain a deeper understanding of the parent-teacher relationship. One of the hallmark benefits of qualitative research is allowing researchers to answer "how" and "why" questions that are not easily transferable to quantitative research questions (Cleland, 2017). A combination of quantitative and qualitative research is described as a mixed-methods approach and provides a more complete picture of the construct of interest (Kelle, 2006). Numerous studies have conducted qualitative interviews with parents and teachers, separately, regarding their home-school relationship, identifying barriers to communication and satisfaction regarding communication (Josilowski, 2019; Spann et al., 2003). However, few studies have examined the perspectives of both stakeholders. The available research analyzing parents and teachers found that both stakeholders want similar things with regard to their interactions, including an active and collaborative partnership (Azad et al., 2018). Importantly, parents and teachers did not appear to recognize how their wants regarding ideal parent-teacher interactions were consistent with each other (Azad et al., 2018). Thus, more research needs to be conducted in this area, particularly with reference to relational congruence.

Research Questions and Hypotheses

Research Question 1: If congruence and a positive relationship exist, what are the keys to success? What are these dyads doing that is indicative of success?

Hypothesis 1: I sought qualitative details describing key components of positive parentteacher congruence. Research Question 2: If an incongruence or low congruence in the parent-teacher relationship exists, what changes need to be made in order to get these two important stakeholders on the same page for the betterment of the child?

Hypothesis 2: I sought qualitative details describing the obstacles leading parents and teachers to incongruent and low congruent relationships.

Method

Participants

Wave 2 consisted of conducting individual qualitative interviews with a subsample of parents and teachers. First, I determined which participants fell in either the low congruence or high congruence group from Wave 1. Nine dyads were determined to be in the low congruent group, and 9 dyads were determined to be in the high congruent group. Then, I confirmed which of these participants reported they were interested in being contacted about a follow-up interview. In the high congruent group, all 9 parents and 3 teachers had agreed to be contacted about Wave 2. In the low congruence group, 7 parents and 3 teachers had agreed to be contacted about in Wave 2. From there, I selected 12 participants, 6 teachers and 6 parents from both the high congruence and low congruence groups. If dyad pairs agreed to participate, I contacted those individuals first. If I did not have dyad pairs, I randomly selected participants. I also invited an additional parent participant from the high congruence group due to the dyad pair being highly congruent but having a mean PTRS-II score in the middle range of the 1 to 5 Likert Scale, thus demonstrating average thoughts regarding their relationship despite high congruence. I contacted 13 total participants to invite them to participate in Wave 2. All 13 participants agreed to participate: 7 from the high congruence group (4 parents, 3 teachers) and 6 from the low congruence group (3 parents, 3 teachers). This sample size was chosen based on research

finding data saturation within the first 12 interviews, indicating the stability of themes at this sample size (Guest et al., 2006). See Tables 6 and 8 for more information regarding dyads from Wave 1 and participants in Wave 2. See Table 10 for information regarding dyads identified as having average congruence.

Of the 13 participants, 92% were Female, 100% were White, and 85% identified as not Hispanic. Of the 6 teachers interviewed, 100% were special educators in public schools. The interviewed teachers taught across all grade levels (i.e., 17% elementary school, 17% middle school, and 67% high school). The children of the parents interviewed were 86% Male, 86% White, 86% not Hispanic, and spanned all three ASD support levels (i.e., 71% Level 1, 14% Level 2, and 14% Level 3). See Tables 7 and 9 for demographic information regarding all participants.

Measures

Teacher Interview Questions

- 1. Tell me about your relationships with parents of the children with autism you teach?
- 2. What factors lead to your current relationship with your student's parent(s)?
- 3. What are some barriers to maintaining a positive parent-teacher relationship?
- 4. How does this relationship differ from relationships you have had with other student's parents?
- 5. What do you think is an ideal goal for parent-teacher interactions?
- 6. When and how do you communicate with parents?
 - a. Frequency, method, and purpose of communication?
- 7. Is there anything else you wanted to share, but did not get the chance?

Parent Interview Questions

- 1. Tell me about your relationship with your child's teacher(s)?
- 2. What factors lead to your current relationship with your child's teacher?
- 3. What are some barriers to maintaining a positive parent-teacher relationship?
- 4. How does this relationship differ from relationships you have had with your child's other teachers?
- 5. What do you think is an ideal goal for parent-teacher interactions?
- 6. What kind of contact do you prefer from teachers?
 - a. Frequency, method, and purpose?
 - b. In what circumstances do want communication from teachers?
 - c. In what circumstances do you wish you were not contacted by teachers?
- 7. Is there anything else you wanted to share, but did not get the chance?

Procedure

Potential participants were contacted via email with a script outlining the details of the study, including the purpose of the study, online nature of the interview, and researcher contact information. Participants were reminded of the study via email and received a copy of the consent form in advance for their review. Verbal consent for Wave 2 was obtained at the time of the interview, and individual interviews were conducted and recorded online via Zoom.

Interviews ranged in length from 20 – 57 minutes, with an average length of 36 minutes.

Participants were compensated with \$25 Amazon gift cards upon completion of the interview.

All gift cards were sent via email at the end of each month. See Figure 1 for project timeline.

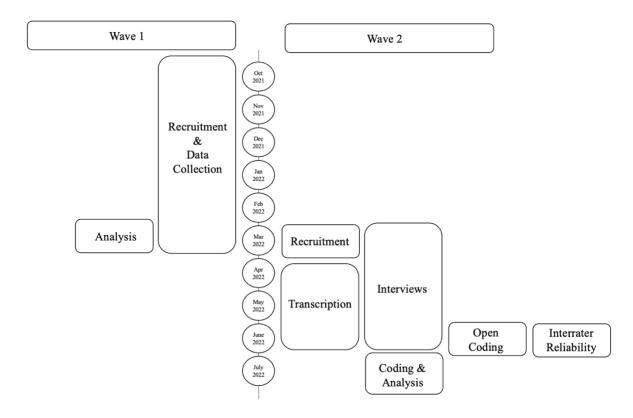


Figure 1. Project Timeline

Data Analysis

All interviews were audio recorded via Zoom and then transcribed. Rough drafts of the transcriptions were obtained using the Pro version of Otter.ai, a speech to text transcription service. Once rough drafts were obtained, a trained undergraduate research assistant listened to each recording and edited the transcripts to verify the accuracy of the text. The interviews were transcribed in Microsoft Word clean verbatim, indicating they were lightly edited for readability. To elaborate, the transcription maintained the meaning of the spoken words, without the added distractions of filler words or inaudible speech. Identifiable features, such as names of people or schools, were also removed from the text to maintain confidentiality. These features were rewritten in a generic fashion using brackets; for example, [Child Name] or [School].

The qualitative interviews were coded using grounded theory (Strauss & Corbin, 1998) using MAXQDA Plus Academia, a qualitative data analysis software. Coding was completed by

a second trained undergraduate research assistant and me. Reliability of coding was established through an iterative process of defining codes and categories. Both coders started by examining the same three interviews, reading each response, outlining main ideas, and then organizing the main ideas based on common themes that emerged across participant responses. Three interviews were chosen due to research advocating a subset proportional to the full data by 10-25%, and three of 13 equaling 23% of the larger data set (O'Conner & Joffe, 2020). Upon completion of the three interviews, the two coders met to discuss the themes that were derived from those three interviews. They worked together to discuss their derived themes and created a coding manual for future interviews. After creating the coding manual both the undergraduate research assistant and I re-coded the same initial three interviews to establish coding reliability. Inter-rater reliability of 72% was achieved. Differences in coding were related to the repeated coding of the same Level 1 or Level 2 code across the same coding paragraph or clarification needed regarding the definition of codes. After consultation, including clarifying, editing, and adding additional codes, the researcher and coding assistant reached an inter-rater reliability of 100%. Although there is "no universally accepted threshold for what indicates acceptable reliability" (O'Conner & Joffe, 2020, p. 9), researchers often aim for interrater reliability at or above 80% (Miles & Huberman, 1994). Given that 100% inter-rater reliability was achieved after reclarification of themes across the first three interviews, the undergraduate research assistant was then responsible for coding the remainder of the 10 interviews. The researcher and undergraduate research assistant met throughout the coding process to discuss the coding segments, including any difficult segments, to ensure reliability and consistency of coding. See Appendix A for the frequencies of the Level 1 and Level 2 codes for all thirteen participants.

Results

Research Question 1

Research Question 1 assessed the key components of positive parent-teacher congruence, including interpersonal relations, teamwork/collaboration, realistic expectations, and appreciation.

Interpersonal Relations

Interpersonal relations encompassed the wide variety of interpersonal skills reported by both parents and teachers as promoting a positive working relationship, including positivity, respectfulness, openness to communication, willingness to share information, ability to constructively take feedback, understanding the other person's point of view, honesty, transparency, and rapport building. In regard to honesty, one teacher stated, "I want to feel that they can be honest with me about what they're struggling with or what they're seeing at school or hear what they think is working, but I also want to be able to be honest with them too about the things that are going on with their student" (Teacher in High Congruence Group). A parent participant agreed and also discussed the importance of feedback stating, "I think open communication is key. I think that a willingness to share information both ways and take feedback when we have feedback. I mean, sometimes we know more what's going on with our kids. Sometimes they know what's more going on with my kid. And I think it's helpful on both sides. Because honestly, whatever's happening in the classroom, it comes home too" (Parent in High Congruence Group). Furthermore, another teacher reported not only on her willingness to take individual feedback, but also feedback about the school as a whole. She discussed sending anonymous surveys at the end of every year "so that if there's anything I need to change, but not just me, if it's a school... if they want to say something about you know the librarian or some

constructive criticism about the lunchroom and how we can handle that differently for our students who have sensory issues or whatever, then I can print those out and give them to my administrator and say here are the things I'm going to work on ... but I at least feel like if there's that parent that's feeling frustrated about this one thing that happened in October, not even with me, but with somebody else... before they leave the school, I want them to know that they always have a chance to say whatever they needed to say" (Teacher in High Congruence Group).

In regard to rapport building, one teacher stated "the rapport I build with my students is a huge factor because I first go to the parents before I go to the students. In the summer, I send a survey to the parents about building rapport with the kid. What is your kid like? What is their favorite food? ... What are those TV shows that they are watching?" (Teacher in High Congruence Group). The same teacher also stated, "I think the thing that I do feel that I do well, is build relationships. I'm not just picking up the phone to call and talk about this one kid. I also know their sister's name. And I know that that sister went is going to prom this weekend. So, when I talk next week to this mom, I'm going to ask how sister's prom was, and when she's so excited, and the relationship building makes the communication good or bad or challenging or joyful, whatever the communication has to be so much better and easier."

Teamwork/Collaboration

When asked to describe ideal parent-teacher interactions, a majority of participants described the theme of teamwork and collaboration. Participants discussed the notion of "it's not us against you... make it more of a partnership," (Teacher in High Congruence Group) and "we're all on the same team" (Teacher in Low Congruence Group). A key part of this teamwork is acknowledging that both parents and teachers are experts in some capacity on this child and the importance of working together towards a common goal, aiming for the child to be "safe and

secure and loved, and cherished, and learn" (Teacher in High Congruence Group). One teacher stated, "I think from both sides, feeling the expert on this kid in these two different parts of their world, and when we can kind of come together then that's going to be the most effective way to just help them develop as far as they can in life or reach their goals, whatever that may be. But an idea of we're going to work together for this kid's success" (Teacher in Low Congruence Group). Similarly, another teacher elaborated on the idea of experts and importance of supporting both the home and school environment, stating "we all have knowledge that maybe the other ones don't have, and we need to share that and utilize it together instead of thinking that I am all I am all-knowing and you're not" (Teacher in High Congruence Group). Furthermore, another teacher stated, "their parents play such a role in their success in the classroom, whether it's just with communication back and forth, because the student can't always do it independently, or working at home on homework, and parents needing to be able to send a quick text or a phone call, even in the evening and saying, 'wait, what am I supposed to do on this social studies assignment? Help me to figure it out, because my kid doesn't remember,' or 'my kid can't verbalize what really needs to be done" (Teacher in High Congruence Group). Importantly, parent participants agreed with the teacher sentiments stating, "if the child fails, then to me, you all fail because something is wrong... I guess it's not about me against the teachers, the school or their school against me, the common goal is this student being the best that he can be with all the resources that we have" (Parent in High Congruence Group). In sum, both parents and teachers reported the critical need for parents and teachers to work together for the betterment of the child, recognizing the integral knowledge each party has and aligning practices across home and school to increase continuity and promote success.

Realistic Expectations

Another important theme that arose was the idea of having realistic expectations not only in regard to the individual student, but also with regard to parent and teacher interactions. For communication practices, parents reported, "it doesn't have to be daily" (Parent in High Congruence Group) and "if I contact a teacher at the end of the day, I am certainly not expecting them, unless it is an emergency, like something horrible has happened, which it hasn't. I'm not expecting them to spend their evening emailing me. That's their time" (Parent in High Congruence Group). One parent even stated, "I don't want to demand more from teachers than what is already demanded of them" (Parent in High Congruence Group). Teachers also reported how realistic expectations regarding student behavior can be instrumental in creating positive parent-teacher relations. For example, one teacher stated, "they're always wanting to help and ... they are realistic, they'll say 'we know when he's upset, he might get physical and here's what helps at home'... so even though they know things go wrong, they've just been awesome.

Because they will acknowledge it and say, we know this can happen and this and this is what could help you in the future" (Teacher in Low Congruence Group).

