

**Parent-Teacher Relationships as an Influence of Academic Achievement for Students with
Autism: A Qualitative Descriptive Case Study**

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Abstract

Parents and teachers play a vital role in promoting positive learning support and environments for students with autism. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through grade 5 in Canada. Bronfenbrenner's ecological systems theory was the conceptual framework that undergirded this qualitative case study. A qualitative case study was utilized to ensure real-world experiences in a natural setting. Purposive sampling was to recruit a sample of 32 participants, which was comprised of 25 parents and 7 certified teachers. Data were collected and triangulated using questionnaires and semi-structured interviews and analyzed using a six-step thematic analysis. Results from this study confirmed that collaboration between home and school shapes the child's development and learning outcomes. A strong educational foundation for children with autism was linked to mutual trust and effective interactions between parents, teachers, and extended family. Future research should continue to explore parents' and teachers' perceptions of home-school collaboration and pedagogical approaches for students with autism using various research approaches.

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Chapter 1: Introduction

Parents can play a pivotal role in the education of a child with autism. According to Shourbagi (2017), parent involvement is an active partnership between teachers and parents to actively contribute to the education of special needs children. Epstein (2010) posited that when teachers promote partnerships with parents, children's learning improves and more succeed in school. Hummerstone and Parson (2020) concurred but also added that parent collaboration can help teachers understand and support students with autism in an educational setting. Numisi et al. (2020) acknowledged educating children with disabilities can be challenging, nevertheless, parental involvement is invaluable when children with disabilities are in the education system. Without parental involvement, the learning needs of children with autism may not be maintained as adequate support and assistance do not always occur in the learning environment. Parent involvement can be affected by barriers such as quality teacher communication, school policies, and lack of self-confidence.

Prior studies have been conducted on family involvement, parent-teacher relationships, and academic outcomes for children with autism. Hess et al. (2006) conducted a study on the partnerships between parents of children with disabilities and teachers. Results revealed that although parents want to advocate for the children's education, parents often lack adequate communication with teachers and feel children face discrimination due to varied student learning expectations. Parsons et al. (2009) conducted a quantitative study on the educational experiences and academic concerns for children with disabilities and families. Results revealed that parents of children with disabilities were overall satisfied with how the children were supported and treated in school. However, results also indicated parents of children with disabilities felt the children were academically discriminated against when compared to children without

disabilities. Zablotsky et al. (2012) conducted a quantitative study on the relationship between school involvement and parents' satisfaction with the education for children with autism. Results revealed parents of children with autism were dissatisfied with level of school communication, which impacted parent involvement.

There was a gap in the literature relative to the influence of the parent-teacher relationship on the academic achievement of students with autism. Wahyuni and Mangunsong (2022) used parental opinion and assessment to conduct a study on the perceived academic achievements of children with special needs. Future research was suggested to explore the role of parent involvement in the education of children with special needs. Mann and Gilmore (2021) conducted a qualitative study on the influence of parent-teacher partnerships on positive student academic outcomes. Participants in the study were limited to Australian schools and may not be applicable to other geographic locations. McIntyre et al. (2023) examined parent-teacher relationship quality and family school engagement. Participants in the study were limited to one region of the United States. The focus of this study was to explore how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada.

This study advanced knowledge and practice relative to the relationship between family involvement, parent-teacher relationships, and academic outcomes for the education of children with autism. Santiago et al. (2021) revealed that information about parental school involvement was commonly one-sided with only parents' viewpoints even though teachers often collaborated and supported parents with the child's learning. Syuraini et al. (2022) indicated parents believed children's learning outcomes could be influenced by parent-teacher communication and collaboration. Abed and Shackelford (2023) found that parents often faced challenges when

providing academic support to children with special needs and parents required guidance from educators and school administrators. When parents and teachers worked together and engage in a successful learning partnership, children with autism achieved academic achievement.

Statement of the Problem

The problem addressed by this study was that children with autism experienced lower achievement due to poor parent-teacher relationships. Hasson et al. (2022) argued that additional support can be critical for children with autism. Without sufficient support, children with autism's long-term development can be impaired and learning compromised. Villegas et al. (2022) suggested the learning goals for students with autism heavily rely on teachers, but teachers struggled to devote enough time to support these students. Gedik and Urkmez (2023) argued that the education outcomes for children with autism was improved with home-school partnerships, but found there was a lack of family-teacher engagement. Parents of children with autism often felt ignored and hence isolated when attempting to advocate for and support the child's education. Teachers played a key role in the academic development of children with autism; however, parents must also participate in the child's learning.

Students with autism, parents, and teachers were affected by the problem. Maciver et al. (2023) stated learning can be a struggle for children with autism as children often require extra support to succeed in school. According to Cappe et al. (2021), teachers struggled to implement special learning strategies and learning plans for students with autism, thus adding high levels of stress in the classroom. Taneja-Johansson et al. (2023) stated that supportive learning environments began at home which could alleviate teacher concerns over effective and appropriate classroom support structure for children with diverse needs. Mazon et al. (2022) further emphasized how teachers were often forced to find ways to properly support the needs of

students with autism due to a lack of adequate communication and coordination between parents and school staff. Supporting children with autism in the educational system may be difficult and therefore require an improved learning environment for teachers, parents, and children with autism.

Purpose of the Study

The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through five in Canada. Convenience sampling was used to recruit a sample of 20-25 parents and teachers of students in K-5 students.

According to Andrade (2021), convenience sampling collected data from part of the population that was available and easily accessible. Participants were at least 18 years of age and were a parents or a certified teacher of a student with autism in grades k-5. Data were collected through 20-25 respondents of a questionnaire and 10-15 semi-structured interviews. Data were analyzed using Braun and Clark's (2006) six-step thematic analysis. Data were analyzed by becoming familiar with the data, generating initial codes, searching for themes, defining, and renaming themes, and presenting results in a written narrative that highlights identified themes relative to how parents and teachers described the parent-teacher relationships as an influence on the academic achievement of students with autism in grades kindergarten through five.

Introduction to Conceptual Framework

Ecological systems theory was the conceptual framework that undergirded this study. Bronfenbrenner (1994) postulated that a child's environment had the ability to influence a child's emotional, physical, and psychological development. The ecological systems theory focused on various interconnected and interactive environmental systems: the microsystem, mesosystem,

exosystem, macrosystem, and chronosystem. El Zaatari and Maalouf (2022) concurred, stating that a child's learning and sense of belonging at school was enhanced by the interactions between students and the school's environment over time. Rosa and Tudge (2013) further aligned the ecological systems theory as a representation of a child's growth in relation to the complexity of the real-world and various influences within the child's environment. Bandura (1977) suggested social learning was a complex process that went beyond the learner's environment and utilized various forms of interaction. Ertmer and Newby (2013) postulated that every learner constructed knowledge through new meanings and ideas based on experiences. Mukhalalati et al. (2022) further argued social learning theory emphasized social influences and environments as reasons for learning and learning reinforcement. The ecological systems theory and social learning theory emphasized learning and the growth that occurred as a child interacts with the environment.

Ecological systems theory was appropriate to address the problem presented by the study. Dunst (2022) believed the growth of a child is related to the interconnected environmental systems which included the child's interests and everyday activities coupled with family behaviors and expectations. Crawford (2020) implied environmental systems were complex, interconnected layers which expanded from the individual to external influences such as social policy and culture. Bronfenbrenner's theory aligned with the idea that children with autism's education was influenced by a child's environment and the people in the environment. For this study, children with autism interacted with their family and parents (microsystem) and with the relations between family and school (mesosystem). Research questions were developed based on the identified gap in the literature addressed the problem and purpose of the study. This study added to or extended the ecological systems theory by exploring how parents and teachers

described the parent-teacher relationships as an influence on the academic achievement of students with autism in grades kindergarten through five.

Introduction to Research Methodology and Design (Nature of the Study)

This study used a qualitative methodology. According to Tomaszewski et al. (2020), the qualitative approach sought an understanding of the subject instead of the prediction of outcomes. Qualitative research built knowledge through the participants' viewpoints and the meanings given to the viewpoints. Borgstede and Scholz (2021) identified interviews and observations as common qualitative research methods as a means to collect data that was then analyzed to identify themes. According to Pyo et al. (2023), qualitative research focused on subjective phenomena that cannot be numerically measured. This qualitative method was appropriate because the focus of the study was to obtain participants' viewpoint of subjective phenomenon using interviews to identify common themes.

This qualitative study utilized a case study research design. According to Yin (2018), a case study explored a single complex issue within its natural context while answering "how" and "why" questions" for the research issue. Coombs (2022) also explained how a case study sought to gain an in-depth understanding of a phenomenon in a bounded system. The bounded system of the research contained a single factor that defined the case study. Priya (2020) remarked how a case study was a research design that utilized the research questions as a foundation of the research. The answers to the research questions analyzed the inquiry in considerable detail and represented an understanding beyond statistical explanations. This case study design was appropriate because the analysis of the data drew conclusions about the complexities of the research and helped explain the interactions of the case factors.

Research Questions

RQ1

How do parents and teachers describe the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5?

RQ2

How do parents and teachers describe family school engagement as an influence on the academic achievement of students with autism in grades kindergarten through 5?

Significance of the Study

There was a gap in the literature relative to the parent-teacher relationship as an influence on the academic achievement of students with autism. Wahyuni and Mangunsong (2022) reported a lack of personal insight from parents in the descriptions of their own child's academic learning. Mann and Gilmore (2020) argued that positive parent-teacher relationships were necessary for student success and recommended a study that included a broader representation of teachers to fulfill more robust descriptions of the parent-teacher relationship. McIntyre et al. (2023) stated there was a gap in the measurement of family involvement, parent-teacher relationship quality, and academic outcomes. This study addressed the gap in the literature and added to the body of knowledge relative to the parent-teacher relationship as an influence on the academic achievement of students with autism.

This study contributed to the existing literature. Malczyk and Lawson (2017) argued that parent-teacher engagement and student's academic outcomes were strongly influenced inside and outside of the school environment. Heatly and Votruba-Drzal (2017) indicated that parents frequently decreased school involvement after students began kindergarten, therefore communication and engagement between parents and teachers also decreased. By way of

quantitative research, the ecological systems theory and the social learning theory was expanded to include the education of students with autism through the support and engagement of parents and teachers.

Understanding the parent-teacher relationship as an influence on the academic achievement of students with autism had implications for teachers and students in the inclusive classroom. Schultz et al. (2016) shared an appreciation of the need for parental advocacy and information sharing, but also the difficulties with overly involved parents. Syeda and Bruck (2022) supported strong parent-teacher relationships and the promotion of learning at school and at home so students with autism could readily improve their learning outcomes. Mautone et al. (2016) suggested that parent efforts influenced the quality of the parent-teacher relationships and student school success. This research provided insight to parent and teacher perceptions of the struggles and recognition of the support given to children with autism in the educational setting.