Appreciation

Appreciation was defined as appreciation for what the other party has to offer and the work they do. Appreciation was an important theme across my parent interviews because it helped build a positive relationship between parents and teachers and ultimately resulted in greater success for the students. One parent reported the appreciation she had for her child's teacher taking the extra time to talk over the IEP with her ahead of the IEP meeting, truly making the IEP a team approach. Another parent reported appreciation for the specialized knowledge the teacher has on some of her son's medical conditions outside of autism. This specific teacher was

reported to have gone "above and beyond" to communicate blood glucose levels and ensure his health and safety outside of academic and behavioral goals (Parent in High Congruence Group). Another parent reported appreciating "the honesty. I don't sugarcoat it... he has a temper. He doesn't have a lot of patience. He has a very colorful vocabulary. And impulsivity is a problem. So, I appreciate that" (Parent in High Congruence Group). The same parent reported ending all communication with, "I appreciate what you're doing. I appreciate your understanding of him, or that you reached out to me, I never leave an email without I'm thankful and grateful for what you are doing. And I do appreciate it because I could not do what you do." Lastly, a different parent stated, "we're glad that he's able to go to school 8 hours a day in a place that can accommodate him" (Parent in Low Congruence Group). Ultimately, all of these parents reported appreciation for their child's teachers, including some of the ways they go above and beyond to provide their child with the opportunity to learn and grow. One teacher also noted feeling appreciated by her student's parents stating, "they're very appreciative" (Teacher in Low Congruence Group).

Research Question 2

Research Question 2 assessed the obstacles leading parents and teachers to incongruent and low congruent relationships. Multiple barriers are discussed below, including multiple students and teachers, technology, adversarial attitudes, transition anxiety, lack of information, response time, inexperienced teachers, and complex concerns. Importantly, in some cases, these barriers are overcome to achieve high congruence in the parent-teacher relationship. Thus, although barriers are present and recognized in the relationship, there are ways in which parents and teachers can overcome these barriers to their relationship and achieve congruence.

Adversarial Attitudes

By definition adversarial is characterized by conflict or opposition. At times this conflict can result in hostile relations, and thus was described as a critical barrier to parent-teacher relationships. This code encompassed a variety of adversarial attitudes, including having an overall negative view of or lacking trust in the school system. One parent summed up an adversarial attitude as going into an IEP meeting and wanting to fight. Importantly, not all of the participants experienced adversarial attitudes firsthand, but it was still discussed among both parents and teachers as a critical barrier to maintaining a positive relationship.

One theme that arose was the feeling of being lied to. One parent, who later became a paraprofessional, reported taking an advocate class to learn more about the IEP process, only to find out her "first administrator lied to [her] in the meeting. [She] didn't realize it until [she] was working in the school. [She] was like, oh, well, that's, that's not true." (Parent in High Congruence Group). This parent reported feeling lied to about the school not being able to offer specialized transportation for her child. She was told that transportation could not be obtained, although she later learned the school was legally required to do so per IDEA (2004). Another parent expressed the same sentiment in regard to the school refusing to do testing. A year later she learned the school "can't actually refuse to do testing" (Parent in High Congruence Group). Another parent theme was the idea of a lack of partnership. One parent stated, "we're on two sides of the fence. I feel like some teachers really want to embrace it and they want to be like a partner, and then other people look at it as intrusive when you're asking questions, and you kind of become the enemy a little bit. Like, it's like you're the person trying to hold them responsible for a plan that they don't really have time for" (Parent in High Congruence Group). The same parent also reported that it was hard "to be in a place where your kid was literally getting

belittled by the teacher, you're like, it's one thing for her to struggle with the students and all that, we knew socially she was going to struggle, but it was hard to have the person in charge of the room being the one that was kind of the bully."

Teachers also reported prior experience with adversarial attitudes from parents. One teacher reported parents being defensive or making the teacher feeling solely responsible for certain things. Defensiveness particularly around behavioral concerns was reported to "not allow for open problem solving" (Teacher in Low Congruence Group). This same teacher reported that she has "seen walls come up. So, if there's a problem, if there's an issue, if there's a disciplinary issue or behavioral problems" or "interactions or meetings where the parents perceive the way the school is kind of coming at them as being very negative. Then I think that that open communication definitely, and relationship building can get pretty damaged." She reported seeing situations where school staff have acted in a way that has come across negatively, while also reporting situations where parents are "extra sensitive to it." Importantly, she also reported that regardless of her personal relationship with her students' parents, adversarial attitudes can still be a barrier "if there have been bumps in the road or poor relationships at the earlier grades." She stated, "I have hit on that before where I could tell that there's a barrier, I can tell there's a wall up. And there's not a... I don't know, almost like a suspicion or like a, like not really trusting the school. Not necessarily me personally, I don't I haven't generally had any reason to believe that it was a personal issue. But more of just I don't trust the school, or I don't trust the programming or whatever." Teachers reported having to be "more on guard for some adversarial parents," having "all of [their] details correct" and taking a "little bit longer to respond to emails because" they want "somebody else to read it over," out of fear of somebody "taking a sentence [they] said the wrong way" (Teacher in Low Congruence Group). In sum, adversarial attitudes

were largely reported by both parents and teachers as a difficult barrier to the parent-teacher relationship, resulting in parents having a lack of trust in the school and teachers sensing overall damage to the relationship.

Complex Concerns

Many disorders and medical conditions often accompany a diagnosis of autism, referred to as comorbidities. In the present sample, parents discussed comorbidities such as hypoxic ischemic encephalopathy, deafness/hard of hearing, diabetes, seizure disorders, anxiety, depression, and attention-deficit/hyperactivity disorder. The combination of these comorbidities with autism makes the student's situations more complex, as there are additional needs to address. One teacher reported having additional training and experience in some of these medical conditions, which gave the parent a sense of comfort in this specific teacher. However, this teacher only had experience due to a previous career in nursing, and thus it is not typical of a teacher to have this extensive of training. One parent reported the difficulties her child's medication changes have had on his behavior and the importance of communicating back and forth to help understand how the medication is affecting his behavior at school in order to find the right dosage. Furthermore, behavioral concerns are frequently reported in conjunction with autism. Numerous parents reported wanting to know about behaviors at school, but also feeling helpless "because [they] don't have any advice and ... I mean, if [they] could do something about it, [they] would" (Parent in High Congruence Group). The same parent stated, "we used to get things like 'he just ripped a poster off the wall.' Next message 'he just dumped this piece of paper. He just ripped all this paper on the floor left and threw it on the floor.' Like every single play by play of every single thing he did. And I don't know what we're supposed to do with that. So, I don't think it's helpful." Thus, some of these more complex concerns can lead to barriers in

parent-teacher communication and their overall relationship when students have more significant needs or neither party quite knows how to handle the situation and thus is left feeling hopeless or "maxed out" (Parent in Low Congruence Group).

Lack of Information

Some parents noted the difficulties their child has in relaying information between home and school, whether due to being nonverbal or having difficulties with memory, such as keeping track of assignments or providing details about their day. One parent stated, "for a child that can't come home and tell me accurately what he did that day, I would say at least once a week for some type of contact is really helpful, because otherwise, I feel really clueless" (Parent in Low Congruence Group). Although the movement towards online resources such as Google Classroom has helped parents keep track of assignments, parents reported it is still very difficult to understand assignments and expectations without proper communication. One parent stated, "that's a barrier. The understanding that getting the assignments, with a due date, with all the instructions, and getting the grade in real time, is what is needed to better set them up for success" (Parent in High Congruence Group). Additionally, another reported barrier was an inability to fully understand the causes or circumstances surrounding a behavior concern. One parent reported hearing, "oh, we don't even know what happened. Nothing happened," which made it difficult to then discuss the behavior and understand the motivating factors when the child returned home that night (Parent in High Congruence Group).

Access to Services

Another theme derived from the interviews was the struggle to access services in the public education system. With an increasing number of students being diagnosed with ASD, there has been an increase in demand for schools to provide services (Burnette, 2012). The

demand for services has only increased during the COVID-19 pandemic and the resulting increase in mental health concerns. Some parents reported feeling as though the school was reluctant to consider an IEP. Some participants in my study were eligible for services under a 504 plan, but not under an IEP. Numerous parents reported wanting more aides and socialemotional supports, including social skills group and social work minutes. One parent reported that her child did not receive his legally mandated social work minutes due to staff shortages and being left with no information as to how those hours would be made up. Some parents have even gone as far to "ask an outside service to come in and observe and make recommendations" (Parent in Low Congruence Group). Other parents reported concerns regarding placements and services received. For example, one parent struggled with finding additional mental health support, as the parent noted increasing behavioral concerns in the home setting, but the parent was told that the school could not provide those services because "he is fine there with them" (Parent in Low Congruence Group). Thus, at times behaviors may be seen in the home or school setting that warrant support, but the school may be unable to provide those supports due to staff shortages or the school reporting that those behaviors do not impact the student's learning and school experience (Burnette, 2012). Perceptions regarding behaviors and necessary supports can differ between the home and school setting leading to negative relationships and even the pursual of due process. None of my interviewees discussed experiencing due process firsthand, but did describe adversarial attitudes between home and school, which was previously discussed in the barrier section.

Multiple Students, Multiple Teachers

One barrier that was discussed was teachers teaching multiple students and students having multiple teachers. Teachers reported that it is more difficult and "overwhelming" to have

close contact with parents when they are servicing multiple students and families (Teacher in Low Congruence Group). Many of the special education teachers reported having a smaller caseload, which was of benefit to them, but discussed this barrier in relation to their general education peers. Also, from the public-school perspective, there are multiple services to be provided to multiple students due to IDEA (2004), but the COVID-19 pandemic has caused teacher shortages, making it difficult to find the staff to keep up with the influx of services. From the parent perspective, parents reported difficulty keeping track of teachers and aides. One parent reported her child's aide constantly switching, making it difficult for parent communication as well as making it difficult on the child with a lack of consistency.

Response Time

Another barrier to the parent-teacher relationship is response time. Many teachers reported not receiving responses to emails or phone calls. In addition, teachers struggled with setting boundaries surrounding when to respond to emails. One teacher stated, "it is common for parents to be looking at emails and responding in the evening. And then sometimes it seems like they would like a response or my interpretation or just the feeling of like, I have an email, I have to respond to it immediately. So, I feel like I should be responding at night, seven to nine. But I really try to make 4 PM my ending time for school. And if I want to look at the email, and then think about how to respond to it, I do but I really try not to respond to anything until after 7:30 in the morning" (Teacher in Low Congruence Group). In sum, teachers reported feeling an internal pressure to have a quicker turnaround, while also placing value on their personal lives and time off. Thus, not only is it important for parents and teacher to discuss frequency and method of communication, but also establish time parameters.

Less Communication with Age

A common theme across interviews was that there was less parent-teacher communication as the student advanced through their schooling. One parent stated, "middle school is where they really start to pull back on communication with the parents, they want it to all go through the kid... I'm nervous about the high school, because I think they're [going to] want even less to do with the parent" (Parent in High Congruence Group). The results were mixed, in that some parents viewed less communication as a barrier and others noted less of a need overall. On the barrier end, parents noted that they had less direct contact with teachers and perhaps did not meet the teachers at all. This was found within the middle school and high school setting, where students had multiple teachers. Often at these grades, parent-teacher conferences are only mandated when a student is having problems in school, and not all teachers are in attendance at IEP meetings. IEP meetings are usually comprised of the case manager (special education teacher) and at least one general education teacher. One participant stated, "as our students age, oftentimes, teachers start communicating more with the students and less with the parents, but the parents desire to know what's going on in the classroom doesn't change whether you have a first grader or a fifth grader or a sophomore in high school" (Teacher in High Congruence Group).

Other parents noted that their concerns regarding their child decreased with age, as their child matured, and thus communication was not as critical as it was in younger grades. For example, one participant noted that they no longer had to worry as much about their child's bathroom routine, or eating habits, as they did when their child was in elementary school.

In a similar fashion, parents also noted that their child was able to self-advocate more themselves and be a point of contact for the home setting, communicating with parents about their day at school and relaying information between home and school.

Inexperienced Teachers

Another reported barrier was the difference in general and special educators, and lack of prior experience with autism. One parent, in discussing her interactions with her child's general education teacher, reported understanding that "a gen ed teacher did not go to school to be a special ed teacher, and therefore just doesn't have some of that background and ways to support a child" (Parent in Low Congruence Group). Although this parent was understanding, she did report some frustration with wishing the teacher was "more knowledgeable in theory of the IEP system... and wish[ed] she would have encouraged testing sooner." This same parent also felt as though the school was not used to a student "as high needs as what he is," which eventually led to the parent deciding to transition her child to a private, specialized school.

Technology

Technology was also reported to be a barrier. To elaborate, one teacher reported that the tone of emails can be misinterpreted in written communication, which can impact the parent-teacher relationship. Another teacher reported that not all parents have access to computers or Wi-Fi, but this seems to have improved since the COVID-19 pandemic, as more students have access to school provided laptops.

Additional Contextual Themes

In interviewing both parents and teachers about their relationships, additional contextual themes arose not directly pertaining to the specific research questions discussed above, including overall communication logistics (i.e., purpose, method, frequency, types of in-person contact,

and proximity), feelings of acceptance, perceptions of the pandemic, public vs. private education, and academic vs. behavioral concerns.

Communication Logistics

Purpose of Communication. A variety of communication purposes were discussed across parent and teacher respondents. The most frequently discussed purpose was to relay a behavior or problem. The least discussed purpose was to relay positive behavior.

Behavior/Problem. A majority of communication between parents and teachers surrounded behaviors seen in the classroom or at home or any other major problems of importance to discuss. Multiple teachers reported feeling more comfortable discussing behavioral concerns over the phone, particularly anything negative in nature. Behavioral concerns can be prevalent across autistic students, and many parents acknowledged expecting to hear about these concerns. Importantly, one parent discussed how she would prefer the purpose of these behavioral discussions to be more solution based, stating she "would much rather have a teacher reach out to [her] saying, this is a problem. Here's some ideas that we have, or how we are addressing it. Are there any other thoughts that you have?" (Parent in Low Congruence Group). While this parent was open to joint problem solving, she stated "I'm not there. I don't really know what's going on. Like, I don't know how you structure your classroom. Like, also, I'm not a teacher. Like I tried that during COVID, and it didn't work."

Want More/Everything. Another theme that arose from a discussion of communication practices was parents reporting that they want to know even more information than the information that is already being provided. One parent stated, "there's never been a circumstance [in] which I don't want to be contacted by the teacher... even if it's like dumb" (Parent in Low Congruence Group). Some parents reported feeling as though they were not kept in the loop

regarding behaviors, only hearing about these behaviors once it turned into a bigger problem which then made it more difficult for parents to intervene. To remedy this situation one parent asked for "broader detail about things," including a better understanding of behavioral antecedents, so she could be better informed when her child returned home from school following a behavioral episode, as even hours later her son was still fixated on the events of the day (Parent in High Congruence Group).

No News is Good News. An interesting sentiment that arose from interviews was the idea of "no news is good news... they don't really have to tell us if nothing is out of the ordinary" (Parent in Low Congruence Group). Many parents reported wanting to know the information that the teacher deemed important to share, while also recognizing the demands communication places on already overworked teachers. For example, one parent stated, "I am willing to take as much communication as they will give me, but I try not to place the expectation on them. Just because I know it can get tiresome and people get bogged down with that" (Parent in High Congruence Group). Additionally, one parent discussed the importance of being kept in the loop, while also walking the fine line of not wanting to be the teacher's "therapy session" (Parent in Low Congruence Group). Some parents expressed not wanting to be contacted for every behavioral concern or isolated event, preferring to be contacted with an "overarching theme" (Parent in Low Congruence Group). Thus, some parents prefer to hear about every isolated event and others do not, furthering the importance of both parties establishing expectations surrounding communication practices.

Positive Behavior. All too often parents of autistic students only hear about negative behavior or grades, thus numerous teachers reported the importance of sharing positive news, including academic gains, fun things in the classroom to share, or stories of personal growth.

One teacher shared that sending notes home serves as "positive reinforcement back and forth like to say 'hey, like, you're doing a great job. Let's take a picture of your work and send it to your mom or dad,' because then they get a lot out of it and then I also think too it's something nice for the parents to see" (Teacher in High Congruence Group). Another teacher reported that she finds it easier to share behaviors while also sharing positive moments. She stated that she's "heard from that parent perspective that, you know, parents of students who have special needs are often, I call them mama bears, right? They're very overprotective. They want their kids to fly and be free and be successful. And also, just protect their little hearts from anything that you know, could damage them, and hurt their feelings. And so, me being able to say, oh, my gosh, your kid did that the most amazing thing today, before then I tell them something that was really challenging. Just so that I've given that parents some of that peace of mind and knowing that their kids, maybe even got in trouble, and there's some accountability there, but we also had this great moment" (Teacher in High Congruence Group).

Method of Communication. A variety of communication methods were discussed across parent and teacher respondents. The most frequently discussed methods were email and text, while the least frequent method was a daily write up.

Email. Emails were the most frequently reported method of communication. Some teachers reported that parents do not check their email very often or do not respond to emails. Regardless, a majority of participants reported email to be the easiest mode of communication, particularly due to having a record of "what was said, when, and how [they] responded" (Teacher in Low Congruence Group).

Personal Phone/Text. A common theme across interviews was in regard to texting as a method of communication. Both teachers and parents reported that texting was a more

convenient and quicker method of communication. While personal cell phone usage was regarded as invasive by some, most teachers reported no concerns regarding providing their personal cell phone numbers to parents. In fact, one teacher reported "always offering [her] cell phone right away, because when parents have students, or something is upsetting them. It's been [her] experience that if they can call [her] and ask and, you know, get it out of their system and know that is so much better than if something happens Friday and now [they] have to wait all the way till Monday" (Teacher in Low Congruence Group).

School Phone/Phone Call. Phone calls appeared to be used in more severe cases of needing to contact home about behaviors or other more sensitive information. While phone calls are of benefit when discussing things more in-depth, they are also more "time consuming for everybody" (Parent in Low Congruence Group), and some teachers reported not getting phone calls back or getting sent straight to voicemail.

Applications. Lastly, participants noted increased usage in a variety of different applications that aided parents and teachers in communicating regarding students. Some of the applications discussed include Google Classroom. Google Voice, Seesaw, Class Dojo, and Zoom. Parents reported that the use of technology and applications has greatly improved their access to materials. One parent stated, "they have a test on Monday, at the end of this chapter, on Monday evening, he will put up the entire next chapter's information on Google Classroom. Now, you're going to work through that information in the classroom, but all of the PowerPoint presentations and information are there. All of the worksheets or study guides are there and that is helpful, because then if he's missing it, it's there." (Parent in High Congruence Group). Zoom meeting were also reported by teachers to be a quick way to touch base with parents.

Daily Write Up. Daily notes home can be done in a variety of ways including a communication binder or notebook, describing important notes for the day and/or the child's schedule. Based on participants responses' daily write ups are less frequently used than in previous years, likely due to the increasing use of technology throughout both the home and school setting.

Frequency of Communication.

Daily. Daily contact was the most discussed frequency. Participants discussed receiving daily notes or emails. The frequency of contact tended to depend on the needs of the child and family, differing even from student to student across the same teacher. For example, one teacher of a student with memory and other health concerns reported being available to talk as many times a day as needed, stating, "I'll do whatever mom needs because I can't imagine how hard that is" (Teacher in High Congruence Group).

Weekly. Weekly communication was the second most discussed frequency type, often in the form of a weekly email describing what is going on in the classroom each week. Teachers reported assessing family's communication needs at the beginning of the school year and tailoring it based on the family's lead, including frequency of parent response.

Biweekly +. Biweekly and beyond was the least discussed frequency type, including more formal meetings such as parent-teacher conferences or monthly newsletters. One teacher stated that she does not communicate "probably as often as it should be. maybe... two or three times a year, unless there are situations or extra things that are happening that we need to address (Teacher in High Congruence Group). In sum, communication practices differed greatly across participants, including parent and teacher expectations, signaling the need for both parties to communicate their expectations early in the relationship.

In-Person Contact.

Formal. Formal in-person contact was described as IEP or 504 meetings and parent-teacher conferences (Azad et al., 2021). Formal contact was discussed more often than informal contact, perhaps due to the stressful nature of these meetings. One parent reported IEP meetings as "very intimidating. And it's hard. The whole goal is to hear a lot of negative stuff about your child and figure out how to overcome it. So that's not fun. So, I like to read everything at home" (Parent in High Congruence Group). This specific parent noted how important it is for schools to abide by the law of sending advanced drafts of the IEP before the meeting (ISBE, 2020) to provide parents with time to go over assessment results and mentally prepare for the meeting. This parent also suggested laying the current and proposed IEP side by side to see the proposed changes. Furthermore, both parents and teachers reported the benefit of parent-teacher conferences to sit down and discuss student strengths and suggestions.

Informal. Informal in-person contact was described as communication during pick-up/drop-off (Azad et al., 2021). Some parents reported talking with their child's aide/paraprofessional at the beginning and end of each school day. Topics of discussion include "what he did, what his mood was, if he was tired, if he got a little cranky, if he wanted to rest or if he was in a good mood or if he got giggly. We even talk about what he had for lunch" (Parent in Low Congruence Group). Other participants reported other informal communication such as texting and notes, which is described more in depth in the method section below.

Proximity. Proximity is defined as nearness in space or relationship. For the purpose of this study, we divided proximity into communication with primary teacher and communication with other school staff (e.g., paraprofessional, other teachers, principal).

Communication with Primary Teacher. One major theme across interviews was how teachers know the child best when they spend most of their time with the student. Although students may interact with many teachers throughout their schooling, each year they have a primary teacher. For example, in elementary school the primary teacher would be either the special education or general education teacher. Typically, the special education teacher serves as the case manager. In middle school and high school, students with an IEP or 504 plan are assigned a case manager who oversees all of the student's classes and special education services. Case managers usually have the student in class at least one year and may remain on their IEP team throughout the duration of that level of schooling. Teachers reported that having the same student across multiple years "helps with the parent relationship part of it" (Teacher in High Congruence Group) because you "get to know families really, really well" (Teacher in Low Congruence Group). Parents reported that consistency is key because students may not "do well with new people, and you have to really spend a lot of time and kind of build trust and build a relationship or else nothing works out for him" (Parent in High Congruence Group). The case manager also serves as a single point of contact for parents, which is critical when students have more than one teacher. One teacher stated, "parents go through me for the communication, even if it's in regard to social studies, or science, which I don't teach. So, a factor for me is my communication with my other colleagues, and knowing what's happening in classrooms, even those that I'm not in and that I don't teach, so that I have the information for the parents when they ask, and I can communicate either way, as kind of that middle person, for my students and all of their teachers, and the parents and all of their teachers" (Teacher in High Congruence Group).

Communication with Other School Staff. Another theme that arose from my parent interviews was the fact that sometimes communication is not with primary teachers, but with other school staff. In some cases, there is less proximity with the case manager, and more with a student's one-on-one aide, or paraprofessional. A paraprofessional can be included in an IEP to provide students with an additional layer of support. One parent reported that it is easier to communicate directly with the aide, rather than the primary teacher, because "she's more assigned, I think a little bit more specifically to [Child's Name], whereas the teacher has to oversee the whole classroom" (Parent in Low Congruence Group). This same parent reported more face-to-face contact with the aide, than the primary teacher, due to pick-up and drop-off procedures. Other parents reported emailing communication with all of the necessary staff on one email, including "the teacher, special education teacher, and the aide" (Parent in High Congruence Group).

Feeling of Acceptance

One theme derived from the interviews was the idea of feeling accepted versus feeling unaccepted. Acceptance, and a lack thereof, was discussed in relation to feeling accepted by teachers and the greater school community.

Accepted. Feelings of acceptance accompanied an overall understanding of ASD, neurodiversity, advocacy, and an inclusive community. Some parents reported having teachers that were "huge advocates for [their] students," introducing them and or participating in community-based services and demonstrating an understanding of individual student needs (Parent in High Congruence Group). One teacher reported the importance of proper accommodations through a thoroughly thought-out IEP. Furthermore, being "open-minded" was frequently discussed in relation to acceptance (Parent in High Congruence Group).

Lack of Acceptance. In contrast, a lack of acceptance was regarded by parents as detrimental to the parent-teacher relationship and perceived school climate. One parent discussed the experiences of her daughter, who she described as "quote, unquote, fairly normal" (Parent in High Congruence Group). This parent described her child being overlooked and hearing comments such as "well, she's so functional, it's fine, she's good. She doesn't need help." This parent was reporting on her experience of having a daughter with autism, as autism in girls is frequently diagnosed later in life and often presents differently than autism in boys. She elaborated stating, "I think everybody expects, like, I don't know, like autistic people to be like Rain Man, or ... somebody who is... nonverbal and their expectations are just something that maybe is not quite correct." She sums it up well by stating "every kid with autism is a little different," yet in her experience not everyone understands autism or believes in autism. Another parent discussed the difficulty of her child having to "live in a neurotypical world" (Parent in High Congruence Group). Furthermore, another parent reported wanting "the classroom teachers to see "her child as a person first, rather than just a mechanic within the classroom or a diagnosis ... taking the time to build the relationship" (Parent in Low Congruence Group).

Perceptions of the Pandemic

The COVID-19 pandemic led to disruptions as students, teachers, and families transitioned to virtual learning and then perhaps hybrid learning before attempting to transition back to in-person learning. One benefit to this study taking place once students had returned to in-person learning was the ability to gain insight into parent and teacher perspectives on how the pandemic affected education for years to come.

Positive. One benefit of COVID-19 was the reported increase in overall communication. Parents reported increased access to online resources including Skyward and Google Classroom,

which helped parents keep track of grades and assignments. Teachers also reported positive sentiments about the way that the pandemic brought parents and teachers "closer" (Teacher in Low Congruence Group).

Negative. On the contrary, participants also reported the negatives associated with education and COVID-19. Some parents reported difficulties in transitioning from Jr. High to High School due to not being able to navigate the social nature of junior high in preparation for the switch to high school. Parents also reported difficulties being able to assist and observe the classroom, particularly at younger grade levels, due to schools having strict visitor policies.

Furthermore, parents also reported less or reduced quality of overall contact due to COVID-19.

One parent reported an inability to attend parent nights to build the home-school relationship.

Another parent noted the difficulties of virtual IEP meetings due to language barriers and an inability to read lips very well in a virtual environment. Teacher also reported concerns surrounding the pandemic, including not being able to meet parents face-to-face at the beginning of the year parent night and the difficulty of having students transition back to in-person learning after being fully remote.

Transition Anxiety

Another contextual factor was anxiety surrounding transitions. A variety of transitions were discussed including elementary to junior high, junior high to high school, and transitioning out of high school. These transitions involved having new teachers or transitioning to a new school. One parent reported initial concerns surrounding moving from elementary to middle school and "having to try and deal with that many teachers" (Parent in High Congruence Group). One teacher reported that "parents get really anxious ... when we're transitioning from eighth grade to high school" (Teacher in Low Congruence Group). Additionally, some participants

reported concerns transitioning out of COVID-19 and remote learning. Thus, transitions are not only difficult for students, but also their parents.