Definitions of Key Terms

Autism

Autism referred to a persistent neurodevelopmental disorder that impacts social interactions and communication skills while often demonstrating a specific and repetitive pattern of behavior (American Psychiatric Association, 2013; Hirota & King, 2023).

Parental Involvement

Parent involvement highlighted parents' role in supporting children in learning at school and home with the goal of improving their child's education (Myende & Nhlumayo, 2022).

Parent-Teacher Relationship

The parent-teacher relationship occurred when parents and educators worked together to support and enhance a child's academic performance (Yu et al., 2023).

Summary

The problem addressed by this study was children with autism experienced lower achievement due to poor parent-teacher relationships. Wahyuni and Mangunsong's (2022) research revealed that parents of children with disabilities tended not to comment on propensities that affected the child's education. However, Mann and Gilmore (2021) voiced the importance of parent-teacher collaboration for attaining positive learning outcomes for children with autism while addressing concerns about the lack of teacher insight and engagement in parent-teacher relationships. McIntrye et al. (2023) advocated for research that measured family involvement and parent-teacher relationship quality relative to the education of children with autism. Bronfenbrenner's (1994) ecological systems theory and Bandura's (1997) were the theoretical frameworks that were used to examine the learning of a child with autism in different environmental contexts – school and home. Data were collected through at least 20-25 respondents to a questionnaire and 10-15 semi-structured interviews. Data were analyzed by becoming familiar with the data, generating initial codes, searching for themes, defining, and renaming themes, and presenting results in a written narrative that highlights identified themes relative to how parents and teachers described the parent-teacher relationships as an influence on the academic achievement of students with autism in grades kindergarten through five. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationships as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada.

Chapter 2 included a discussion of the conceptual framework, a review of the literature, methodological issues, a synthesis of findings, and a summary. Chapter 3 included a discussion of the methodology that was used to explore the phenomenon. Chapter 4 provided a discussion

of the study's findings. Lastly, chapter 5 included a discussion of the implications for practice, policy, and theory, along with recommendations for further research.

Chapter 2: Literature Review

The problem addressed by this study was children with autism experienced lower achievement due to poor parent-teacher relationships. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationships as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada. Schuck et al. (2022) indicated there is often a disconnect between teachers and classwork and what parents are doing at home. Vassallo et al. (2020) also highlighted the differences in priorities and approaches faced by parents and teachers when supporting children with autism which potentially led to misunderstandings. Andoni et al. (2024) acknowledged a strained relationship between parents of children with autism and teachers caused a negative impact and therefore caused distress for a child with autism. The results of this study showed the effect of parent and teacher interactions and the academic achievement of students with autism.

Research for this literature review was conducted through ERIC and Google Scholar accessed via National University's library. Peer-reviewed articles were found using the following keywords: *parent involvement, parent-teacher collaboration, parent-teacher relationship, parent engagement, learning outcomes for students with autism, parental roles in child learning, teacher perceptions, young students with autism, and inclusive learning environments*. The literary search led to approximately 80 articles and information relevant to this study. Most applicable articles had been limited to include a five-year range from 2019-2024. There are, however, significant articles in this review prior to 2019 as they reflected historical or seminal aspects of the study.

Chapter 2 included a discussion of the theoretical frameworks of the ecological systems theory and the social learning theory that undergirded this study. The chapter also included

extensive literature that covered (1) a historical overview of autism in Canadian schools, (2) a depiction of autism, (3) the target population and why this population needed to be studied, and (4) a survey of current literature pertaining to the constructs of each theory. Chapter 2 concluded with a summary of methodological issues in the literature review and a synthesis of the findings.

Conceptual Framework

The ecological systems theory is the conceptual framework that will undergird this study. Bronfenbrenner (1979) developed the ecological systems theory as a holistic approach to describe the growth and development of children. The ecological systems theory has evolved from alternative theories related to complex systems and environments. Rosa and Tudge (2013) acknowledged that Bronfenbrenner recognized the complexities of child development and highlighted the broader, more intricate interplay of numerous environments and factors that influenced every part of a child's life. Crawford (2020) accredited Bronfenbrenner's ecological system theory as an evolution from Bertalanffy's (1950) general systems theory. According to Drack and Pouvreau (2015), Bertalanffy proposed that real systems (living organisms) can acquire new properties as living organisms interact with the environment which can result in continual evolution. Velez-Agosto et al. (2017) further noted that the ecological system theory was influenced by Vygotsky's socio-cultural theory and how cognitive development is socially and culturally dependent. Overall, Bronfenbrenner developed the ecological systems theory from various frameworks. Each framework influenced Bronfenbrenner and helped him to focus on the impact of social interaction on a child's development.

The ecological systems theory can be used to understand how the interactions within a child's environment can help a child grow and develop into a mature adult. Bronfenbrenner (1978) acknowledged the ecological systems theory as *the ecology of childhood* as the

arrangement of environmental levels are organized by how much impact each level has on a child. Bronfenbrenner and Ceci (1994) posited that behavioral genetics and environmental characteristics can also impact human development as each environmental condition is a consequence of various interactions and functioning. Bronfenbrenner (1978) argued that a child is at the center of the child's environment and that environment then expands past the immediate surroundings. Bronfenbrenner's (1994) ecological approach consists of five concentric layers that encompasses a child's support structures and the interactions between these foundations. These concentric layers are the microsystem, mesosystem, exosystem, macrosystem, and chronosystem.

Bronfenbrenner's ecological environment consists of interrelated systems. The first layer is the microsystem. Zaatari and Maalouf (2022) described the innermost environment, the microsystem as the immediate setting containing the child. Reifsnider et al. (2005) referred the following layer, the mesosystem, as the interactions between the structures of the microsystem. Zaatari and Maalouf (2022) defined the following layer, the exosystem, as the connections that affect the mesosystem. These connections have indirect influences on the development of a child. Flynn and Mathias (2023) further described the exosystem as the larger social system or network in which a child does not regularly engage. Liu et al. (2021) provided information about the fourth layer and implied the macrosystem is not a specific environment as the macrosystem consists of ideologies and attitudes that can influence a child's upbringing. Tong and An (2024) clarified the macrosystem as the outermost circle which allows value and belief systems such as culture or socioeconomic status to influence any or all former layers. Zaatari and Maalouf (2022) characterized the chronosystem as the final layer which encompasses time and relates to life transitions. According to Crawford (2020), as a child ages and matures, the physical and

cognitive changes may interact and alter Bronfenbrenner's previous environmental layer influences. The ecological system theory is a complex, interacting theory that affects every aspect of a developing child.

Similar studies have used Bronfenbrenner's ecological systems theory as a theoretical framework. Wang et al. (2023) explored the factors that could impact student learning outcomes through online learning. The study revealed that school support and family involvement impact online learning engagement and academic achievement. Hoffman and Kirby (2022) conducted a qualitative analysis using the ecological systems theory to identify barriers that may affect the transition to adulthood for youth with autism. Influential supports such as interests, positive experiences, and parent awareness were identified as positive factors in child development. However, barriers such as lack of awareness about resources and youth challenges were found to impede the transition to adulthood. Klag et al. (2021) addressed the problem of gaining employment for individuals with autism by applying the ecological systems theory to reveal the multiple elements that can affect employment. The research revealed an employment ecosystem that entailed new challenges for individuals with autism as individuals age into adulthood. The ecological systems theory was often considered a widely accepted holistic framework for researchers to use when studying human development to understand a person's evolving environments.

Other theoretical frameworks were considered but deemed not appropriate for this study. Harris (2016) described Deleuze and Guattar's rhizomatic learning theory (2002) as a metaphor based on biological rhizomes and described learning as an expanding, multi-directional endeavor that adapted and grew as a community effort as learners' needs and perceptions change. The rhizomatic learning theory was not appropriate because the focus of this study was not to explore

how participants chose a learning path bounded by the participants' living habitat or environment. Premack and Woodruff's theory of mind (1978) referred to an individual's ability to use cognitive capacity to attribute mental states. Pedreno et al. (2017) described the theory of mind's core concepts as being based on the understanding that people have different thoughts and feelings from each other. Kana et al. (2015) defined the theory of mind as how one strongly engaged in social interactions and social cognition. This study was not appropriate because the focus of this study was not to examine the relationship between social interactions and social cognition.

This study was appropriate to explore how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism. Sun et al. (2021) contended that success in school was often related to academic achievement. Academic achievement has been commonly measured in general education research, but this research was more specific and encompassed the learning of a child with autism. Sengonul (2022) asserted that research about parent involvement in education was important as children's development was dependent on person-context interaction. However, Wondim et al. (2021) concluded that parent and school involvement was minimal when children have disabilities. An in-depth examination was taken to address the problem and purpose of the study relative to how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism.

History of Autism

Autism is a complex neurological disorder that affects people in different ways. Lord et al. (2020) defined autism (ASD) as a neurodevelopmental disorder characterized by a multitude of impairments in social communication, sensory deficits, and restricted or repetitive behaviors.

Autism was not recognized as a specific disorder until the early 20th century. Evans (2013) traced the beginnings of the term autism from German psychiatrist Bleuler in 1908 as a symptomatic word to describe severe cases of childhood schizophrenia. Bleuler (1950) defined autism as a physical demonstration of a person's inner thoughts of which onlookers were unable to understand or participate. According to Harris (2018), Leo Kanner, the first person to publish a systematic description of autism in 1943, defined infantile autism as a neurological disorder in which children were intelligent, but displayed deficits in social behaviors. Chawner and Owen (2022) indicated that names pertaining to autism have been constantly modified due to ever-changing definitions. Autism is now recognized as autism (ASD), but autism has also been accepted as Asperger syndrome, Rett Syndrome, pervasive developmental disorder, and autistic disorder.

The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM) originally labelled children with autistic traits as children with childhood schizophrenia, resulted from cold parenting. According to Mottron and Gagnon (2023), the DSM-III manual, published in 1980 and then revised in 1987, broadened the concept of autism to a pervasive development disorder which was distinct from schizophrenia. Rosen et al. (2021) differentiated the definition of autism in DSM-IV to DSM-5 marked as a shift from a multi-categorical diagnostic system for autism to a single diagnosis with multiple dimensions. The diagnostic criteria in the DSM-5 advanced the term of autism to autism.