Public vs. Private

One interesting theme from three of the parent interviews was the discussion of differences between public school education and private school education. This topic is particularly interesting due to private schools not being required by law to provide special education services because they are not funded through the federal government, which mandates IDEA (2004). One student changed schools in the middle of the school year, moving from a public school to a private school. This parent noted the primary reason for this transition was due to the "social difficulties that she was having at her public school" (Parent in High Congruence Group). This student found that her public school was less accepting of autism, as the family lived in a small town which lacked diversity, whereas the private school provided a more inclusive and accepting experience. The parent of this child also noted that the family saw an increase in ASD representation at the private school versus the public school, thereby reducing the feeling of being an "outlier... messing up the perfect little vision of the world that they have." Another student started of his educational journey in private school, receiving early education services, then transitioned to public school, repeating both Kindergarten and 1st grade. This parent drew on her family's experiences and spoke about her intention to re-enroll her child in private school to complete 2nd grade because she feels like "we've lost ground at this point and they're just able to better serve him" (Parent in Low Congruence Group). The private school she discussed is a private, specialized school focusing on assisting deaf and hard of hearing students. Parents who chose a private school reported smaller class sizes and increased awareness and ability to provide individualized supports. On the contrary, another parent reported switching her

child from a private, parochial school to a public school at the onset of high school. Her motivation behind this transition was because she "knew that an IEP would be absolutely necessary" (Parent in High Congruence Group). Thus, in some instances parents reported greater success with private schools offering smaller class sizes and specialized services, while others were motivated by the legal protections provided by a public education.

Academic vs. Behavior

One theme derived from interviews was parent reports of teachers having an increased focus on managing behavior rather than stressing academics. Some parents reported the focus on behavior as a positive, as some students are focusing on simply attending school and being able to be a member of the larger classroom. One parent stated, "they do push academics, but mostly, it's just trying to be at school, because, you know, he's been out of school for so long...he's definitely very behind in schools, not his strong point. So, I appreciate them not forcing academics and things. It's much just trying to get into the routine and the behaviors regarding school, because I mean, you can't do those academics, the academic work, if you can't even be at school" (Parent in High Congruence Group). Other parents found this focus to be a negative as they felt like their academic concerns were not being heard. One parent stated, "one thing that I'd say was a deterrent was the fact that she was very, like behavioral driven... and was more concerned about controlling him in the classroom and him not being such a disruption, where I also had academic concerns, and I did not feel very heard on that" (Parent in Low Congruence Group). In sum, parents viewed the focus on behavior over academics differently depending on each child's individual needs. For some, the focus on behavior made sense due to the child just starting school or transitioning back to school after a period of being away due to COVID-19 or medical needs. Also, some students tend to focus less on academics and more on life skills

depending on the program in which the student is placed. On the opposite end, some parents, particularly parents who were well versed on components of education, wanted their students to be pushed more academically and meet more academic goals rather than strictly having a behavioral focus.

Discussion

The purpose of Wave 2 was to acquire qualitative data from a subsample of participants who fell in either the low congruence or high congruence group from Wave 1 based on results from the *PTRS-II* and creation of the distance score. I examined two research questions.

Research Question 1

First, I examined the keys to success in positive parent-teacher relationships. From my interviews I derived four codes describing the key components of positive relationships: realistic expectations, interpersonal relations, teamwork/collaboration, and appreciation. Realistic expectations was reported to be a critical component of positive relationships, in regard to both student expectations and expectations surrounding parent and teacher interactions. Expectations regarding communication primarily arose from the interviews. Previous research has found communication to be a barrier to parent-teacher interactions because communication is time intensive and scheduling difficulties can arise (Josilowski, 2019). Although communication can be time intensive, participants reported less of a barrier when both parties were realistic in regard to the timing of responses, including a shared understanding that teachers work school hours and may be unable to respond after school hours in order to prioritize their lives outside of being teachers. Realistic expectations regarding student behavior were also noted. Teachers reported feeling more supported when parents understood that behaviors may arise, regardless of the interventions put in place, and the importance of working together in a positive and respectful

manner to problem solve with the goal of eventually reducing behaviors. Children often display similar behaviors across home and school and optimal success is obtained when working together to formulate common strategies towards the same goal (Autism Ontario, 2012).

Additionally, interpersonal skills were found to be incredibly important to the parentteacher relationship, setting the foundation for the quality of their relationship. Some of the key interpersonal skills discussed included positivity, respectfulness, openness to communication, willingness to share information, ability to constructively take feedback, understanding the other person's point of view, honesty, transparency, and rapport building. Honesty and transparency are components of trust, and trust was a key variable in the Wave 1 analyses. Trust is defined as "an individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open" (Hoy & Tschannen-Moran, 1999, p. 189). Trust is integral to building positive relationships that are defined by a "sense of mutual respect, collaboration, and a willingness to move forward as partners in the journey" (Prizant, 2008, p. 34). Participants noted the importance of being able to be honest with each other about what is being seen behaviorally and academically, regardless of if that information may be perceived negatively, as the goal is to be able to be up front about concerns in order to properly address those concerns. Another key component of interpersonal relations was the ability to take feedback. One teacher reported sending out anonymous surveys at the end of each year to better understand the parent perspective. Surveying parents in an anonymous fashion is one tool that can and should be used by schools to better understand the overall climate of their school. In fact, research suggests that many schools do not currently utilize parent surveys, as only 32% of parents surveyed reported ever participating in a parent survey

(Hodges & Yu, 2016), but surveys can be used to acquire information about school strengths and opportunities for improvement.

Teamwork and collaboration were reported to be an ideal goal for parent-teacher interactions. Interestingly, previous research found that parents and teachers did not appear to recognize how their wants regarding ideal parent-teacher interactions were consistent with each other (Azad et al., 2018). However, the current study found that parents and teachers largely agreed when answering the question, "what do you think is an ideal goal for parent-teacher interactions?" Both parents and teachers reported the critical need for parents and teachers to work together for the betterment of the child, recognizing the integral knowledge each party has and aligning practices across home and school to increase continuity and promote success. Collaboration has been shown to increase student learning, by bridging the gap between home and school (Loughran, 2008), which is why parents are considered integral members of the IEP team and have a legally mandated right to participate in all aspects of the IEP (IDEA, 2004). Parents in the current study reported better relations when they felt like a "fully-informed team member" (ISBE, 2020, p. 37) and were provided the opportunity to discuss concerns outside of formal meetings, including the IEP, which are held annually. Teachers should continue to find ways to elicit parent participation and align practices across home and school to reduce discontinuity of care (Azad et al., 2021).

Lastly, appreciation was also reported as a key theme aiding in positive parent-teacher interactions. Teachers often feel underappreciated which can have detrimental effects to teacher efficacy, but supportive parents are one way to increase teacher efficacy and in turn student success (Lohrman and Bambara, 2006; Tschannen-Moran & Hoy, 2001). Wave 1 found that teacher efficacy significantly predicted parent-teacher congruence. In combining the results from

Wave 1 with the qualitative findings surrounding appreciation from Wave 2, it is evident that parental support is a critical component of teacher efficacy, which then impacts the parent-teacher relationship.

Research Question 2

Second, I examined areas of improvement in the parent-teacher relationship. I found that there are numerous barriers to a successful parent-teacher relationship, including adversarial attitudes, complex concerns, inability to acquire information, access to services, response time, less communication with age, transition anxiety, inexperienced teachers, and technology.

The most frequently discussed barrier was adversarial attitudes, leading to conflict within the parent-teacher relationship. This finding is particularly important in light of Wave 1, which found parent trust to be a key predictor of parent-teacher congruence. When trust is absent, relationships can be characterized by adversarial attitudes, leading to an idea of one party being against another, rather than a collaborative approach. Special education services, particularly for autistic students, is believed to be the "most litigated area in education" (Katsiyannis & Herbst, 2004, p. 106). Although adversarial attitudes do not directly lead to formal legal action, adversarial attitudes can lead to strained communication practices over time, which then may lead to an inability to effectively engage in dispute-resolution without the use alternative strategies such as due process (Mueller & Carranza, 2011). Importantly, there are a variety of alternatives to due process, including mediation and resolution meetings, which can be more cost effective and timely (Mueller & Carranza, 2011). Regardless of the method used, adversarial attitudes and disagreements can arise, demonstrating that more transparency is required in special education. For example, numerous parents reported feeling lied to regarding services that were legally mandated by IDEA (2004) but not provided. Feelings of being lied to directly relate

to honesty as a key component of trust (Hoy & Tschannen-Moran, 1999). Perceived dishonesty can lead to parents not having trust in their child's school. Other parents reported difficulty receiving access to services (the fourth most discussed barrier) consistent with prior literature finding dissatisfaction in the number of services received (Bitterman et al., 2008). Some teachers also reported having difficult discussions with parents who were not happy with their child's placement. Parents who are unhappy with school often seek assistance from special education advocates and other sources, helping families better understand the special education system. Perceptions regarding behaviors and necessary supports can also differ between the home and school setting leading to negative relationships. Thus, it would be beneficial for schools to take the extra time to discuss the special education process with parents, helping them better understand concepts such as FAPE and LRE. Although ISBE provides a plethora of resources for parents on their website, including "The Parent Guide," Educational Rights and Responsibilities: Understanding Special Education in Illinois (2020), this document is 232 pages in length and very overwhelming for parents. IDEA (2004) mandates that schools send an outline of the laws of special education, entitled *Procedural Safeguards* once a year, but does not mandate that schools sit down with parents to help them understand the document, leading special education to be very difficult to navigate as a parent. Previous research on parent's reaction to eligibility decisions has found that parents "express disappointment, resignation, and a sense that they are problem solvers by default when they perceive that the decision rendered does not appear to adequately address the difficulties their child is experiencing" (Flanagan, 2001, p. 92). The study also found that, "parents do not find the parents' rights and procedures information understandable or 'parent friendly.' Parents have a cursory and sometimes misinformed understanding of special education and its eligibility process even though they participate in meetings and receive information" (Flanagan, 2001, p. 92). Despite the age of the Flanagan study, parent

perceptions have remained largely unchanged, and the current study found that some parents have taken advocacy classes or found work in the school system solely as a tool to help them better understand the special education process. In sum, more work needs to be done to ensure parents understand special education eligibility and the legal components of special education, overall. It is also imperative that schools follow special education requirements when providing services for students.

Research has found individuals with ASD to demonstrate significantly more behavior problems than typically developing peers (Blacher & Baker, 2019). These behavior problems can impact both parents and teachers as they attempt to find the best way to reduce problematic behaviors in both the home and school setting. The complexity of behavioral concerns is that it is often difficult to find interventions, as behavioral interventions are not a one-size-fits all approach. Parents in the current study reported difficulty surrounding hearing about behavioral concerns due to feeling helpless about what to do about these behaviors. The communication about these behaviors, in turn, led to significant barriers in the parent-teacher relationship. Research has found that teachers view problem behaviors as their primary concern and parents view it as their third highest concern (Azad & Mandell, 2016). Research has also found that parenting stress is associated with greater discrepancies in parent and teacher reports of behavior problems, and low agreement was found between parents and teachers, even more so for emotional problems versus more observable behavioral concerns (Palmer et al., 2022). Additionally, behavioral concerns have been found to be predictive of conflict in the studentteacher relationship (Blacher et al., 2014). Thus, the current study signals a need for parents and teachers to learn how to best communicate about behaviors. Azad and colleagues (2021) have suggested a need for research to examine how child-level behavioral concerns influence how consultation can be used to improve parent-teacher communication.

Another reported barrier was the inability to acquire information. At times, information was simply not provided to parents, or access to information decreased as children aged. The theme of less communication with age is consistent with prior research, but regardless of age and maturation, parents still benefit from communication and an understanding of their student's schooling (Azad et al., 2021; Goldman & Burke, 2019; Woods et al., 2018). Communication practices are pertinent for the autistic population regardless of age and maturation due to parent concerns regarding keeping track of assignments and details. Numerous parents reported that their children struggle with executive functioning skills, making it difficult for them to keep track of assignments. Although online resources such as Google Classroom has made it easier for parents to keep track of assignments, parents reported it is still difficult for them to understand the assignment in full without the added explanation students likely get at school and their child's inability to relay that information at home where the assignment is being completed. Thus, the present study sheds light on the need to continually ensure parents have access to information needed to complete assignments, including updating Google Classroom for assignments and due dates, and providing an in-depth description of assignments so that parents are well-informed to be able to assist their child with said assignment.

One reported barrier was teachers teaching multiple students and students having multiple teachers. Teachers reported that it is more difficult to have a close relationship with parents when they are servicing multiple students and families. This barrier is known in the literature, as researchers suspect large caseloads of students contribute to the high attrition rate of special educators (Russ et al., 2001). Most special educators in my sample reported having smaller caseloads to keep up with the demands of their students, but also discussed caseload barriers in regard to their general educator peers. Parents also reported on the barrier of multiple

teachers, particularly as their students transitioned into middle and high school. Communication can be made more difficult when there are numerous teachers to talk to, rather than one or two sole points of contact. The purpose of a case manager in special education is to coordinate instruction and services. Although case managers serve an important purpose of often being the primary point of contact in middle and high school, case managers are not teaching or present in every single class and thus it can be difficult for all of the important information to be adequately relayed. Ideally, collaboration across providers is completed, ensuring case managers are knowledgeable despite the barrier of not being present at every moment of the school day.

As previously discussed, communication practices are most positive when realistic expectations are held between parents and teachers. One barrier to this relationship is having unrealistic expectations surrounding response time. At times the pressure to respond may come less from the parents and more from the teacher themselves, wanting to be as prompt as possible, recognizing what they would want response wise from their child's teacher. Work-life balance is difficult for any career path but can be mediated by professional development seminars focusing on helping teachers maintain a more positive work-life balance, thereby increasing job satisfaction.

Another reported barrier was having inexperienced teachers. One parent noted the differences in training between general and special educators, which has also been discussed in the literature (Johnson, 2020). Although the current study was comprised mostly of special educators (Wave 1: 76% and Wave 2: 100%), general educators were still discussed in the study. General educators receive far less training on special education practices, including differentiating instruction, behavior management, and special education law (O'Connor et al., 2016). Teacher preparation programs, particularly those teaching general educators, should

consider increasing the number of courses related to special education and behavior management in order to ensure adequate inclusion practices and student success. Professional development can also be provided by the school specific to ASD.