History of Disabilities and the Canadian Education System

The first legislation for the rights of individuals with disabilities in Canada passed in 1839. Brown and Radford (2015) suggested provincial governments were given authority to

establish provincial asylums with no formal education for people with developmental disabilities. Pooran and Wilke (2005) stated Canada had rights for individuals with disabilities enshrined in the country's Constitution since 1867. According to Oreopoulos (2005), by 1873, all but three provinces had established a representative government for the education of children and funded schools through taxation. Harrison (2020) indicated the UDHR declared education to be free and compulsory for elementary-aged children. Although the Universal Declaration of Human Rights (UDHR) of 1948 posited that everyone had the right to a core education, an education was still not available for people with disabilities.

Canada did not begin to eliminate barriers for people with disabilities until the 1950s when deinstitutionalization was mandated. Mulheir (2012) affirmed deinstitutionalization was required as children with disabilities were isolated from their families and often lacked access to inclusive health and learning supports while in residential facilities. The closing of Canadian institutions was supported by UNESCO (United Nations Educational, Scientific, and Cultural Organization). The UNESCO Convention against Discrimination in Education (1960) emphasized the importance of inclusion and equity. Lemay (2009) argued that people with any degree of disability are more likely to do better in the community compared to an institution. According to Brown and Radford (2015), the Canadian Associations for Community Living and the Canadian Association for Children were created for people with developmental disabilities, founded on the premise that people with disabilities had the right to participate in life's decisions. Such organizations allowed teachers and parents new and increased opportunities to express concerns and develop advocacy strategies. Francisco et al. (2020) stated deinstitutionalization was a positive step in lowering educational barriers, but students with disabilities still were required to attend special classes without being separated from other

students. In 1996, British Columbia became the first province to close all the large institutions for people with disabilities.

There was little information on the closure of Canadian institutions for people with disabilities before the publication of *Obstacles*. *Obstacles* (1981) is a Canadian publication authorized by the House of Commons Special Committee in the 1980s designated to address the deinstitutionalization of the Disabled and the Handicapped. This publication indicated the challenges faced with deinstitutionalization even though the Canadian Human Rights Act (1977) included the prohibition of discrimination based on mental disability. Banks (2009) argued that diversity and inclusion were essential conditions of human rights values although seldom followed. The transition to community living was a slow process for people with developmental disabilities in Canada and continued to require government intervention.

As people with disabilities moved into community-based care, independence and community integration grew. Joffe (2010) stated the government of Ontario proposed the *Handicapped Persons Right Act* (1979) as the promise for Canadians with disabilities was to have the right to live free from discrimination and enjoy the same quality of service, education, and inclusion as people without disabilities. Siegel and Ladyman (2000) indicated that the policy of inclusion was presented by British Columbia's Ministry of Education in 2000, yet the policy was not uniformly adopted by school boards and districts until years later. Then, Article 24 of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) (2007) acknowledged the right to an inclusive education for students with disabilities. In 2012, the Supreme Court of Canada ruled that students with disabilities were entitled to receive accommodation measures needed to access and benefit from public education. Canadian autism policy, Bill S-203, the Federal Framework on Autism Spectrum Disorder Act, received approval

in 2023. This legislation profiled the need to support people with autism, families, and caregivers in the community.

Inclusion was not the first option for the education of children with disabilities. Hehir et al. (2016) stated that a dual pathway had been provided for students with disabilities based on the assumption that segregation was a better option than in mainstream classrooms. Hayes and Bulat (2017) emphasized the goal of educating children with special needs should be the same as educating children without special needs. Mann et al. (2023), however, argued that special schools continued to be a significant barrier to inclusive education reform. Brussino (2021) argued schools were instead focusing on enlarging school capacity to accommodate students with disabilities in mainstream schools, which did not mean students with disabilities were in mainstream classrooms. Wehmeyer (2022) revealed school officials did not want children with disabilities to be integrated with peers as school officials often believed children with disabilities were uneducable and typical children needed protection from children with disabilities. However, in 2023, the Alberta government asserted that the government was responsible for providing inclusive schooling for students with disabilities at the policy level and that improvement was still needed at the school setting level.

Autism in Canadian Schools

Canadian legislation prohibits discrimination against children with disabilities and mandates the right to an inclusive education. Shepherd and Waddell (2015) disagreed, noting that parents of children with autism have conflicted with Canadian policymakers since the 1990s. Greschner and Lewis (2003) concluded legal challenges increased between parents of children with autism and provincial governments for the funding of early autism interventions. With many successful judicial decisions, funding for young children with autism increased and

specific programs emerged. Roberts and Webster (2020) spoke of individual concessions made for students with autism in schools. Specific school strategies and approaches included individual educational plans, behavioral intervention, multidisciplinary collaboration, and adaptations in curriculum and instructional practices. Due to the Individuals with Disabilities Act (IDEA) originally passed in 1975, then adjusted in 1990 to include autism, individual education programs for students with autism were newly authorized in Canada's education system.

Education for students with disabilities was not equal in all parts of Canada. According to AuCoin et al. (2020), each province or territory had their education jurisdiction which meant provincial interpretation of inclusive education policy varied. Avery et al. (2022) stated some provinces offered a universal amount of support for all children in the spectrum, while other provinces provided support based only on the assessed needs of the individual. Individualized education support and programs for students with autism can vary and be found in segregated special education classes or inclusive general education classes.

Autism Around the World

Autism affects individuals around the world. According to Zeidan et al. (2022), approximately 1% of children around the world have been diagnosed with autism. Li et al. (2022) confirmed rates of autism in children aged 8 years have indicated a steady incline. More specifically, in the United States, autism rates increased from 2.47% in 2014 to 3.14% in 2020. In Europe, autism rates ranged from 0.42% in 2014 to 3/13% in 2020, whereas in Australia the rates increased from 1.41% in 2014 to 2.52 % in 2020. Sacco et al. (2022) concluded that autism research proficiency is still developing in low to middle-income countries. Autism prevalence rates are most likely greatly underestimated.

Various agencies have conducted autism surveillance to help identify autism rates around the world. Salari et al. (2022) discussed how early autism detection helped develop strategic plans to meet and improve educational performance. Health policymakers relied on the prevalence numbers to understand the burden of autism and the demands autism had on health and government services. Zeiden et al. (2022) insisted prevalence estimates dictated public policy and research priorities so knowing where to locate the screening Data were paramount. Canada used the National Autism Spectrum Disorder Surveillance System which reported autism prevalence across six provinces and the Yukon territory. In the United States, the Center for Disease Control (CDC) tracked autism numbers among the citizenries. Lopez and Moller (2024) indicated that individual national health registries in France, Denmark, and Iceland provided autism estimations. Tracking autism rates helped countries allocate funding for autism research and resources.

Countries commonly allocated budgets for services for people with autism. Talantseva et al. (2023) cited autism as an extremely disabling impairment which inflicted an exceedingly high economic burden. McConkey (2022) stated the number of available resources was often reflected by affluence and rural-based populations. Affluent countries demonstrated a natural network of governmental services. In contrast, poorer countries lacked service planning and delivery for people with autism. Talantseva et al. (2023) indicated countries with higher income and human development index (HDI) reported higher rates of autism and increased access to educational and social supports. Zeidan et al. (2021) reported that 33% of individuals with autism had co-occurring intellectual disabilities, which increased the financial need for support in and out of school. Countries commonly identified and assessed individuals with autism, so financial resources were assigned to the necessary treatments.

Caught in the Middle: Students with Autism and The Parent-Teacher Relationship

Autism affects how people perceive and interact with the world; therefore, children with autism typically experience difficulty in learning. According to the Canadian Health Survey on Children and Youth (2019), the prevalence of autism among children aged 5 to 11 is 2.5%. Statistics Canada (2024) estimated there to be approximately 5.625 million students enrolled in public and private schools in Canada in 2021/2022. With an approximate autism rate of 2.5 %, there would be 140,625 students with autism present in the 2021/2022 Canadian school system. Ibrahim (2020) asserted that school-age children with autism required specific approaches from family and teachers to enhance academic performance. Hawthorne (2024) reported that almost 1 in every 50 children had autism in Canada. With an average of 30 students per class, there was at least one child with autism in every two Canadian classrooms. Farrow et al. (2024) recognized children with autism aged 5 to 17 often had different functional struggles and needed specialized support and services for children with autism and their families. For these difficulties, 22% of children with autism had difficulty with memory or concentration, 19% with communication, and 13% with self-care. An autism diagnosis, however, did always indicate a child with autism encountered functional challenges and required significant targeted interventions.

As in Canada, autism in the United States was also prevalent. According to Ames et al. (2022), Canada's prevalence of autism was approximately 1.5% of children aged 5-17 years. In contrast, the Centers for Disease Control and Prevention (2023) estimated 2.8% of children in the United States were identified as children with autism. D'Adamo et al. (2024) confirmed autism rates in the United States were increasing at an alarming rate. With the autism criteria expanding in the 1990s, there had been a 300% rate frequency increase in autism since 2000. Loftus (2024) further documented that autism rates in the United States were dramatically higher by 241% than

the baseline statistics in 2000. Harris (2023) questioned the variance in autism rates between states, which ranged from 1 in 43 in Maryland to 1 in 22 children in California. Diagnostic screening and the availability of services were given as probable reasons for the notable rate differences.

Children spend a substantial amount of time in school. Anderson et al. (2024) emphasized the need for a deep understanding of children with autism while in school as students spend at least 180 days per year in most US states. The Education for All Handicapped Children Act (1975) was introduced in the United States so children with disabilities were allowed to attend public schools. According to the National Center for Education Statistics (2023), there were approximately 7.3 million students in US public schools, of which 12% or 880,000 students had autism. Kolbe et al. (2023) expressed concern that school districts across the United States lacked adequate education services for people with special needs and failed to meet the legal obligations outlined in the Individuals with Disabilities Education Act (2021). Inclusive education for children with autism continued to be a struggle for many US states.

Debates continued regarding inclusive education for children with special needs in the United States. Leijen et al. (2021) considered the argument of two opposing discourses for inclusive education. One discourse described children with special needs as having the highest quality education provided by specially trained people. The second discourse reported children with special needs as being able to learn together. These two diverse understandings were noted to be commonly represented throughout the United States as children with disabilities often acquire education in separate or specialized schools and not in mainstream classrooms. Morgan et al. (2022) confirmed segregation for children with disabilities continued to occur in the United States. Education placement for children with disabilities was found to be further based on race,

ethnicity, or degree of need. Learning was found to need to be varied for children in the autism spectrum. Vivanti et al. (2022) identified that it was not the physical integration that made a successful learning experience; instead, the importance was the learning opportunities a child with autism received in the least restrictive environment. Liu et al. (2023) further suggested nearly 90% of children diagnosed with autism received special education services in public schools. U.S. federal law mandated all public schools educate all children, but it did not identify what public schools must provide.

Parent-Teacher Conflict in the Inclusive Classroom

Parents of children with autism were often conflicted with teachers in an inclusive school environment. O'Hare et al. (2023) stated mothers of children with autism were commonly viewed as negotiators, monitors, supporters, and advocates. Blackwell (2023) admitted children with autism faced barriers in schools caused by conflicting parent-teacher opinions. Children were at times excluded from classroom activities due to challenging behaviors, but parents viewed the exclusion as a lack of providing accommodations. Gagnon et al. (2019) argued students of intrusive, overprotective, and overbearing parents experienced poorer outcomes. Tyszkiewicz-Gromisz et al (2024) argued that parents were often controlling and overprotective. Teachers contended parents created submissiveness in children by ordering teachers to adhere to certain parental preferences. Barriers developed between parents and teachers weakened school relationships and made the educational journey difficult for a child with autism.

Parents' active involvement in the learning of children was important as parents were commonly the ones who spent most time with the children. Chaidi and Drigas (2020) revealed parental involvement as a necessary influence on the education and quality of life for children with autism. Sokal and Katz (2020) highlighted legislation from the BC Ministry of Education

which contained a special needs student order (2006) which required parent consultation in the integration and education decisions for children with autism. Parent involvement in a child with special needs education was deemed necessary for the promotion of positive academic achievement. Schmid and Garrels (2021) accepted school success for students with disabilities was strongly based on the support and encouragement received from parents. Parents were therefore entitled to be treated as partners in the schooling of their children with autism.

Parents often questioned teachers' ability to educate students with autism in an inclusive environment. Faraji-Khiavi et al. (2021) indicated parents of children with autism often felt dissatisfied with the skills children with autism learned in school, concluding that inclusive classrooms prevented the learning of specific skills. Anderson (2020) added that parents felt children with autism faced learning obstacles due to insufficient teaching skills and teacher support. According to Vassalo et al. (2020), most parents of autistic children believed every child with autism was atypical, and autism affected each child differently. Vander Steen et al. (2020) concluded parents of children with autism questioned teachers' abilities when working with children with autism. Parents often felt teachers lacked specialized training and did not have effective learning strategies for students with autism. The teacher-student interactions were important for a child with autism, yet parents had often questioned teachers' abilities in the classroom. Sharma et al. (2022) concluded elements such as limited teacher knowledge of autism inhibited the progress of children with autism in schools. Parents and teachers had different perspectives when supporting a child with autism, resulting in conflict as to how to best educate the child.

Parents of children with autism often placed unrealistic expectations on teachers. Hodges et al. (2020) believed teachers faced difficulties when parents wanted a child with autism to be

treated the same as other students, even when children with autism required school-based provisions or intervention techniques. Paccaud et al. (2021) surmised that parents had become more difficult to contact, often due to work schedules and family structures; therefore, teachers were frustrated when parent involvement was required. Numisi et al. (2020) revealed teachers increasingly perceived a lack of respect from parents of children with autism. Parents were often believed to be mean and bossy which was viewed as a demotivating factor in a positive relationship.

A Tale of Two Environments. The collaborative efforts between parents and teachers concerning students with ASD extended beyond the school to the home environment. Walker et al. (2019) found that family and the activities in the home impacted the overall development of a child with disabilities. Lehl et al. (2020) concurred, adding that the home environment was a predictor of a child's educational and social development. Porta et al. (2022) stated that parental interactions in the home setting allowed for rich informal learning experiences. According to Crawford (2020), children spent the majority of time at school or home, and the experiences children had at these locations strongly impacted children's development and learning. Antony (2022) argued teachers had a direct impact on children's learning as teachers instilled skills and resilience. Stanley and Kuo (2022) suggested that when families and teachers formed a partnership, the needs of a child were further supported, and the quality of learning was expanded. According to Goodall and Montgomery (2023), parental engagement enhanced a child's self-esteem and motivation, which then led to increased learning in school. Children exposed to extensive learning experiences through interactions with family which helped initiate active learning at school and home.

Parental-teacher engagement at home and school potentially motivated children to learn new skills and improved academic outcomes. Sim et al. (2021) associated parental engagement in education as a contributing factor in the enhancement of learning outcomes. However, parent-teacher barriers, such as values, beliefs, and expectations, complicated parent-teacher collaborations. Parents felt unheard, unwanted, and not valued in school conversations when collaboration was strained. Kambouri et al. (2022) explored ineffective parent-teacher partnerships and found parents were often treated as unknowledgeable in a child's disorder by teachers, "the professional expert," in the child's disorder. When teachers disregarded parents' experiences and insights, parents felt inadequate and no longer wanted to collaborate with teachers. Bashir et al. (2023) suggested schools were more welcoming to parents and communicated school goals and expectations in a clear and unbiased manner. Antony-Newman (2024) advocated for parent engagement in a child's education and stressed that teachers must learn how to sustain a relationship with parents. The parent-teacher relationship was a complex association that endured challenges due to the intensity and demands of the teachers' and parents' roles.

Parent-Teacher Collaborative Relationships

Parent-teacher collaboration was the interplay between parents and teachers. Ovati et al. (2024) supported teachers who had strong collaboration with parents as a mechanism of positive reinforcement for children with disabilities. According to Lara and Saracostti (2019), parental involvement in a child's education enhanced academic achievement. Attard and Booth (2023) contended the parent-teacher relationship were invaluable for a child with autism, however, the relationship was not always a positive association. Vlcek et al. (2020) stated parents and teachers had contrastive goals as parents commonly focused on life skill development and teachers

emphasized academic goals. While no person downplayed the importance of academics, preparing a child with autism for the future needed to involve the learning of necessary life skills.

Teachers played an essential role in ensuring all students with autism received a quality education, but parents offered a collaborative approach to potentially help with the specific needs of students with autism. Garcia-Melgar et al. (2022) conducted a qualitative descriptive study with 12 participants that explored collaboration teamwork between parents, teachers, and support staff for the inclusion of children with disabilities in mainstream primary schools. Results revealed when shared problem-solving was encouraged, academic achievement for students with autism was increased. Results also showed when parents were not recognized as important contributors to a child with autism's education, academic achievement was lower. Hyassat et al. (2024) conducted a quantitative descriptive study with 148 participants to examine special education teachers' viewpoints on involving parents of disabled students in mainstream schools. Results revealed that mutual parent-teacher partnerships boosted learning outcomes and increased academic achievement. Parent involvement was also found to be an important predictor of learner motivation for students with disabilities. Wilder (2023) completed a qualitative research study to explore the influence of parental involvement on student academic achievement. Results indicated that the relationship between parent involvement and academic performance was positive unless parental involvement was minimal and only included homework assistance.

Despite that the parent-teacher collaboration implied a mutual commitment to education support for a child with autism, parent-teacher difficulties arose. Paccaud et al. (2021) indicated that communication failure began when a child initially entered the classroom as the family-

school collaboration lied mainly on the teachers. Vlcek et al. (2020) stated teachers often took an authoritative approach when speaking with parents instead of taking a collaborative approach. Senoo et al. (2024) characterized working with parents as a difficult endeavor as parents were uncooperative and in denial about the inclusion of students with autism in mainstream activities, especially if teachers expressed a need for an adapted curriculum. This resulted in a parent-teacher conflict.

Two-way communication required a mutual effort from parents and teachers to ensure a healthy exchange of ideas, suggestions, and strategies for children with autism. Arapi and Hamel (2021) indicated that although parent-teacher partnerships were commonly promoted, the partnerships were often unilateral as parents felt uninvolved in the education of the child with autism. Tensions arose if the parent felt unheard and believed that the teacher was not providing sufficient learning tools for the child. Paccaud et al. (2021) emphasized teachers and school professionals were inclined to control or educate parents, so families adapted to the classroom etiquette and teachers' ideas. Paseka and Schwab (2020) concluded for a positive motivating inclusive classroom, both parents and teachers needed to be open and responsive to a child with autism's academic and social needs. Two-way communication was a mutual effort that allowed parents and teachers to collaborate in the best interest of the child.

Parents and teachers experienced stress related to addressing the needs of students with autism. Levinson et al. (2020) stated that although parents and teachers wanted what was best for a child with autism, perceptions, and concerns for a child with autism may differ. Di Renzo et al. (2022) reported parenting a child with autism was stressful and required outside support. Bolourian et al. (2022) suggested that for teachers, stress occurred when a child with autism entered the class as there was an increase in workload responsibilities which included adapting

the curriculum to address the needs of the student with autism. Palmer et al. (2023) highlighted teachers were influenced by the structure and classroom activities as teachers often observed children in situations that parents did not see. Activities such as a child's interaction with peers and a child's performance in directed activities required more support for a child with autism which increased the stress levels and workload for teachers. Parenting stress was often associated with observations or occurrences at home for a child with autism, whereas teacher stress was caused by occurrences at school.

Even though inclusive classrooms were commonly recognized as a learning setting for everyone, parents of children with disabilities were not always supportive of inclusive education. Tryfon et al. (2022) reported parents were dissatisfied with the time it took school administration to plan and organize adequate school supports for children with disabilities. Parents also spoke of a lack of planning and poor employee attitudes in inclusive classrooms. Steven and Wurf (2020) revealed parents of children with disabilities commonly felt that inclusive classrooms were not well-equipped with learning materials and resources. Families further acknowledged an overwhelming need for additional information, such as inclusive education objectives and diversity classroom policies. Simon et al. (2022) regarded the level of education as an impacting factor in inclusive classrooms. Parents had concerns about the amount of personalized and differentiated support given to students with autism. Overall, parents of children with disabilities disclosed varying attitudes and improvement suggestions about inclusive classrooms, teachers, and schools.

Parents and teachers stood in judgment of each other when attempting to address the needs of the student with autism. Keville et al. (2022) revealed parents often felt that teachers looked down on parents and blamed parents for a child's challenging behaviors which was

thought of as a result of poor parenting. However, Jaffal (2022) noted that teachers believed parents felt that teachers were not skilled in teaching children with autism. While many parents were friendly and supportive, different parents did not understand what teachers did in the inclusive classroom. Narot and Kiettkunwong (2024) stated that parents' misconceptions about inclusive education were often due to a lack of clear communication between schools and parents in the form of class updates, school strategies, and limited access to resources about inclusive education. Hanssen and Erina (2021) agreed that parents had difficulty relying on teachers and felt teachers were unable to teach children with special needs. Parents commonly felt parental involvement was required in the education of a child with special needs.