Although the increased use of technology has been reported to be a benefit to both parents and teachers, technology was also a reported barrier. Email was a frequently reported method of communication, but some teachers reported tone being misinterpreted via email.

Emotions can be both intentionally and unintentionally communicated via email (Byron, 2008).

Although many teachers are now comfortable with technology and emailing given its frequent usage in daily life, it may be beneficial for schools to provide professional development on the use of email to make teachers more confident in their use of email as a source of communication (Byron, 2008).

Additional Contextual Themes

Furthermore, the current study uncovered a host of additional themes not directly related to the primary research questions but rather describing contextual details. One key theme was in regard to overall communication practices, including purpose, method, and frequency.

Communication practices differed greatly across participants. Daily contact was the most frequently discussed frequency type, but teachers also reported recognizing they should likely communicate with parents more than they currently are. The purpose of communication also differed across participants. The most frequently discussed purpose was to relay a behavior or problem, and the least discussed purpose was to relay positive behavior. Differences were also found between parents who want to know even more information than already discussed and parents who are comfortable only hearing from teachers when something is out of the ordinary. Thus, the results of this study show that expectations regarding communication are unique to each family, signaling the need for both parties to communicate their expectations early in the

relationship. This finding is in line with previous research highlighting "the need to address teachers' expectations about communication" (Azad et al., 2021, p. 16). Communication practices should be further addressed in teacher preparation programs and school-based professional development (Azad et al., 2021). Parents and teachers should also establish expectations prior to each school year, both discussing their expectations for each other and developing a communication plan. Parent-teacher communication plans will likely differ based on the individual needs of each student. The current study did not examine details about parent occupation, but future research should examine how parents' occupation relates to communication practices.

Additionally, another theme from the communication category was in regard to method of communication. Interestingly, the current study found that both teachers and parents reported texting to be a commonly used method of communication, as texting was reported to be more convenient. While personal cell phone usage was regarded as invasive by some, most teachers reported no concerns regarding providing their personal cell phone numbers to parents. This theme is important because it speaks to technology's impact on education and the ways in which schools can better utilize technology to improve parent-teacher communication. Other researchers have begun to analyze texting as a mode of communication and have found similar results, including enthusiasm from both stakeholders (Snell et al., 2020). Furthermore, applications were also discussed as a method, including Google Classroom. Google Voice, Seesaw, Class Dojo, and Zoom. Many parents reported the key benefits of having so much information at their fingertips, particularly for students who struggle with executive functioning skills. Although not specifically discussed during the current interviews, the pandemic also opened up the possibility to attend IEP meetings virtually via Zoom or over the phone, leading to

increased accessibility. Thus, as technology continues to expand, schools can incorporate a variety of different methods to better reach parents, thereby supporting family-school engagement (Snell et al., 2020).

Importantly, communication for students with autism is not unique to just the parent and the primary teacher dyad. The current study illuminated that paraprofessionals are also integral to an examination of communication practices, as they continue to take an active role in the education of autistic students (Irvin et al., 2018). Paraprofessionals are expected to grow in number at a rate of 8% by 2026 (U.S. Bureau of Labor Statistics, 2017). However, a "paraprofessional dilemma" exists in which many paraprofessionals are inappropriately utilized without sufficient training (Giangreco et al., 2006). Thus, many of the discussed recommendations for teachers in regard to training should also be provided for paraprofessionals, as they are often the primary point of contact between home and school, particularly at informal times such as pick-up and drop off.

Feelings of acceptance was also found to be an important theme. Parents reported greater parent-teacher relations and overall views of school climate when they perceived teachers had an in-depth understanding of ASD and neurodiversity, advocated for their students, and were in schools that promoted an inclusive community. Parents reported wanting their child's teacher to see beyond the disability, taking the time to truly understand the child's individual needs and build a relationship with the student despite difficult behaviors. Some parents reported having teachers that were advocates for their students introducing them and or participating in community-based services. A literature review of 25 articles found teacher's overall knowledge of ASD to be poor (Gómez-Marí et al., 2021). The current study found that greater positive parent-teacher relations were found when teachers were knowledgeable about ASD, leading to

parent perceptions of acceptance. Although teacher-specific knowledge of ASD varied across the current study, particularly between general and special educators, the results indicate a need to continue to train both types of educators on ASD in order to promote inclusive schools (Gómez-Marí et al., 2021). In regard to school climate, research has demonstrated that autistic kids are at an increased risk of experiencing bullying, and bullying can lead to significant mental health concerns such as suicidal ideation (Schroeder et al., 2014). Thus, it is critical for schools to aim to promote a positive school climate, marked by inclusive attitudes toward neurodiversity, in order to achieve social-emotional wellness. Autism Awareness and Acceptance month is celebrated across the entire month of April, aiming to help individuals further understand autism and promote inclusion. A variety of awareness activities are often done in the schools during the month of April as research has pointed to the need to focus on peers' understanding of autism in order to truly obtain inclusive practices (Cremin et al., 2021). Future research is needed in order to find evidence for specific autism awareness interventions (Cremin et al., 2021).

Childhood is marked by a series of transitions, many of which involve school. Throughout a child's schooling years, children transition grades as well as schools, such as transitioning from elementary to middle school and middle school to high school. Although not all students change schools, as some schools house K-12 in one building, there is still a transition of a new grade and often a new teacher. A study by Tobin and colleagues (2012) found parental reports of inadequate support surrounding the primary to secondary school transition. Practical suggestions from that study that also apply to the current study are having private viewing of the school rather than solely the general school visit and staff being made aware of the child's diagnosis well in advance to allow adequate time to understand the child's needs and discuss behavioral strategies (Tobin et al., 2012).

The current study highlighted the difference between academic and behavioral concerns. Some parents reported being pleased with having teachers who focused more on behavioral concerns than academics, giving the child's young age and transition back to a typical classroom setting after COVID-19. However, other parents reported feeling as though their academic concerns were left unheard. Previous research has found academics to be a point of disagreement between parents and teachers, as teachers have rated academics as a last concern and parents have ranked it as a higher concern (Azad & Mandell, 2016). The researchers of that study suggested that this disagreement may be in part due to teachers having more knowledge on "the normative range of academic performance." They also suggested that "teachers may be more concerned with repetitive behaviors because they are disruptive in the classroom, whereas parents may have adapted to these behaviors at home" (p. 39). This finding further highlights the need for parents and teachers to communicate about their goals and concerns to ensure all needs are properly being addressed.

CHAPTER IV: GENERAL DISCUSSION

Key Findings and Themes

Wave One

The purpose of Wave 1 was to acquire quantitative data from dyad pairs of parents and teachers of K-12 students with ASD regarding parent-teacher congruence, teacher efficacy, and school climate. I examined three research questions. First, I examined the relationship between school climate and teacher efficacy. The results did not demonstrate a significant correlation between school climate and teacher efficacy. One possibility for the lack of significant findings is due to methodological issues surrounding the operational definition of school climate. School climate is a broad and multi-dimensional concept and is defined differently across studies. In fact, researchers have not reached a clear understanding of "which dimensions are essential in measuring school climate, and the divergence and disagreement in the literature are evident (Berkowitz et al., 2017)" (Berkowitz et al., 2021, p. 398). Loukas (2007) describes school climate as being comprised of three dimensions: the physical dimension (e.g., availability of resources and ratio of students to teachers), the social dimension (e.g., quality of interpersonal relationships and equitable treatment), and the academic dimension (e.g., quality of instruction). All three dimensions are integral to education, but the current study only focused on the social dimension. School climate in a broader sense, may be more related to teacher efficacy. For example, previous research found a significant correlation between teaching resources (e.g., teaching materials) and efficacy. Perhaps the physical domain described by Loukas (2007) is more critical to teacher efficacy as it affects the availability of resources provided to teachers. Resources are critical to teachers of autistic students because of the need to individuate in order to provide the necessary accommodations and modifications set forth in an IEP. The same study also found a significant correlation between parent support and efficacy, but no correlation between efficacy and support from administration or colleagues (Tschannen-Moran & Hoy, 2002). The researchers stated, "because of the traditional isolation of the teaching profession, and the dearth of meaningful feedback from administrators in traditional supervisory practice, perhaps it is not surprising that teachers do not look to these as primary sources to inform their efficacy judgments. Teachers have been forced to cultivate their beliefs of their capability to impact student learning whether support from colleagues or administrators was available or not" (Tschannen-Moran & Hoy, 2002, p. 6). In contrast, other research has found that instructional leadership significantly predicted teacher efficacy (Ma & Marion, 2021). Instructional leadership was defined by a leader's ability to develop a positive learning climate, for example, principals who promote professional development and make teacher's voices feel valued and heard. Indirect effects were also found, with trust partially mediating the relationship between instructional leadership and teacher efficacy. Trust was a component of school climate explored in the current study. Thus, the results linking school climate and teacher efficacy are mixed and future research should work to better operationally define school climate in the context of teacher efficacy. In the meantime, regardless of the results, school psychologists and other school personnel can work to help build efficacy within teaching staff. Efficacy can be developed by working to build collaborative partnerships, changing the idea of teaching from "traditional isolation" (Tschannen-Moran & Hoy, 2002) to a field that thrives from supportive relationships across all stakeholders (e.g., principals, other teachers, students, and parents). School psychologists often work with a variety of stakeholders and are also extensively trained in consultation and collaboration. School consultation is the provision of indirect psychological and educational services in order to improve student learning (Gutkin & Curtis, 2009). Consultation

involves the school psychologist and the teacher collaboratively engaging in the problem-solving process. Research has shown that consultation can successfully increase teachers' self-efficacy and provide teachers with the tools they need to be successful, in addition to suggestions they may not have previously considered (Gutkin & Curtis, 2009).

Second, I tested whether school climate (and teacher efficacy) predicted parent-teacher congruence. In Wave 1, I examined parent congruence based on a continuous distance score in which higher scores indicated lower congruence. I found that the overall model was not significant. However, I found that school climate did individually predict parent-teacher congruence. Thus, my initial hypothesis that school climate would positively predict parentteacher congruence (i.e., a more positive school climate would predict higher congruence) was supported. School climate was a composite variable comprised of teachers' collective efficacy, parent trust in schools, and faculty trust (i.e., trust in principal, trust in colleagues, and trust in parents/students). Interestingly, parent trust in schools was the only subscale that was significantly correlated with parent-teacher congruence, and when parent trust was examined as an individual predictor, the model drastically increased in significance. Thus, the most important result from Wave 1 lies in its findings surrounding the importance of parent trust in forming shared beliefs and expectations surrounding the parent-teacher relationship. When parents have trust in their child's school it becomes easier to repair communication breakdowns and differences of opinion. For example, if a parent is unhappy with something going on with their child's education, a parent that has trust in their school will likely feel more comfortable bringing up a concern. In turn, the teacher is likely to take that feedback constructively, and make the necessary changes, engaging in effective communication, rather than ending in a communication

breakdown marked by adversarial attitudes. In sum, the parent-teacher partnership is secure and not threatened by "bumps in the road."

Third, I tested whether teacher efficacy predicted parent-teacher congruence. The addition of teacher efficacy as a predictor was important due to a gap in the literature recommended by Minke et al. (2014). The results of the current study found teacher efficacy to be significantly correlated to various components of the PTRS-II Scale, but not predictive of overall parent-teacher congruence. The results, in turn, contradicted by hypothesis finding that teacher efficacy did not significantly positively predict parent-teacher congruence. This finding is important because teacher efficacy has long been studied and garnered more attention recently with the COVID-19 pandemic (Weißenfels et al., 2022). Teacher efficacy is described as "a little idea with big impact" (Tschannen-Moran & Hoy, 2002, p. 6). Efficacy is not an actual assessment of competence, but rather a teacher's sense of competence (Protheroe, 2008). While the concept may seem "little," research over the past 40 years, stemming from Bandura's initial research on self-efficacy (1977), has found that teacher efficacy has great implications for student learning. A metanalysis found a statistically significant correlation between teacher efficacy and student achievement in part due to an overall enthusiasm for teaching (Kim & Seo, 2018). The current finding demonstrates that teacher efficacy, while important for student learning, did not significantly predict parent-teacher congruence in the current sample. Future research should continue to examine the connection between teacher efficacy and parent-teacher congruence, utilizing a variety of different assessment methods such as a different efficacy measure specifically for students with ASD [i.e., Teacher Self-Efficacy for Students with Autism Scale (TSEAS; Love et al., 2019)], and different statistical method to calculate congruence.

Although communication and collaboration across these stakeholders is important for the success of all students, parent-teacher congruence is critical for students with ASD. The increase in prevalence of ASD, currently 1 in 44 (Maenner et al., 2021), has led to an increase in demand for schools to provide services (Burnette, 2012). Simultaneously, special education services, particularly for autistic students, is believed to be the "most litigated area in education" (Katsiyannis & Herbst, 2004, p. 106) and compared to families of students with other disabilities, families of autistic students are significantly more likely to use due process (Burke & Goldman, 2015). Dissatisfaction with school services is one reason parents of autistic children are more likely to utilize due process (Zirkel, 2011; Goldman & Burke, 2019). One avenue in which dissatisfaction may develop is through barriers to communication and collaboration. In fact, research demonstrates that "parents want much more than to be present at meetings" and "communication [is] a frequently identified issue" (Tucker & Schwartz, 2013, p. 12). The primary results of Wave 1 demonstrate that school climate is an important predictor parentteacher congruence, particularly through parent trust in schools. In sum, "trust and meaningful communication with parents are the foundation of change" (Wiener, 2009, p. 44).