Academic Development of Students with Autism

The academic achievement of children with autism often contained learning components specific to each child. According to the Public Agency of Canada (2022), 68.7% of Canadian children with autism had long-term health conditions and 73.3% of Canadian children with autism had difficulty in at least one functional domain, which required outside support. Functional domains included impairments in speech, non-verbal communication, and social interactions combined with restricted and repetitive behaviors, interests or activities. Academic competencies was affected by an individual's functional domains. Cao et al. (2022) described academic competencies for students with autism as an education framework representing a set of coveted learning outcomes that integrate the knowledge, skills, and attitudes necessary for social inclusion and educational development. Key academic competencies consisted of social communication, learning skills, play, emotion, and sensory processing. Ozerk et al. (2021) suggested that for a student with autism, academic achievement was difficult without proper supports and interventions to enhance social and learning skills. Sari et al. (2024) examined the

association between autistic symptoms and academic achievement and found children with stronger autistic symptoms had lower achievement marks for language, mathematics, and social studies. Problem behavior and lower vocabulary also impacted classroom learning for children with autism. Although children with autism commonly had learning challenges, children with autism are capable of academic achievement similar to neurotypical school peers.

Academic achievement can be assessed based on specific autistic symptoms. Sar et al. (2024) focused on language impairments as a common autism deficit which required early intervention to promote better academic achievement as a child with autism grows. With vocabulary development, children with autism gained a foundation in reading, writing and comprehension. Georgiou and Spanoudis (2021) profiled language disorders and autism and determined language skills were elevated for children with autism with the increased learning of linguistic skills involving phonology, syntax, and morphology. Fuller and Kaiser (2020) found that altering school environments to be less stimulating reduced anxiety among students with autism and allowed the students to take the necessary time to decide what and how to reply to the verbal information from teachers and students. This was helpful due to the fact that students with autism process information differently.

Autism Without an Intellectual Disability. Not all people with autism have a learning disability. Shenouda et al. (2023) identified that autism rates have steadily increased, however, most children with autism, up to 72%, have a borderline or average intellectual ability. According to Rosello et al. (2021), a high majority of students with autism demonstrated areas of academic strength and weaknesses which were similar to children without autism. The difficulty in interpreting academic performance for students with autism was often due to the demonstration of moderate impairments in verbal and spatial working memory and learning

flexibility. Roberts and Webster (2022) recognized the challenge faced by the educational system to provide appropriate child-centred pedagogy for academically enabled children with autism. The unique academic variability of children with autism required the identification of specific strategies and priorities that enabled students with autism to develop skills and retain focus on educational tasks.

Effective education for children with autism is important for leading a healthy and thriving life. Wu (2022) expressed the need of education equity for children with autism as all children learn in various ways. McDougal et al. (2020) profiled students with autism and found academic outcomes for children on the spectrum were as diverse as every child, with only attention levels as a predictor of educational achievement. Typical and atypical students had similar results as poorer attention spans resulted in poorer learning outcomes. Kintzinger (2023) affirmed children with autism had different ways of thinking and that learning was possible. Learning, however, was difficult for children with autism as learning was commonly not designed to meet individual needs. According to Sari et al. (2024), academic performance levels for children with autism was assessed using different assessment measurements. Therefore, the perceived ability level of a student with autism varied based upon the individual's autistic symptoms and how performance was evaluated.

Learning Environments for Students with Autism. The appropriate learning environment helped students with autism to better focus and engage in learning. According to Vinen et al. (2023), children with autism had improved behavior and social skills when there was early intervention, including engagement and learning from home and school environments. Petersson-Bloom and Holmqvist (2022) concurred, adding that school environments required adaptations to meet students with autism's sensory and auditory difficulties. According to Dyer

(2022), the inclusive classroom was an important learning setting for a child with autism and for an inclusive classroom to be effective, active participation between children with and without disabilities needed to be present. Although an inclusive learning environment helped students with autism focus and engage in the learning process, an inclusive learning environment was not appropriate for all students.

Not all children with autism are part of an inclusive classroom. Ahlers et al. (2023) revealed students often had limited access to inclusive learning in schools. Instead, students with autism were commonly found in self-contained settings with learning goals based on developmental domains that potentially influenced academic achievement. Sweeney and Fitzgerald (2023) supported the facilitation of autism special classes within mainstream schools. Special classes with sensory and environmental accommodations were found to promote learning for children with autism. Banire et al. (2021) reported when children with autism were confined to isolated educational settings, there were fewer learning disturbances which helped students maintain attention and develop learning skills. For children with autism, learning more readily happened when appropriate supports in specific educational settings were present.

Physical environments often assert direct influence over a child's learning development. Hill et al. (2021) defined learning environments as school or home settings which displayed the social, psychological, and physical environment for learning. Leifler et al. (2021) addressed school learning as socially and academically challenging for students with autism. School challenges were reduced when environmental adaptations such as classroom organization and individual accommodations were introduced to children with autism. O'Hagan et al. (2021) acknowledged formal school environments were difficult for older children with autism but were manageable for children in primary grades. When students have one class, one teacher, and

fewer overall students, students with autism reported positive school outcomes in comparison to older children with autism with multiple teachers, larger schools, and higher academic demands. Reicher (2020) studied home learning for children with autism and reported the positive benefits of learning from home. For children with autism, learning from home was shown to increase academic outcomes because many social pressures were removed, while learning flexibility was increased. According to Kovac et al. (2024), there was a strong interdependent system around the child as learning occurred both at home and at school. Family, school, and home environments were shown to work together and separately to enrich a child's development and increase the likelihood of learning success.

Social Skill Learning in the Inclusive Classroom. One of the traditional aspects of autism is social dysfunction. More specifically, the American Psychiatric Association (2013) defined core deficits in autism as social interaction, communication, and repeated patterns of behavior. Davis and Crompton (2021) indicated a dissimilarity of communication styles between individuals with and without autism, which played an integral role in the interaction and understanding of each other. Miscommunications and breakdowns in social reciprocity commonly occurred as people with autism experienced the world in different ways. Chan et al. (2023) revealed cognitive difficulties of autism persisted into adulthood if not addressed and worked on during childhood and adolescence. In the mainstream classroom, children with autism experienced the social structure of an inclusive learning setting but often felt socially isolated with a lack of social interactions and connections.

The school environment is complex and depends on many skills for a child with autism to navigate effectively. Hodges et al. (2022) referred to the lack of structure and predictability as a predictor of school connectedness. School environments were improved for students with autism

by increasing peer acceptance and allowing students to make choices. Dean et al. (2023) revealed social relationships were associated with greater school satisfaction and were commonly developed in the classroom. However, children with autism needed structured activities and environments that promoted peer engagement to develop social skills and positive social outcomes. Tsou et al. (2024) assessed the school socialization of children with autism and provided knowledge to promote school inclusion. Class interventions included peer partners and adjusting the physical classroom setting to encourage children with and without autism to be in contact and play with each other. Classroom environments could impact a child with autism's cognitive learning, but with the help of specific interventions, a child with autism's social, emotional, and academic skills were strengthened and improved.

Children with autism experienced cognitive challenges in the school environment if effective support and interventions were not designed to enhance social skills. Silveira-Zaldivar et al. (2021) considered deficits in social skills that strongly impacted many of the essential functional domains including academic achievement, behavior, relationships, and adult life outcomes. Teacher assessments further rated social skills, goal-directedness, and emotional stability as important factors in educational success. Alkinj et al. (2022) promoted social development by the implementation of educational programs. Educational programs were suggested to target social communication skills with the help of social stories, animated video modelling, and recording and watching self-videos. Hodges et al. (2022) further considered educational programs as a promotion of a student's sense of self-worth and self-esteem. Building personal strengths provided opportunities for students with autism to make choices and improve self-awareness.

Learning Through Modeling. Students with autism could learn new skills from the observation of others. Rashid et al. (2024) specified autism as a disorder of the brain which adversely affected cognitive skills and not actual knowledge. Acquiring new skills were difficult for children with autism, but children with autism were found to learn skills by repetition, imitating and interacting with others. Opuku et al. (2021) focused on the interaction between typical developing students and students with autism and confirmed the use of peer role models greatly influenced socially desirable behaviors of students with autism. Student peer modelling also enhanced the emotional well-being of the student with autism which promoted a strong inclusive environment. Alkan and Cavusoglu (2024) supported positive peer relationships to help children adapt to school and acquire self-regulation skills. Peers were found to function as a source of information and moral support. Foti et al. (2019) indicated cognitive abilities can be refined by practice and feedback. By using observational training, children with autism were shown to associate behavioral patterns with outcomes.

Teachers can be a significant role model for a child with autism's learning and development. Youssif et al. (2024) regarded teachers as the foundation of the learning process as teachers guided and directed students in the classroom. Through engagement with students with autism, teachers demonstrated specific behaviors that students should display in the learning environment. Khozin and Rozza (2024) studied teachers as authoritarian figures for students and confirmed with clear modelling patterns, students developed trust and learning competence. Students' learning was further enhanced when teachers explained through verbal instruction and described new information and skills. Cilliers (2021) considered teaching and learning to be examples of cognitive processes that occurred in a social context. Teachers who enabled students to deal with change in a school environment through the observation and practice of appropriate

behaviors were able to promote a positive and engaging learning experience. Teachers also showed improvement in student learning through the physical demonstration of new skills. A student's cognitive development and learning ability were favorably augmented as a student was guided and mediated by social interactions and modelling from others.

Gap In Literature

Prior studies have been conducted on family involvement and parent-teacher relationships, and academic outcomes for children with autism. Eskow et al. (2018) conducted a quantitative correlational study with 823 participants to examine the family-teacher relationships and the partnerships impact on the academic progress of a child with autism. Results revealed family-teacher partnership satisfaction was correlated with child academic progress as well as family quality of life. Garbacz et al. (2016) conducted a predictive correlational quantitative study with 31 participants to investigate child and family variables that potentially affected family involvement and parent-teacher relationship in a child with autism's learning. Results suggested parent-teacher relationships and parental involvement were impacted by the degree of child impairment. Pham et al. (2018) conducted a quantitative correlational study with 228 high school students to examine the impact of parent-teacher relationships for students with different disabilities on student's grades and behaviors. Results showed two positive associations: (1) teacher-parent relationships and disability type and (2) parent-teacher relationships and student grades. Azad and Mandell (2015) completed a qualitative study with 39 parent-teacher dyads to investigate if parents and teachers had similar concerns for children with autism, and if these concerns had been discussed with each other. Findings indicated that communication between students and teachers was connected to the quality of parent-teacher relationships and hence to the educational support for children with autism.

There was a gap in the literature relative to the parent-teacher relationships as an influence on the academic achievements of students with autism. Wahyuni and Mangunsong (2022) conducted a quantitative study on variables that affected children with disabilities' academic achievement. With the use of convenience sampling, 365 participants were identified as parents of children with special needs. Two questionnaires were completed and then analyzed to determine (1) the relationship between academic achievement and parental involvement and (2) the demographic variables that affect parental involvement and children's academic achievement of children with special needs. The results indicated parental involvement was important to the academic achievement of a child with special needs. Results also showed that parent involvement at school was motivational for students to learn and improve their school performance. Future research was suggested to explore parents' perceptions of the influence of parental involvement in the academics of children with special needs.

Another study explored barriers to positive parent-teacher relationships. Mann and Gilmore (2021) obtained qualitative data by conducting semi-structured interviews with 20 parents and 16 educators. Results revealed parent-teacher engagement was an important factor in positive outcomes for students with disabilities even though teachers were shown to value the partnership less. Participants in the study were limited to Australian schools and were not be applicable to other geographic locations.

A study explored the influence of family-school partnerships on a child with autism's learning outcomes. McIntyre et al. (2023) collected data through in-person interviews and four different questionnaires from a sample size of 68 parents of children with autism. Results revealed that parental stress and mental health issues impacted parent-teacher relationships and

educational involvement. Participants in the study were limited to one region of the United States.

There was a gap in the literature relative to the influence of the parent-teacher relationship on the academic achievement of students with autism. Wahyuni and Mangunsong (2022) suggested examining the role of parent involvement in the education of children with special needs. Mann and Gilmore (2021) advocated for more quantitative research on the role of teachers in the promotion of parent-teacher partnerships due to the study's small qualitative study and inability to generalize findings to broader school settings. McIntyre et al. (2023) suggested future research measure family involvement, parent-teacher relationship quality, and child characteristics. The focus of this study was how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada.

Exploring how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism had positive implications for parents, teachers, and students with autism. Syuraini et al. (2022) indicated that learning the importance of communication, cooperation, and parent participation opened opportunities for a child's education. Golos et al. (2023) argued supportive relationships including parent-school collaborations were vital for improving a child with autism's education and overall quality of life. Garbacz et al. (2016) acknowledged there was a positive association in a child's education and academic outcomes when there was parental involvement. This study offered insight and guidance

into the influence of the parent-teacher relationship on the academic achievement of students with autism.

Summary

The problem addressed by this study was children with autism experienced lower achievement due to poor parent-teacher relationships. Wahyuni and Mangunsong (2022) used parental opinion and assessment to conduct a study on the perceived academic achievements of their children with special needs. Future research was suggested to examine the role of parent involvement in the education of children with special needs. Mann and Gilmore (2021) conducted qualitative research on the influence of parent-teacher partnerships on positive student academic outcomes. Participants in the study were limited to Australian schools and were not applicable to other geographic locations. McIntyre et al. (2023) examined parent-teacher relationship quality and family school engagement. Participants in the study were limited to one region of the United States. Bronfenbrenner's (1994) ecological systems theory was the conceptual framework that undergirded this study. Sengonul (2022) emphasized that children's education was contingent on various ecological factors reflected in the child's common networks, such as family, home, and school. Kale et al. (2023) confirmed that parental involvement and the school environment significantly influenced a child's learning process. When home activities supported learning, the home became an extension of the school environment and higher academic achievement occurred. Wang et al. (2022) analyzed the viewpoints of parents and teachers and recognized different autism approaches. Parents spoke of autism knowledge through personal experience whereas teachers spoke of autism through educational and professional experiences. With autism rates on the increase, the Public Agency of Canada (2022) documented a statistical increase to approximately 2% for children with

autism. Hasson et al. (2024) concluded support was essential for children with autism, but adequate levels of educational and collaborative support was a challenge for parents and teachers. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationships as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada.

Chapter 3 included a discussion of the research methodology and design that were utilized in the study. Chapter 4 included a discussion of the findings. Lastly, chapter 5 included a discussion of the implications for practice, policy, and theory along with recommendations for further research.

Chapter 3: Research Method

The problem addressed by this study was children with autism experienced lower achievement due to poor parent-teacher relationships. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationships as an influence on the academic achievement of students with autism spectrum in grades kindergarten through 5 in Canada. Cerero et al. (2024) indicated parental involvement was essential for academic achievement for students on the autism spectrum. In the school system, parental involvement include attendance at school functions and meetings, cooperation with teachers, and homework support. Al-Hamad et al. (2023) also concluded positive interactions between teachers and parents improved academic outcomes for children with autism. Vuorinen (2021) pointed out that parents and teachers were in a relationship that was different from other relationships. Parents spoke from a personal position, whereas teachers spoke from a professional position.

Chapter 3 included a discussion of research method, design selected for this study, and population and sample. The chapter also included a description of the study procedures and data analysis process. Lastly, this chapter also contained an explanation of the assumptions, limitations, and delimitations, and ethical issues associated with the study. The chapter was concluded with a summary of key points.

Research Methodology

A qualitative methodology was utilized for this study. According to Yin (2018), qualitative research captures real-world experiences in natural settings. Qualitative research was further assessed as a method for providing in-depth personal perspectives. Bingham (2023) indicated that qualitative research was flexible in nature while still ensuring study

trustworthiness. Qualitative research was time-consuming yet had the ability to invoke theory from the data. Qualitative research sought knowledge and aimed to answer ‘how’ and ‘why’ questions. Ugwu and Eze Val (2023) further confirmed that qualitative research uncovers a personal understanding of how people discern surroundings. This qualitative research method was appropriate because the focus of this study was to analyze non-numerical data to understand experiences and gain new in-depth knowledge about the research topic.

Similar studies used a qualitative methodology. Cerero et al. (2024) conducted a qualitative methodology through semi-structured interviews with 42 participants to explore the influence of parental involvement on the schooling of children with autism. Findings revealed insufficient communication between parents and teachers and a need for improved autism training for teachers and parents. Alnoaim and Alharbi (2023) conducted interviews with nine special education teachers to understand the academic performance of students with special needs and positive parent involvement. Data revealed that parental involvement was paramount to the success of educational goals for students with disabilities. Hridi et al. (2021) conducted semi-structured interviews with 10 participants to understand the influence of parent-teacher relationship on the learning experiences of children with autism. Results revealed a lack of parent-teacher communication and a need for improved collaboration to aid in the educational development of children with autism.

A quantitative method was not appropriate for this study. According to Bloomfield and Fisher (2019), quantitative research is a systematic process that analyzes and tests variables through numerical data. Borstede and Scholz (2021) agreed that a quantitative method is a way to give mathematical representations for empirical events. Mohajan (2020) also asserted that quantitative research focuses on statistical data to derive conclusions that can be extrapolated to

the broader population. This quantitative method was not appropriate because the focus of the study was not to test and analyze variables through numerical data that was generalized to the larger population.

A mixed methods approach was not appropriate for this research. According to Dawadi et al. (2021), mixed methods research combines the strengths of both qualitative and quantitative research by obtaining multiple perspectives to expand research evidence. Sharma et al. (2023) contended that mixed methods research is a complex approach which requires a researcher to integrate multiple data sources to understand the research problem. Sarawati and Devi (2023) defined mixed methods methodology as a holistic approach that uses the richness of qualitative data as well as the accuracy of quantitative data for a more intricate analysis. A mixed methods approach was not appropriate because the focus of this study was to gain a comprehensive understanding of a phenomenon through textual data and not numerical data.

A qualitative method was appropriate because the focus of the study was to seek insight into the complex behaviors of teachers and parents and how the parent-teacher relationship impacted the learning outcomes of children with autism. According to Russell et al. (2024), a good parent-teacher relationship was critical in the educational growth for children with autism. The focus of this study was to highlight the perspectives of teachers and parents to give detailed information about the parent-teacher relationship and how the relationship impacts the learning of children with autism. The participants gave meaning to the study from personal surroundings and first-hand experience. Phytanza et al. (2024) alluded to the importance of parent-teacher involvement in the academic performance of students with autism, beginning with social interaction in school. Qualitative research uses real-life experiences to give a thorough understanding of a challenging research subject.

Research Design

A descriptive case study research design was utilized for this qualitative study. According to Yin (2018), a case study is an empirical inquiry that commonly uses field data from real-life scenarios. The data received in a case study comes directly from individuals with significant knowledge about the research topic. Nguyen et al. (2020) further supported that a case study design is the correct choice when a research topic cannot be explained apart from the topic's natural setting. Priya (2021) emphasized that a case study is a research strategy constructed to demonstrate transparency to help establish the reliability of the study. Coombs (2022) illustrated how a case study uses a bounded case to study a specific phenomenon. A bounded case is embedded within a natural context which is dependent on the factors of time and place. This descriptive case study design was appropriate because the focus of this study is to gain contextual and in-depth knowledge about a real-world situation.

Other research designs were considered but deemed not appropriate for this study. According to Patton and Broward (2023), Husserl's phenomenology emphasized how people perceive the world without bias or past experiences through the processes of bracketing and intentionality. Phenomenology was not appropriate for this study because phenomenology focuses on lived experiences and perceptions instead of a single event phenomenon. McLeod (2024) discussed ethnography as research about a cultural phenomenon involving both the researcher and participant. Ethnography was not appropriate because in this study the researcher was not an active member of the cultural phenomenon. As defined by Parks (2023), narrative research is a collection of stories about people's lives. Narrative research was not appropriate for this study because a narrative study can be very time-consuming and due to study time restraints, a narrative study would not be possible.

Population and Sample

The population of interest was general and special education teachers working with children with autism in kindergarten through 5th grade (K-5) and any parent (mother or father) of a child with autism in grades K-5 in Canada. Statistics Canada (2023) reported that there were 2,925,025 children aged 6 to 12 in Canada. According to the Canadian Health Survey on Children and Youth (2019), the Canadian prevalence rate of autism is 2.5%, which means there are approximately 73,126 children aged 6 to 12 with autism in Canada. Based on UNESCO's International Standard Classification of Education (ISCED) 1 (2024), there were 57,163 elementary teachers in Canadian public schools. According to the Council of Ministers of Education Canada (2022), in 2020, there were 10,100 elementary schools in Canada. The Government of Canada (2025) issued a special education enrolment by exceptionality data set, which showed that in 2022-2023, there were 19,595 elementary students with autism throughout Canada. There were at least the same number of parents as there were elementary students with autism.

Target Population

The target population was general and special education teachers who worked with children with autism in kindergarten through 5th grade (K-5) and any parent (mother or father) of a child with autism in grades K-5 in three Canadian provinces. For 2025, the Government of British Columbia (2025) reported that there were 75,073 certified teachers. However, in 2023, there were approximately 37,000 full-time elementary teachers in British Columbia's public school system. The Alberta's Teachers Association (2025) reported 32,485 full-and-part time teachers in 2025. The Saskatchewan Teachers Federation (2023) estimated there were 12,131 full-time teachers in 2022-23. However, the specific number of parents and children with autism

is unknown. The Government of British Columbia (2024) reported in 2021 that there was an estimate of 78,305 students with special needs in the British Columbia K-12 public educational system. The Government of Alberta (2024) reported approximately 118,986 students with special needs in the Alberta K-12 public education system. According to the Government of Saskatchewan (2021) there was an estimate of 9,000 students with special needs in the Saskatchewan K-12 public school system. According to Statistics Canada's Canadian Survey on Disability (2022), there were approximately 11,400 children aged 5-14 in Saskatchewan with a disability. Therefore, there were at least the same number of parents as there were elementary students with autism.