Wave Two

This study is unique in its combination of both quantitative and qualitative data to obtain a deeper understanding of the parent-teacher relationship. One of the hallmark benefits of qualitative research is allowing researchers to answer "how" and "why" questions that are not easily transferable to quantitative research questions (Cleland, 2017). The current study aimed to uncover the keys to success in congruent parent-teacher relationships as well as better understand the barriers hindering positive relationships or leading to incongruent parent-teacher relationships. This study highlights the importance of the reciprocal nature of the parent-teacher

relationship. Learning is not isolated to home versus school, but rather occurs across both settings. Both stakeholders are integral to the education of students and thus it is important for the parent-teacher relationship to be viewed as a partnership integral to student success. Parents and teachers discussed the importance of establishing realistic expectations early on in the working relationship, regarding communication practices and student goals. Teachers also discussed the importance of building rapport with both the student and the family. Once rapport is built and expectations are discussed, practices can be put into place to ensure consistent communication and work towards understanding and appreciating the other person's expertise and point of view. Additionally, contrary to previous research (Azad et al., 2018), parents and teachers in the current study agreed about an ideal goal for their interactions: teamwork and collaboration. Participants reported the critical need for parents and teachers to work together for the betterment of the child, recognizing the integral knowledge each party has and the need to align practices across home and school to increase continuity and promote academic, behavioral, and social-emotional success. This finding further illuminates the Ecological Framework (Bronfenbrenner, 1979) and reasoning behind IDEA (2004) describing parents as integral members of the IEP team. Parents in the current study reported better relations when they felt like a "fully-informed team member" (ISBE, 2020, p. 37) and were provided the opportunity to discuss concerns and formulate ideas outside of formal meetings. Teachers should continue to find ways to elicit parent participation outside of yearly IEP meetings and find additional ways to align practices across home and school (Azad et al., 2021).

A variety of barriers were discussed, with the most commonly discussed barrier being adversarial attitudes. By definition adversarial is characterized by conflict or opposition, neither of which are helpful to maintaining a positive parent-teacher relationship. Adversarial attitudes

were discussed in relation to overall negative views of the school system and constraints of services in public education (e.g., resources and funding), as well as specific instances in which families did not feel as though the school was abiding by IDEA (2004). Although individual schools cannot increase their funding and ability to provide certain services, schools can improve in their transparency regarding special education. Although ISBE has established "The Parent Guide," Educational Rights and Responsibilities: Understanding Special Education in Illinois (2020), the document is overwhelming for parents. In fact, research has found that "parents do not find the parents' rights and procedures information understandable or 'parent friendly.' Parents have a cursory and sometimes misinformed understanding of special education and its eligibility process even though they participate in meetings and receive information" (Flanagan, 2001, p. 92). The inaccessible nature of resources such as these have led some parents in my study to take advocacy courses, hire outside professionals (i.e., advocates or outside diagnosticians), or even become paraprofessionals to increase their level of knowledge on special education. Special education should not be so difficult to navigate for families, and schools have a duty to ensure parents adequately understand their rights, outside of simply checking a box that they have shared the Procedural Safeguards document once a year. In sum, more work needs to be done to ensure parents understand special education eligibility and the legal components of special education, overall, which would thereby decrease negative attitudes towards the school system. The current study did not examine the use of and experience with advocates. Future research should examine how the use of advocates impacts trust, from both the parent and teacher perspective.

Additionally, a variety of communication practices were discussed with the most important findings surrounding the increased use of technology by schools. One reported benefit

of the transition to online education with the COVID-19 pandemic was the increased use of technology. Teachers reported increased communication with parents as parents served as their child's educator. The current study also found an increase in parent access to information about their child's education. Applications such as Google Classroom have allowed parents access to materials distributed in the classroom and information regarding missing assignments and deadlines. Parents reported this access as critical because many of their children struggle with executive functioning skills and misplace important papers. Additionally, this study highlighted the increased prevalence of texting as a method of communication. Previously, texting was considered unprofessional and an invasion of privacy as teachers would have to provide their personal cell phone numbers. The current study found that most teachers reported no concerns regarding providing their personal cell phone numbers to parents. In fact, texting was reported to be more convenient and a quicker tool to promote parent-teacher communication. Teachers who were unsure of providing their personal phone number reported using Google Voice, a free service that can be used to receive a voice number that connects to your cell phone while keeping your personal cell phone number private. Google Voice can be used for both phone calls and texting. Thus, technology is an incredibly important tool to continue to be used to help support family-school engagement (Snell et al., 2020).

Implications for Practice

A working parent-teacher relationship is integral to a positive school environment for students with ASD. Both Wave 1 and Wave 2 uncovered key implications for practice across educators, school psychologists, and administrators, including the need for education on parent-teacher communication, education on autism, keys to building trust, and overall communication practices.

Education on Parent-Teacher Communication

First and foremost, education regarding parent-teacher communication is a concern due to research demonstrating that teachers lack training in effective collaboration and communication (Azad et al., 2021; Montgomery & Mirenda, 2014). One specific area of focus is helping teachers learn how to better discuss behavioral concerns with parents, as research has pointed for the need to examine how child-level behavioral concerns influence how consultation can be used to improve parent-teacher communication (Azad et al., 2021). School psychologists can provide professional development trainings and consultation services to help teachers learn strategies to best explain behavioral concerns while simultaneously combatting deficit thinking. Deficit thinking is defined as the notion that students with disabilities struggle in school because they have disabilities. It situates school failure within the individual, rather than recognizing the "social ecology of the school, grade, or classroom" (Weiner, 2006). School psychologists are a great resource for teachers and can help reframe behaviors in a positive manner and focus on the strengths of the child, rather than focusing only on deficits Furthermore, communication has been found to decrease with student age (Azad et al., 2021; Goldman & Burke, 2019), which is typical with student maturation, but is a major concern for parents when their child is unable to speak up for themself (e.g., they are non-verbal or have difficulties remembering what homework assignments to complete). Pre-service and in-service training for teachers is needed in the communication domain because efficacy increases with increased education. As teachers are trained on communication practices, they may acquire more support from parents, in turn helping understand family goals, behavioral antecedents, effective strategies, and students' strengths, weaknesses, likes, and dislikes. To garner parental support, a team approach is required in order to align practices across home and school and open the doors to the possibility of communication (Azad et al., 2021). Parents are often regarded as a child's first and most important teacher (National Head Start Association, n.d.), and once children begin school, parents and teachers share the responsibility of teaching. A team approach is outlined in legal guidelines surrounding the IEP process (IDEA, 2004), but is not always transferred to the daily needs of a student, outside of the annual review. One recommendation to increase communication and collaboration is to make expectations clear from the very beginning (Azad et al., 2021). Numerous Wave 2 qualitative interviews discussed questionnaires used at the beginning of every school year, seeking information regarding communication practice expectations, including frequency and method. Questionnaires can also be used to understand the parent perspective regarding their child's schooling. Effective feedback is a powerful tool for improvement, at both the individual teacher and overall school level. Teachers can anonymously survey parents on their communication skills as well as overall climate of the school, including parent trust. This data can be used to better the overall parent-teacher relationship by drawing the teacher's attention to specific areas of intervention, as well as improve the overall well-being of the school through schoolwide efforts.

Education on Autism

In addition to training on communication, this study uncovered that additional training and education are needed on ASD itself. The current prevalence rate for ASD is 1 in 44 (Maenner et al., 2021), and the increase prevalence has led to an increase in demand for schools to provide services (Burnette, 2012). The current study highlighted the importance of feelings of acceptance outside of solely the parent-student-teacher relationship. Rather, feelings of acceptance are needed across the entire school, including principals, paraprofessionals, students, and the greater community. One way that schools can improve their understanding of autism and

neurodiversity is by continuous education. As discussed in the beginning of this paper, there is a growing body of research on language preferences between identity first language (IFL; e.g., autistic person) and person first language (PFL; e.g., person with autism). A variety of other topics of discussion are growing in the autism community and thus continuous education is required to ensure adequate understanding. Some of these conversations can be included in undergraduate coursework but should continue to be discussed in in-service presentations due to the changing nature of terminology and increased access to autistic voices and new understanding of the autistic perspective. Schools can also collect a list of community resources to share with parents and promote teachers' collaboration with outside service providers. Although additional communication and collaboration can be time-intensive, comprehensive wrap-around services are integral to success. Furthermore, schools can also help promote a positive school climate by offering education to students as research has pointed to the need to focus on peers' understanding of autism in order to truly obtain inclusive practices (Cremin et al., 2021). Schools can have designated activities during the month of April for Autism Awareness and Acceptance month, such as inviting guest speakers, reading books written by autistic individuals, or showing movies depicting the autistic experience. These ideas are also not limited to the month of April, as awareness and acceptance are warranted at all times.

Furthermore, Wave 2 highlighted the intersection between ASD and other comorbid conditions. Although each case is unique, schools have a duty to ensure adequate training on these comorbid conditions, especially as ASD may not be the primary diagnosis presenting in a child. To qualify for an IEP, the school team must identify the primary disability, the disability that has the most impact on the child. At times, students may also have a secondary disability designated, which can impact the services received. Regardless of disability category, the current

study highlighted the complexity of having a student with ASD and other comorbid conditions. Depending on the comorbid condition, it may also be beneficial to have increased communication and collaboration between the teacher(s) and school nurse, as the school nurse has more specific medical training which may be beneficial in cases such as those described in the Wave 2 interviews, discussing comorbid conditions such as diabetes and seizure disorders. Many parents also discussed the complexities of having a student who demonstrates behavioral concerns. Trainings such as those from the Crisis Prevention Institute (CPI) are evidence-based and can help school staff respond to crisis. CPI teaches physical intervention as the last resort, but this level of intervention may be warranted based on the level of risk and appropriate school parties should be properly trained in order to ensure student safety and wellbeing.

Keys to Building Trust

Parent trust in school was found to be a key predictor of parent-teacher congruence. This finding is important because it highlights the need for schools to focus on trust as a key component of parent-teacher and parent-school relationships. The importance of trust has been further explored as the COVID-19 pandemic has led to an "erosion of trust" and "accelerated an already concerning trend for school districts: dwindling enrollment as families shift to competing options, such as home schooling, school choice, virtual learning, and private schools" (K12 Insight, 2022). The current study also highlights some of the trends described in the literature, as some parents in Wave 2 reported transferring their children to private schools, due to feeling as though their home district was unable to meet the needs of their student.

First and foremost, schools should acquire data on current perceptions of trust. Scales, such as the one used in the current study, can be used as tools to examine current perceptions of trust. The data can then be used to make broader systems level change. School psychologists, in

particular, should assist in this systems level change, as systems level change is one component of the National Association of School Psychologists (NASP, 2020) practice model by which school psychologists are trained (Standard IV.1.2, 2020). A majority of change in terms of trust can focus on family engagement, as "the greater the family engagement, the higher level of trust" contributing to improvement in parent-teacher relationships (K12 Insight, 2022).

Brewster and Railsback (2003) highlight a variety of ways to improve overall perceptions of parent trust. Their suggestions focus on diverse families, specifically in regard to culture and language. Importantly, efforts to improve trust for diverse families, including families of students with disabilities can be used improve trust for all students and families. Some suggestions include highlighting student success, improving family-school communication practices, demonstrating openness to conversation, taking parents' concerns seriously, and remembering that it takes time to build trust (Brewster & Railsback, 2003). As discussed in the current study, at times communication may seem to focus on areas of deficit. In fact, the very nature of IEP meetings is to discuss areas of concern. Thus, it is critical for schools to also engage in conversations with families to highlight student strengths. Openness and communication practices are also key. Some conversations may be more difficult to have, particularly as evaluation results may not lead to an IEP or disagreements may arise about necessary services. Although these conversations may be hard and negative feelings may arise, the school team has a duty to walk the parent through the reasoning as to why some of these services are not being provided. This may be one part of a longer conversation and need to surpass the time constraints of a typical IEP meeting. Parents can also be invited to "help generate solutions," ensuring they feel valued as a team member (Brewster & Railsback, 2003). Lastly, the building of trust takes time. Wave 2 highlighted that parents may hold on to past encounters with schools or specific

staff, which can impact current trust building in a new school or new parent-teacher relationship. This serves as a perfect opportunity to engage in a discussion of what has gone well in the past and what the family is looking for differently in this new endeavor. These suggestions are important but not exhaustive. Parent trust is best defined by current perceptions in individual school systems to further indicate specific areas of reform. These suggestions can be used as an initial basis with which to start trust reform, but future work is required to determine the best ways in which trust can be fostered and repaired in individual schools and relationships.

Overall Communication Practices

As previously discussed, it is integral for parents and teachers to develop a communication plan early on in their relationship. The details of that plan are likely going to be unique to each family, as people differ in their wants and needs regarding communication. Although differences may present themselves, the results of this study have highlighted the various changes that have occurred in the types of communication that can exist between parents and teachers. Schools' use of technology has greatly increased in recent years as more and more people are comfortable with and knowledgeable about technology. Although technological barriers were discussed in the parent-teacher relationship, a majority of respondents discussed the key benefits and ease of technology, including more frequent communication and increased access, including access to the other person and access to resources. Texting is a quick and convenient form of communication and applications such as Google Voice can be used to maintain privacy. Additionally, applications such as Google Classroom and Skyward have given parents increased access to their child's education, including a place to see missing assignments and grades, and find materials that may have been left at school or misplaced. In sum, technology should continue to be utilized in a manner that promotes effective communication.