Sampling Strategy. Purposive sampling was used to recruit participants. Ahmad and Wilkins (2024) defined purposive sampling as a research sampling process in which the participants were chosen based on specific research criteria. Obilor (2023) concurred, noting that purposive sample is used when there are specific reasons for selecting participants. Participants for this study were parents of a child with autism in the grades of kindergarten to 5 or a teacher of a student with autism in grades k-5.

Sample. The expected sample was 25-30 general or special education teachers working with children with autism in kindergarten through 5th grade (K-5) and any parent (mother or father) of a child with autism in grades K-5 in three Canadian provinces who are members of parent-teacher organizations that provide services for individuals with autism. The organizations included AB, the AAC, ASN, and ASB. The listed Canadian organizations did not offer separate parent and teacher membership numbers. As stated in AB's annual report (2023), AB had 7081 active members and the AAC (2023) had over 650 people registered as community or associate

members. The ASN in British Columbia had at least 1,100 family and professional members listed and the ASN (2023) stated there were over 900 members in this nonprofit agency.

An email to recruit participants was sent to the nonprofit autism agencies. The email included (a) a description of the study (b) criteria for participation, and (c) a link to the questionnaire. Each agency also received a recruitment poster to post on the agency's website. Each agency director or designee, served as a gatekeeper, forwarded the email to the membership. Lamprianou (2021) defined a gatekeeper as an individual in an organization who helps a researcher gain access to potential research participants. Individuals completed the informed consent, which included the purpose of the study, benefits of participating, and information regarding confidentiality and the right to leave the study at any chosen time. Once the informed consent was completed, the participant proceeded to the questionnaire. At the end of the questionnaire, participants were thanked for participating and redirected to another page to provide contact information if interested in participating in a semi-structured interview.

If the sample size was not met, participants were recruited using snowballing sampling. Gill, S. (2020) emphasized that chain sampling is also known as snowball sampling and occurs when existing participants help recruit future study participants. Leighton et al. (2021) acknowledged snowball sampling as a method to increase participant numbers by using existing participants to help recruit new participants through acquaintances. If sample size was still not met, convenience sampling was to be used to recruit participants using social media, more specifically Facebook groups for parents and teachers of students with autism, to recruit participants. Golzar et al. (2022) explained the concept of convenience sampling as the ease of attaining participants through participant availability and accessibility. Social media can quickly

reach a broad audience while still embracing the required targeted population. If the sample size was still not achieved, a drawing for \$25 gift card was to be offered to recruit participants.

Materials

Data were collected and triangulated using a questionnaire and interviews from two different groups. Donkoh (2023) defined triangulation as a process to ensure robust and rigorous qualitative findings. Triangulation was demonstrated through the use of multiple sources of data, methods of data collection, or participant perspectives to examine the research phenomenon. Chowdhury and Shil (2021) highlighted the gathering of various data should complement each other. Data were collected and triangulated using an open-ended questionnaire and interviews.

Questionnaires

Data were collected using a questionnaire. Sharma (2022) explained that a questionnaire helps a researcher assess a participant's knowledge and attitude towards a specific topic or subject of interest. Ranganathan and Caduff (2023) emphasized the importance of a questionnaire's design and use when analyzing the quality and accuracy of the data. Tombs and Strange (2024) considered a questionnaire to be an independent data collection method as the gathered information does not include any interaction with the researcher. Questionnaires were structured to assemble specific information from the study participants.

Data were collected using a 10-item questionnaire from approximately 20-25 participants that took 15 to 20 minutes to complete. There were three demographic questions and seven open-ended questions. Sharma (2022) stated the length of a questionnaire determines the response rate as the longer the questionnaire is, the lower the response rate. Kato and Miura (2021) found that a 10 to 20-minute questionnaire likely has the strongest response rate and quality compared to a 30 to 60-minute questionnaire. The questionnaire was developed based upon the identified gap in

the literature, the components of Bronfenbrenner's ecological environment systems theory, and the themes that emerged from the review of literature. The questionnaire addressed how parents and teachers described the parent-teacher relationships (RQ2) and family involvement (RQ2) as an influence on the academic achievement of students with autism in grades kindergarten through five.

Interviews

Data were collected using semi-structured interviews. Jordan et al. (2021) considered interviews helpful when revealing each participant's true perspectives. Dunwoodie et al. (2022) emphasized how interviews provided subjective interpretations of the social context of the research. Interviews allowed participants to share feelings and opinions toward social phenomena. Dursun (2023) stated that interviews were an interactive process between the participant and interviewer that were used to obtain information about a specific subject. The interview questions shaped the interview and allowed the participants to construct personal and purposeful answers.

An interview protocol was created and used to conduct interviews. Jordan et al. (2021) suggested the development of a protocol was to provide a framework where the questions were objective and not leading. According to Dursun (2023), an interview question is designed so a participant gives a comprehensive answer to the subject matter. The interview protocol was addressed to how parents and teachers described the parent-teacher relationships (RQ2), and family involved (RQ2) as an influence on the academic achievement of students with autism in grades kindergarten through five. The interview questions were based on sections of the Vickers and Minke's (1995) Parent-Teacher Relationship Scale-II (PTRS) and addressed "feelings of affiliation and support," "shared expectations/beliefs about child and each other," and "sharing of

information.” The interview protocol was comprised of 10 to 15 questions about the parent-teacher relationship. The interview protocol was reviewed and approved by the dissertation committee. According to Shoozan and Mohamad (2024), feedback is necessary to make certain the interview questions align with the research questions. The interview protocol was also field tested with 2 individuals to the target population from which the sample was recruited. As necessary, adjustments were made to the interview protocol based upon the field tests. The field tests were then analyzed for apriori codes. Bingham (2023) addressed apriori codes as anchor codes or codes that are developed before the data collection. Naz et al. (2022) suggested the formation of a field test is paramount to improve instrumentation. A field test helped the interviewer recognize the natural flow from one question to the next question and assessed the wording. The data from the field tests was not included in the data set.

Interviews were conducted for 45-60 minutes with 10-15 participants. Taherdoost (2022) recognized that interviewers need to consider time as an important factor when conducting an interview. For a case study, the length of each interview may be between 45 and 60 minutes. Jamshed (2014) supported in-depth interviews to be a wider time range of at least 30 minutes to over an hour, depending on the respondents’ answers. Mtisi (2022) suggested that the number of interviews was reliant on data saturation which could be up to a sample size of 30. Interviews for 45-60 minutes with 10-15 participants insured the collection of thick, rich data.

Study Procedures

Prior to conducting research, approval was obtained from National University’s Institutional Review Board. Site authorization was also obtained from nonprofit autism agencies to recruit participants. Informed consent was obtained from each participant prior to participation in the study.

Purposive sampling was used to recruit a sample of 10 teachers of and 10 participants of children with autism from three Canadian provinces. Wilkins (2024) defined purposive sampling as a research sampling process in which the participants are chosen based on specific research criteria. Obilor (2023) concurred, noting that purposive sample is used when there are specific reasons for selecting participants. Participants must be parents of a child with autism in the grades of kindergarten to 5 or a teacher of a student with autism in grades K-5.

An email to recruit participants was sent to the nonprofit autism agencies. The email included (a) a description of the study (b) criteria for participation, and (c) a link to the questionnaire. Each agency also received a recruitment poster to post on the agency's website. Each agency director or designee, serving as a gatekeeper, forwarded the email to the membership. Lamprinou (2021) defined a gatekeeper as an individual in an organization who helps a researcher gain access to potential research participants. Individuals completed the informed consent, which included the purpose of the study, benefits of participating, and information regarding confidentiality and the right to leave the study at any chosen time, before proceeding to the questionnaire.

Data were collected using a questionnaire administered via Qualtrics, an online data collection platform. Once individuals click on the link to the questionnaire in the invitation email, participants first completed the informed consent before being allowed to proceed to the questionnaire. The questionnaire contained three demographic questions and seven open-ended questions. Sharma (2022) spoke of how the length of a questionnaire can determine the response rate as the longer the questionnaire is, the lower the response rate. Lahmer (2022) explained how open-ended questions permit participant responses to be free and genuine expressions of thought. At the conclusion of the questionnaire, each participant was thanked for the participation and

were directed to another page where each participant was asked to provide contact information if interested in participating in a semi-structured interview to schedule the interview.

Data were collected using semi-structured interviews. Interviews were scheduled with individuals who expressed interest and provided contact information and were conducted via Zoom. Participants were from different provinces so in-person interviews were difficult to carry out. Also, by having virtual interviews, the researcher was able to have a greater number of participants for the research. Keen et al. (2022) supported the use of virtual interviews for logistical considerations as well as transcription functions. The interviews were audio and video recorded. A second recording device, a cell phone, was used to ensure all data is captured. According to Azad et al. (2021), using a telephone device for interviews can be advantageous to the interviewer as interviews can reduce interviewer self-consciousness and bias, while giving the interviewee increased anonymity. For participants who did not want to be visually recorded, the use of a recorded audio was the best choice for participants. Saarijavi and Bratt (2021) promoted the use of separate video and audio recording devices for interviews as a separate device such as a cell phone can ensure connectivity throughout an interview even when video may have an unstable Internet connection. Before the interview commenced, informed consent was reviewed, which included information relative to the purpose of the study, benefits of participating, and information regarding confidentiality and the right to leave the study at any chosen time. Written and verbal consent to participate in the study was obtained. An interview protocol consisting of 10-15 questions was used to conduct 45-60-minute interviews. Shoozan and Mohamad (2024) emphasized the importance of a refined interview protocol for data quality and credibility. Each question from this study's interview protocol was asked along with follow-up or probing questions as needed. Robinson (2023) suggested the necessity of asking probing

questions to elicit additional detailed research data. At the conclusion of the interview, each participant was thanked for participating, allowed to ask any questions, and informed that a transcript was to be emailed for member checking. As defined by McKim (2023), member checking gives credibility to the data and allows each participant to review their interview for accuracy and offer feedback. Lastly, the participants had seven days to edit or redact and return transcripts. After 7 days, the transcripts were marked “member checked” or “not member checked.”