Communication should also be discussed at the outset of the school year, in order to set the tone for the rest of the school year. Edutopia, a website published by the George Lucas Educational Foundation, lists actionable steps teachers can take at the beginning of the school year to promote parent partnerships (Tutt, 2021). In the early childhood setting, many teachers make home visits prior to the first day of school. Home visits offer a way to "connect outside of the school walls," focusing on not only meeting the child, but also the family. Home visits can also provide insight on family dynamics and experiences. Families could also be invited for individual meetings prior to the first day of school for students. Outside of face-to-face contact, surveys can be utilized. Parents can be surveyed on communication preferences and provide pertinent information about their child, including successful strategies, motivational tools, and specific interests. Teachers can also utilize technology as a way to engage parents. Teachers can create classroom social media pages to post photos of student work and preview upcoming curriculum. Application such as the Remind app can be used to help families keep track of due dates and decrease missing assignments. In sum, there are a variety of ways to include families and promote parent-teacher communication and collaboration. Unfortunately, time is a frequently discussed barrier when examining these strategies. It is important for schools to examine a teacher's day and determine the best use of time. During the pandemic, many teachers were called upon during their planning periods to assist in other classrooms due to substitute teacher shortages. Teachers need planning time to effectively work with students and their families. The beginning of the school year is a perfect time to set a day or two dedicated to solely parent contact. Time throughout the year should also be dedicated to family communication. Although it is important for schools to provide a plethora of professional development topics, time needs to be focused on meeting the daily needs of students and families prior to the

inclusion of additional professional development. By setting specific times throughout the day, and even the year, schools can ensure they are promoting family partnerships and allowing teachers adequate time to prioritize family work. Schools can also model this dedication to family partnerships by reworking the manner in which IEP meetings and parent teacher conferences are conducted. Schools can shift their schedule to allow some days and times when parents can meet with teachers outside of the typical school day, as many parents work during the school day and are unable to meet at these times. Schools can also work to actively find substitutes for IEP meetings, so teachers can be fully present in these meetings without rushing to return to the classroom.

Strengths, Limitations, and Future Directions

Mixed Methods Design

The primary strength of this study is the overall design, combining both quantitative and qualitative research within a mixed-methods approach. A strength of the mixed-methods approach is the ability to acquire different perspectives while allowing participants to share their voice (Shorten & Smith, 2017). Wave 1 consisted of quantitative data, and Wave 2 consisted of qualitative interviews. Another strength is the use of dyadic data. This is one of very few studies to utilize dyadic data to understand the relationships of parents and teachers of the same child. In fact, only two studies to date have analyzed parent-teacher relationship congruence using dyadic data (Garbacz et al., 2015; Minke et al., 2014). Thus, the current study is unique in its combination of both dyadic data as well as a mixed-methods approach.

Sampling Bias

As discussed in the participants section of Wave 1, one limitation of this study was sampling bias. The study only included dyad pairs, and thus required both parent and teacher

responses for the same child. Parent responses were not included in the analysis unless teachers also responded, thus forming a dyad pair. It is possible that completion of the scales depended on the parent-teacher relationship. Although the teacher response rate was relatively high at 77.08%, teachers may have been more reluctant to complete the survey if there was a more negative parent-teacher relationship. The current study acquired some parent responses marked by lower *PTRS-II* scores (e.g., scores below 4), but the corresponding teachers did not end up participating, and thus no dyad was formed. This sampling bias may have inflated overall relational congruence, impacting the validity of the results.

Most participants were recruited from the Central Illinois region. Although the basics of education remain consistent across the United States due to federal legislation such as IDEA (2004), teaching practices can differ state to state, town to town, and district to district. Thus, this study does not mirror all possible parent-teacher relationships across the entire United States or worldwide and results must be interpreted in the context of the Central Illinois setting, a setting that is comprised of numerous small, rural districts, with small class sizes, limiting the generalizability of the results outside of the Central Illinois region. Furthermore, the current study is also limited in that it was comprised of a mostly White and female sample across teacher and parent participants. In the child sample, a majority of participants were White, which is consistent with data showing a higher prevalence of diagnosis among white students, but the difference in diagnosis rate is more likely due to lack of access among families of color rather than autism being more prevalent in White students (CDC, 2019). Future studies should seek out a more diverse sample.

Wave 2 consisted of qualitative interviews with a subsample of participants from Wave 1.

The participants in Wave 2 were chosen based on their congruence category (i.e., low or high

congruence) as well as whether or not they agreed to be contacted and to participate in Wave 2 of the study. Of the 9 dyads in the high congruence group, 9 parents and 3 teachers originally agreed to be contacted about Wave 2. I chose to interview all three teachers and the three parents that completed their parent-teacher dyads (who also agreed to be contacted about Wave 2). I also selected an additional parent participant due to the dyad pair being highly congruent but having a mean PTRS-II score in the middle range of the 1 to 5 Likert Scale, thus demonstrating average thoughts regarding their relationship despite high congruence. Thus, there were 5 other parents who agreed to be contacted and were eligible, but they were not contacted nor included in Wave 2 because the target sample size was already obtained. Of the 9 dyads in the low congruence group, 7 parents and 3 teachers originally agreed to be contacted about Wave 2. Two parentteacher dyads were chosen to be interviewed, and then I selected the only remaining teacher participant and one additional parent participant at random. Thus, there were 2 other parents that agreed to be contacted and were eligible but were not contacted nor included in Wave 2 because the target sample size was already obtained. In sum, most of the interviews were conducted in a parent-teacher dyad format, and more parents than teachers originally agreed to participate. See Tables 6 and 8 for more details regarding the interviewed participants from each dyad.

The qualitative findings were captured from predominantly White, female voices in Illinois, and the teacher sample was solely special educators in the public education setting. Furthermore, this study captured the voices of a select group of parents and teachers. Parents responded to community postings for the surveys in Wave 1, and teachers were contacted if parents provided their contact details. It is possible that stakeholders who were dissatisfied or overwhelmed did not respond to the invitation. Participants were only contacted for Wave 2 if they agreed to be contacted after Wave 1 participation. This may have further limited the

potential sample to those with time and resources to be interviewed. Additionally, not all parents and teachers who agreed to participate in Wave 1 were contacted for Wave 2 due to sample size constraints. It is possible that participation was related to satisfaction and involvement for the parent-teacher dyad, leading to participants being more satisfied and involved than a general sample. Thus, this study should be interpreted in the context of a possible sampling bias, impacting the validity of the results.

The described findings are not indicative of the general population and should be interpreted in the context of its demographics. Future studies should consider seeking a more diverse sample to describe broader parent-teacher perspectives across a variety of contexts, times, and places.

COVID-19 Pandemic

This study was conducted in the midst of the COVID-19 pandemic, which was a contextual limitation. Although schools returned to in-person learning for the 2021-2022 school year, the year in which recruitment took place, the COVID-19 pandemic was still very much affecting student learning, through staff shortages, increasing mental health concerns, and lack of instruction during quarantine periods. Teacher burnout increased and teacher self-efficacy decreased during the fully remote setting, but research is still being conducted on the return to inperson learning and lingering effects of COVID-19 (Weißenfels et al., 2022).

Definition of Congruence

Another limitation stemmed from the definition of congruence utilized for Wave 2 in this study. Congruence in parent-teacher relationships is largely understudied with only two studies to date having examined parent-teacher dyads. Additionally, both of these studies have defined congruence differently, using different statistical methods. Minke et al. (2014) defined

congruence by using three "exclusive and exhaustive" categories for the mean scores from the PTRS-II composite scale (Minke et al., 2014, p. 534). Positive congruence was defined by both parents and teachers reporting PTRS-II mean scores greater than or equal to 4.00 on the 5-point Likert scale. Nonpositive congruence was defined by mean PTRS-II scores below 4.00 for both parents and teachers. Lastly, incongruence was defined by parent and teacher PTRS-II mean scores falling into different categories of the 5-point Likert scale. In contrast, Garbacz et al. (2015) used a distance formula in which higher scores indicated more distance between parent and teacher ratings (i.e., low parent-teacher congruence). Three types of congruence were calculated: high congruence (i.e., 1 SD below the sample distance mean), average congruence (i.e., sample distance mean), and low congruence (i.e., 1 SD above the sample distance mean). Garbacz et al.'s study (2015) had a total of 175 participants with mean distance scores ranging from .36-.99 depending on congruence type. The current study chose not to use the methodology from Minke et al., (2014) due to the limitation of the cut scores being "artificially derived" and not based on "empirical grounds" (p. 543). Rather, I aimed to use a distance formula similar to Garbacz et al. (2015), but as discussed above was unable to use distance scores based on standard deviations from the mean as cutoff scores due to the distribution of scores overall. The current study calculated the scores for the 25th and 75th quartile. Congruence distance scores < .1250 (i.e., less than the 25th percentile) were defined as high congruence. Congruence distance scores > .6042 (i.e., greater than the 75th percentile) were defined as low congruence. Scores between .1250 and .6042 were defined as average congruence. In sum, both studies to date have used different statistical methods to calculate congruence. The method used in this study was based on empirical grounds, but the cut scores were specific to this data set as they were defined by the 25th and 75th percentiles. Of the 37 total dyads, 9 dyads were determined to be in the low

congruent group and 9 dyads were determined to be in the high congruent group. If the current study were to have used Minke et al.'s (2013) methodology, one of the dyads in my high congruence group would have been labeled "non-positive congruent," and 4 of the 9 dyads in my low congruence group would have been placed in the "positive congruent group." In sum, using Minke et al.'s (2013) methodology, 1 dyad would have been labeled "non-positive congruent," 5 would have been labeled "incongruent," and 31 would have been labeled "positive congruent." In comparing my methodology with Minke et al.'s (2013), my methodology did not separate between positive congruent and non-positive congruent; however, only one of the dyads in my high congruence group would have been described as "non-positive congruent," using Minke et al.'s system. One of the participants from this dyad was selected for the interview in Wave 2 in order to acquire some information regarding this non-positive congruent perspective. Future studies should work to provide empirical support for a precise method of assessing congruence that can be replicated across studies.

Order Effects

Wave 1 scales were administered via Qualtrics. Scales were answered in one predetermined order, with the *PTRS-II* being the first scale completed by both parents and teachers. Given that relationship factors were asked before broader climate and trust scales, it is possible that relationship details primed participants' thinking about later variables. Scales could be presented in different orders in future studies to account for order effects.

Correlational Design

Wave 1 was correlational in nature, which was a limitation. Although teacher efficacy was found to predict parent-teacher congruence, causal conclusions regarding the direction of the relationship cannot be drawn. Future research, including longitudinal and experimental designs,

should continue to examine the relationship between teacher-efficacy and parent-teacher congruence in order to describe the casual direction of this relationship.

Conclusion

The current study examined relationships between parent-teacher dyads in terms of congruence, the degree to which both parties are in agreement about their relationship. Wave 1 acquired quantitative data regarding a predictive model, with school climate and teacher efficacy as the predictor variables and relationship congruence as the outcome variable. School climate, and parent trust in particular, was found to significantly predict parent-teacher relationship congruence, but teacher efficacy did not predict congruence. Wave 2 acquired qualitative data further describing the parent-teacher relationship. Notable findings include key components of positive parent-teacher congruence (e.g., collaboration and realistic expectations), barriers to positive parent-teacher congruence (e.g., adversarial attitudes and access to services), and additional contextual themes (e.g., communication logistics). The most significant takeaway from this study is the importance of parent trust. Parent trust in schools is the degree to which parents feel that their school demonstrates openness, honesty, competence, reliability, and benevolence. These five components lend themselves to increased parent-teacher collaboration. When trust is present in the parent-teacher and parent-school relationship, collaboration becomes easier. In turn, when collaboration is present in the parent-teacher relationship, congruence is more likely because parents and teachers are in constant communication, aiding towards shared perceptions and beliefs. The combination of trust and communication is critical for autistic students, who benefit from increased collaboration across home and school. Additionally, the current study highlighted the manner in which distrust can lead to adversarial attitudes, which was the most frequently identified barrier to a positive parent-teacher relationship. In sum, a

working parent-teacher relationship is integral to a positive school environment for students with ASD. The current study uncovered key implications for practice, including the need for professional development on parent-teacher communication, autism, keys to building trust, and overall communication practices.

CHAPTER V: TABLES

Table 1

Descriptive Details for the Parent Sample for Wave 1

Variable	%	Range	Mean	SD
Gender Identity				
Male	8.1			
Female	91.9			
Trans Male/Trans Man	0.0			
Trans Female/Trans Woman	0.0			
Genderqueer/Gender Non-Conforming	0.0			
Age (in years)		30-64	43.54	7.79
Race				
White	78.4			
Black	8.1			
American Indian or Alaskan Native	0.0			
Asian	13.5			
Native Hawaiian or Other Pacific Islander	0.0			
Ethnicity				
Hispanic or Latino	5.6			
Not Hispanic or Latino	91.7			
Other	2.8			
Household Income				
Less than \$25,000	5.6			
(Table Continues)				
	100			

Table 1, Continued

Variable	%	Range	Mean	SD
\$25,000-\$49,000	5.6			
\$50,000-74,999	19.4			
\$75,000-\$99,999	22.2			
\$100,000-\$124,999	19.4			
\$125,000-\$149,999	11.1			
\$150,000 or more	16.7			
Highest Level of Education Obtained				
Less Than High School	2.7			
High School Graduate	5.4			
Some College	10.8			
2 Year Degree	2.7			
4 Year Degree	51.4			
Professional Degree	24.3			
Doctorate	2.7			
Length of Time with Primary Teacher				
0-3 Months	35.1			
4-6 Months	29.7			
7-9 Months	0.0			
10-12 Months	0.0			
1 Year	8.1			
2 Years or More	27.0			

Table 2

Descriptive Details for Students Described in Wave 1

Variable	%	Range	Mean	SD
Diagnosis of ASD				
Medical	10.8			
Educational	0.0			
Both	89.2			
Gender Identity				
Male	89.2			
Female	10.8			
Trans Male/Trans Man	0.0			
Trans Female/Trans Woman	0.0			
Genderqueer/Gender Non-Conforming	0.0			
Age (in years)		6-18	11.86	3.46
Race				
White	81.1			
Black	10.8			
American Indian or Alaskan Native	0.0			
Asian	13.5			
Native Hawaiian or Other Pacific Islander	0.0			
Ethnicity				
Hispanic or Latino	5.6			
Not Hispanic or Latino (Table Continues)	94.4			

Table 2, Continued

Variable	%	Range	Mean	SD
Other	0.0			
Grade Level				
K	2.7			
1	2.7			
2	13.5			
3	10.8			
4	2.7			
5	8.1			
6	2.7			
7	16.2			
8	5.4			
9	13.5			
10	2.7			
11	10.8			
12	8.1			
School Type				
Public	89.2			
Private	5.4			
Specialized School for Children with ASD	5.4			
DSM-5 Severity				
Level 1: Requires Support (Table Continues)	64.9			

Table 2, Continued

Variable	%	Range	Mean	SD
Level 2: Requires Substantial Support	16.2			
Level 3: Requires Very Substantial Support	18.9			
IEP Categories				
Autism	97.3			
Blindness	0.0			
Deafness	2.7			
Emotional Disturbance	5.4			
Hearing Impairment	0.0			
Intellectual Disability	8.1			
Multiple Disabilities	0.0			
Orthopedic Impairment	0.0			
Other Health Impairment	35.1			
Specific Learning Disability	10.8			
Speech or Language Impairment	24.3			
Traumatic Brain Injury	0.0			
Visual Impairment	2.7			
Services Received				
Academic	83.8			
Behavioral	51.4			
Social-Emotional	78.4			
Related Services	70.3			
(Table Continues)				

Table 2, Continued

Variable	%	Range	Mean	SD
Percentage of Time in General Education				
80% or more of the day	59.5			
40-79% of the day	10.8			
Less than 40% of the day	29.7			
Paraprofessional Support				
Yes	59.5			

Table 3

Descriptive Details for the Teacher Sample in Wave 1

Variable	%	Range	Mean	SD
Teacher Type				
General Educator	24.3			
Special Educator	75.7			
Gender Identity				
Male	2.7			
Female	97.3			
Trans Male/Trans Man	0.0			
Trans Female/Trans Woman	0.0			
Genderqueer/Gender Non-Conforming	0.0			
Age (in years)		22-60	39.42	9.67
Race				
White	94.6			
Black	0.0			
American Indian or Alaskan Native	0.0			
Asian	5.4			
Native Hawaiian or Other Pacific Islander	0.0			
Ethnicity				
Hispanic or Latino	2.7			
Not Hispanic or Latino	94.6			
Other	2.7			
(Table Continues)				

Table 3, Continued

Variable	%	Range	Mean	SD
Household Income				
Less than \$25,000	0.0			
\$25,000-\$49,999	19.4			
\$50,000-\$74,999	19.4			
\$75,000-\$99,999	22.2			
\$100,000-\$124,999	22.2			
\$125,000-\$149,999	5.6			
\$150,000 or more	11.1			
Highest Level of Education Obtained				
Bachelor of Arts/Science	35.1			
Master of Arts/Science	62.2			
Ph.D/Ed.D	0.0			
Other	2.7			
Grade Levels Taught				
Elementary School	45.9			
Middle School	24.3			
High School	37.8			
School Type				
Public	91.9			
Private	2.7			
Specialized School for Students with ASD (Table Continues)	5.4			

Table 3, Continued

Variable	%	Range	Mean	SD
Years Teaching this Grade Level		0-22	9.39	6.31
Total Number of Years Teaching		1-35	12.27	7.62
Percentage of Day Spend with this Student				
80% or more of the day	45.9			
40-79% of the day	16.2			
Less than 40% of the day	37.8			

Table 4

Correlations Among Subscales and Composite Measures

																						١
Measure	1	2	8	4	S	9	7	∞	6	10	=	12	13	41	15	16	17	18	61	20	21	22
I. Congruence (C)	1																					
2. PTRS-II Parent (C)	79***	ı																				
3. PTRS-II Parent Joining	78***	****6.	ı																			
4. PTRS-II Parent Communication	28	.44**	.20	I																		
5. PTRS-II Teacher (C)	00:	.23	.25	.00	ı																	
6. PTRS-II Teacher Joining	02	.17	.21	09	.83***	ı																
7. PTRS-II Teacher Communication	.03	.21	.20	.12	.82***	.37*	ı															
8. TSDES (C)	14	.23	.19	.21	.49**	.19	.61***	ı														
9. TSDES Instruction	-11	.24	.23	80.	.48**	.22	.56**	.83***	!													
10. TSDES Teacher Professionalism	00:	02	.02	13	.43**	.27	*24:	.42*	.39*	1												
11. TSDES Teacher Support	14	91.	.25	18	.46**	.32	.43**	.52***	.47**	****	1											
12. TSDES Classroom Management	H	.16	.12	61.	.43**	.15	.56**	.75***	.62***	.22	.27	i										
13. TSDES Related Duties	14	.20	.12	.36*	52.	.02	.37*	.83***	.48**	.05	.17	.49**	ı									
14. School Climate (C)	35*	*14.	.40*	.17	.05	60:-	.16	.19	II.	61.	.16	.13	.15	1								
15. Collective Beliefs (C)	08	.12	14	02	.26	03	.46**	.28	71.	.32	.26	.25	. 19	.79***	1							
16. Collective Beliefs Instruction	13	.12	.15	05	.31	.01	.50**	.37*	.31	.42*	.33	.32	.20	. ***79.	.91***	i						
17. Collective Beliefs Discipline	03	11.	11.	10.	61.	06	.37*	.18	.03	.20	.17	.17	.17	.78***	.94***	.72***	!					
18. Faculty Trust (C)	80:	07	05	10	16	23	02	.13	Þ).	.16	90.	II.	.13	.79***	.64**	.50**	***L9	!				
19. Faculty Trust Principal	.19	28	28	11	23	25	14	00:	04	02	17	90.	.05	.49**	.43**	.35*	***	.78***	1			
20. Faculty Trust Colleagues	.01	06	.01	25	27	24	23	-111	14	.17	90.	20	. 111-	.63***	.40*	.34*	.40*	.75***	.39*	1		
21. Faculty Trust Parents & Students	00:	.13	.13	90.	60:	10	.24	.33	.20	.22	.19	.30	.29	.76***	.65***	**67:	.70***	****	.44**	.50**	1	
22. Parent Trust (C)	72***	*****	.72***	.43**	01	9.	07	01	40.	80:-	.03	06	- 00:-	51***	.01	00:	.02	,03	17	.17	60.	1
Mean	.43	4.44	4.47	4.34	4.64	4.74	4.23	8.14	8.07	8.76	8.77	8.16	6.53	.02	7.74	7.93	7.54	4.91	5.11	5.18	4.53	2.46
Standard Deviation (Table Continues)	.46	.59	89.	.74	.30	.25	.85	89.	.93	.38	.36	56:	2.36	. 69:	.92	.87	1.12	09:	.83	.64	77:	1.58

Table 4, Continued

Measure	1	2	3	4	5	9	7	∞	9 1	10 11	12	13	14	15	16	17	18	19	20	21	22
Z	37	37	37	37	37	37 3	37 36	5 36	36	36	36	35	37	36	36	36	35	35	35	35	37

p < .05 *p < .01 **p < .001

Congruence = / Parent PTRS II Composite - Teacher PTRS II Composite /

PTRS-II = Parent Teacher Relationship Scale

TSDES = Teaching Students with Disabilities Efficacy Scale

School Climate = Collective Beliefs Composite + Faculty Trust Composite + Parent Trust Composite

(C) = Composite

Table 5

Correlations Among Key Composite Measures and Demographic Variables

Measure	-	4	r	4	c	0	-	0		01	:	1	2	Ė	CT	0.7	-	97		ì
I. Congruence (C)	1																			
2. PTRS-II Parent (C)	***6L'-	!																		
3. PTRS-II Teacher (C)	00:	.23	!																	
4. Teacher Type	08	.13	.55***	1																
5. Teacher Gender	00.	10	.15	67:	ı															
6. Teacher Age	05	.12	.04	.03	80:	I														
7. Teacher Ethnicity	24	-31	Ţ	27	00:	21	i													
8. Teacher Race	Π.	28	20	14	.04	24	.51***	I												
9. Teacher Income	05	.18	.12	09	.23	.56***	30	17	I											
10. Teacher Years Teaching	80.	00.	.07	.12	80.	.70***	22	13	.43*	1										
11. Teacher Grade	.23	24	24	.15	*,34	.17	24	25	.16	.26	i									
12. Parent Gender	*4*-	.35*	05	90:	05	60.	43**	37*	.15	13	-00	i								
13. Parent Age	.32	21	.42**	.32	23	.00	15	90:-	01	.31	***99.	26	1							
14. Parent Ethnicity	10.	.02	00.	90'-	02	.03	00:	.02	12	.07	.10	03	.12	i						
15. Parent Race	06	04	25	16	80.	11	.34*	.58***	80	.12	45**	15	28	.05	!					
16. Parent Income	18	.20	16	15	06	.43*	21	14	.25	61.	.15	***	13	-00	13	ı				
17. Child Gender	20	.04	24	21	48**	10	00.	80:-	19	14	.17	.10	.00	-:27	16	23	1			
18. Child Age	.18	10	.34*	53	01	.16	38*	34*	.29	.27	.87***	13	.62***	11.	56***	.05	.01	i		
19 Child Ethnicity	07	.10	-:06	14	40	-:00	00.	90.	07	04	00.	.37*	12	.82**	.12	41.	30	05	;	
20. Child Race	03	04	16	20	80.	21	.37*	***\$9	05	.02	.38*	27	25	00	***66	21	17	49**	80:	ı
z	37	3.1	3.7	3.7	5	č	ţ	Ę	į	ē		į		ž	3.1	è				;

* p < .05 **p < .01 ***p < .001Teacher Type: 1 = General Educator, 2 = Special Educator Gender: 1 = Male, 2 = Female Ethnicity: 1 = Hispanic or Latino, 2 = Not Hispanic or Latino, 3 = Other

Race: 1 = White, 2 = Black/African American, 3 = American Indian or Alaskan Native, 4 = Asian, 5 = Native Hawaiian or Other Pacific Islander

Income: 1 = < \$25,000, 2 = \$25,000-\$49,999, 3 = \$50,000-\$74,999, 4 = \$75,000-\$99,999, 5 = \$100,000-\$124,999, 6 = \$125,000-\$149,999, 7 = > \$150,000

Grade: 1 = Elementary, 2 = Middle School/Jr. High, 3 = High School, 4 = Multiple Grades

Table 6

High Congruence

Dyad	Congruence	PTRS-II Composite	PTRS-II Composite	Interviewed
	(Distance)	Parent	Teacher	
1	.00	5.00	5.00	Yes – Parent and Teacher
2	.00	4.50	4.50	Yes – Parent and Teacher
3	.04	3.71	3.75	Yes - Parent
4	.04	4.96	5.00	No
5	.04	4.71	4.67	No
6	.00	4.83	4.83	No
7	.00	5.00	5.00	No
8	.00	4.79	4.79	No
9	.08	5.00	4.92	Yes – Parent and Teacher

Note: *PTRS-II* = Parent Teacher Relationship Scale

Table 7

High Congruence Interview Demographics

Dyad	Role	Age	Gender	Race	Ethnicity	Years	Child	Child	Child	Child
							Age	Gender	Race	Ethn.
1	Parent	45	Female	White	NHL		14	Male	White	NHL
1	SpEd	43	Female	White	NHL	15				
2	Parent	33	Female	White	NHL		8	Male	White	NHL
2	SpEd	56	Female	White	NHL	17				
3	Parent	43	Female	White	NHL		15	Female	White	NHL
9	Parent	44	Female	White	NHL		14	Male	White	NHL
9	SpEd	43	Female	White	NHL	17				

Note: SpEd = Special Educator, NHL = Not Hispanic or Latino; Years = Total Years Teaching,

Ethn. = Ethnicity

Table 8

Low Congruence

	Congruence	PTRS-II Composite	PTRS-II Composite	Interview
Dyad	(Distance)	Parents	Teachers	
1	.71	4.08	4.79	Yes – Parent and Teacher
2	.87	4.04	4.92	No
3	.75	4.25	5.00	No
4	.63	4.71	4.08	No
5	1.08	3.46	4.54	No
6	1.04	3.71	4.75	Yes – Parent and Teacher
7	.83	3.75	4.58	Yes - Parent
8	2.33	2.29	4.63	Yes - Teacher
9	1.17	3.63	4.79	No

Note: *PTRS-II* = Parent Teacher Relationship Scale

Table 9

Low Congruence Interview Demographics

Dyad	Role	Age	Gender	Race	Ethnicity	Years	Child	Child	Child	Child
							Age	Gender	Race	Ethnicity
1	Parent	59	Male	White	Other		17	Male	White	NHL
1	SpEd	42	Female	White	NHL	20				
6	Parent	50	Female	White	Hispanic		16	Male	Other	Hispanic
6	SpEd	38	Female	White	NHL	17				
7	Parent	33	Female	White	NHL		8	Male	White	NHL
8	SpEd	35	Female	White	NHL	14				

Note: SpEd = Special Educator, NHL = Not Hispanic or Latino; Years = Total Years Teaching

Table 10

Average Congruence

Dyad	Congruence	PTRS-II Composite	PTRS-II Composite
	(Distance)	Parent	Teacher
1	.20	4.50	4.30
2	.42	5.00	4.58
3	.21	4.08	4.29
4	.33	5.00	4.67
5	.38	5.00	4.63
6	.37	4.17	4.54
7	.38	5.00	4.63
8	.38	5.00	4.63
9	.42	4.21	4.63
10	.17	5.00	4.83
11	.17	4.08	4.25
12	.42	4.33	4.75
13	.50	4.50	5.00
14	.21	4.63	4.83
15	.25	4.75	5.00
16	.17	4.79	4.96
17	.42	4.79	4.38
18	.17	4.42	4.25
(Table C	ontinues)		

Table 10, Continued

Dyad	Congruence	PTRS-II Composite	PTRS-II Composite		
	(Distance)	Parent	Teacher		
19	.58	4.67	4.08		

Note: *PTRS-II* = Parent Teacher Relationship Scale

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APPENDIX A: CODE FREQUENCIES