Data were stored in electronic form and held in a folder on the researcher’s laptop computer. The researcher’s laptop computer is password-secured, and the hard drive is encrypted. Once the research was completed, the folder was transferred onto a portable USB Flash Drive which was locked in the filing cabinet located in the home office. All data were deidentified to ensure anonymity and confidentiality. Kang and Hwang et al. (2023) defined anonymity as an ethical rule in research in which all personal information is obscured so participants cannot be identified. Badampudi et al. (2022) reflected on the importance of confidentiality and how protecting raw data ensures that no participant or organization can be identified in the research results. Pseudonyms were used for any identifying information. All data will be stored for seven years and then will be physically destroyed.

Data Analysis

The data collected from the questionnaires and interviews were prepared, cleaned, and organized for analysis. The questionnaires were downloaded and reviewed. According to Rouder et al. (2021), to ensure data quality, duplicate and inconsistent data should be removed. Incomplete questionnaires were removed from the data set. Recorded interviews and auto-transcripts were downloaded from Zoom. Written transcript allowed the researcher to experience

the interview through the perspectives of the participants. Transcription Data were compared to the recordings to ensure accuracy. The questionnaire and interview Data were then added to SPSS software. SPSS software was used for data organization to identify data themes and patterns.

Demographic data collected from the questionnaire was summarized to create a sample profile. Hughes et al. (2022) confirmed that demographic questions should be characteristic to the research. For this research, the demographic information included age, gender, and education level of the parents and teachers. Gathering demographic data provided a comprehensive picture of the sample.

A thematic analysis was used to analyze the data. Jowsey et al. (2021) indicated that using a thematic analysis for qualitative data is a popular research method in aiding the researcher in understanding the participants' experiences and perceptions. Thematic analysis contained multiple steps that were flexible and independent of theoretical approaches. Braun and Clarke (2022) encouraged that during data analysis procedures, the researcher needed to make certain the methodological processes conformed with the researcher's values and thematic analysis. Christou (2023) further addressed the thematic analysis as a critical tool for rich description of the entire data set. This study was analyzed using Braun and Clark's (2006) six-step thematic analysis.

Step 1: Familiarization of the Data.

The first step in analyzing Data were becoming familiar with the entire body of research data. This phase involved substantial reading and re-reading of the research transcripts. Notes were taken on any details or observations that stood out. Byrne (2022) recognized how engaging with the research data allows the researcher to extract meaningful insights. Naeem et al. (2023)

acknowledged the importance of reading and reviewing the data to identify keywords and specific quotation selection. Jowsey et al. (2021) suggested that in addition to reviewing the transcripts, the researcher also shares and discusses the newly found insights to gain additional input from others. Each recording was listened to multiple times and compared to the transcripts.

Step 2: Generating Initial Codes

For credible research, the coding process began with the organization of the data. Braun and Clark (2006) implied the stage of initial code generation as imperative to the qualitative approach. After becoming familiar with the data, specific words or phrases were assigned to pieces of transcribed data. Maguire and Delahunt (2017) recognized that generating initial codes reduced the data from the first stage into small chunks of meaning. Codes were categorized based. Byrne (2022) stated that generating codes is a flexible process that allows the researcher to continue to learn about the data and find new patterns of meaning. Coates et al. (2021) asserted that the coding of data exemplifies the different shared experiences, thus identifying new emerging research data details. Additional codes were generated from the questionnaires and interviews. Codes were documented, reviewed, and integrated into the final report. The codes derived from the merged dataset helped to establish themes.

Step 3: Searching for Themes

After codes were established, potential themes were identified. Dawadi (2020) indicated that uncovering meaning may require several codes to be combined into one theme. Turning codes into potential themes involved organizing data extracts into recurring ideas and patterns. Similarities or connections between the codes were identified. By recognizing the similar codes, themes were assigned to the corresponding codes. Morgan and Nica (2020) implied data collection ends and preliminary theme creation occurs when new data no longer offers the

researcher new information. Kiger and Varpio (2020) outlined the search for themes as a reflection of all the data. Themes were organized and evaluated relative to research questions. Duplicate themes were collapsed into one theme or eliminated. New themes were discovered as well.

Step 4: Reviewing Themes

Identified themes were reviewed. Jowsey et al. (2021) confirmed the process of critiquing the original themes to give a fuller understanding of the data. Reviewing themes also resulted in the formation of additional research themes. Coates et al. (2021) insisted that theme refinement and creating accurate depictions of the research data are vital to yield comprehensive research results. Morgan (2020) interpreted the reviewing of themes as an evaluation of the original themes and the process of reconstruction to give identity and meaning to the given themes. Initial themes were created in the prior step; themes were reviewed by re-reading the data. By re-reading the data, the themes changed when the themes did not fit with the codes. The newly founded themes were then reviewed to ensure the themes answered the research questions.

Step 5: Defining and Naming Themes

Once the themes were finalized, each theme was defined and named. Kiger and Varpio (2020) suggested that during the fifth stage of the thematic analysis, the researcher needs to create a narrative description of every theme which incorporates the most significant aspect of each theme. The researcher then gave a name or title to the themes that were designated in step 4. The theme titles that the researcher chose somehow reflected extracts from the data. Hemming et al. (2021) noted how each original theme's name should be replaced with concise, yet dynamic titles. The working titles were never meant to be permanent, so the new names become an important descriptive aspect of the study. Naeem et al. (2023) interpreted the definition of

themes as a conceptualization through the interpretation of keywords. Therefore, for a researcher to accurately name themes, the keywords refer to the actual data from participants and not assumptions from the participants or the researcher. The themes were further refined and redefined during this step before the final report was written.

Step 6: Producing the Report

The final step of a thematic analysis was the production of the report. Christou (2023) reported that a final report is comprised of a complicated story written in a logical and coherent manner. Data were collected and was triangulated using a questionnaire and interviews from two different groups to address the research questions. Donkoh (2023) defined triangulation as a process to ensure robust and rigorous qualitative findings. This write-up was written so other researchers would be satisfied with the validity of the research analysis. According to Finlay (2021), while writing the report, the researcher needs to integrate the analytic narrative into a persuasive report that includes informative data passages as affirmation. The final report was a narrative that included the themes organized according to research question, and key findings.

Assumptions

There were assumptions associated with this study. According to Flage and Askeland (2020) assumptions are necessary and inevitable details of research. Research assumptions can be interpreted as believed to be true statements in proposed research that preside over the research yet are unable to be proven. The following are assumptions for the study.

- Participants offered honest perspectives on parent-teacher relationships. Participation in the study was strictly voluntary, and participants could have withdrawn from the study at any time.

- Participants' responses reflected experiences. Purposive sampling was used to recruit participants. Participants were chosen based on specific characteristics and experiences which directly related to the purpose of the study.

Limitations

Every study has limitations regardless of design. Montgomery (2023) characterized limitations as research restrictions that are largely beyond a researcher's control but can affect the study's outcomes. Limitations are often related to the specific methodology and study design. The following limitations are associated inherent to this study:

- The sample size was small. Qualitative research design can have a smaller sample size than quantitative studies, which may have limited the generalizability of the research. To address the small sample size, the researcher ensured saturation. Purposive sampling was also used to select participants with different perspectives or experiences relating to the research objectives.
- Results are not generalizable. The findings of this case study were limited to general or special education teachers working with children with autism in kindergarten through 5th grade (K-5) and any parent (mother or father) of a child with autism in grades K-5 in three Canadian provinces who are members of parent-teacher organizations that provide services for individuals with autism. Therefore, results cannot be generalized to other populations.
- Only qualitative Data were collected. Various factors, such as researcher bias and a lack of generalizability, could have influenced the validity and reliability of qualitative data. As a result of the subjective nature of qualitative research, member checking was used to ensure the accuracy of the data.

Delimitations

There were delimitations associated with this study. According to Coker (2022), delimitations were the elements the researcher chose to include and exclude in the research study.

- The scope of the study only explored the experiences and perspectives of teachers and parents raising children with autism in Canada. Results did not apply to other demographics or geographic locations.
- The ecological systems theory was the conceptual framework that undergirded the study. Other theories were not used that better addressed the problem.
- Only parents with younger children with autism were recruited to participate in the study. Those individuals who were not currently parenting or have not previously parented children with autism between the grades of K-5 were excluded from the study.

Ethical Assurances

Approval from National University's Institutional Review Board (IRB) was obtained prior to data collection. Site authorization from the nonprofit autism organizations was also obtained prior to data collection. Research was conducted in accordance with the principles as illustrated in The Belmont Report (1978). The Belmont Report identified the three fundamental ethical principles for all human subjects: *respect for persons, beneficence, and justice*.

Respect for persons was a principle of ethical research. Serpico (2024) further supported human research protection issues with the fundamental value of a participant's autonomy. Nagai et al. (2022) indicated informed consent was necessary to ensure research participation is voluntary and confidential. Participants were seen as self-sustaining agents. Participants were

informed of the purpose of the study and were required to complete an informed consent before participating in the study. Participants were also be informed of the right to withdraw from the study at anytime without penalty.

Beneficence was another principle of ethical research. Cheraghi et al. (2023) defined beneficence as protecting a research participant from harm. Beneficence promoted the well-being of each participant. Barrios et al. (2022) implied that research results would maximize positive outcomes while reducing negative outcomes. All Data were deidentified to ensure anonymity and confidentiality and pseudonyms assigned to protect participants' identities. All data were stored on a portable USB Flash Drive which was locked in a filing cabinet only accessible to the researcher's home office for a period not to exceed three years before being destroyed.

Justice was a principle of ethical research according to the Belmont Report. Brenna and Das (2021) acknowledged that participant selection was completed fairly without unnecessary inclusion. Suarez-Balcazar et al. (2022) promoted justice in research ethics as an assurance of impartial and consistent research procedures. Once the National University Institutional Review Board approved this research, permission from non-profit organizations was sought to help identify possible participants for this study. All those who met the inclusion criteria were recruited and allowed to participate in the study. The sample was selected on the basis of the research problem. Also, the interview questions and the questionnaire were rigorously reviewed by the dissertation committee to ensure all material was uniform and non-bias for both parents of children with autism and teachers of children with autism. These necessary steps confirmed that all participants were treated equally and fairly.

Personal biases were addressed when conducting research. As one who had a personal and professional background tutoring students with autism and working with parents and

teachers, this research was highly personal. As a result, personal bias was acknowledged, and steps were taken to mitigate personal bias as well. A researcher journal was kept throughout the research process to record thoughts and feelings that arose. Maintaining a researcher journal contributed to the trustworthiness of the study by minimizing researcher bias.

Summary

The problem addressed by this study was children with autism experienced lower achievement due to poor parent-teacher relationships. This qualitative research was conducted using a case study design. According to Miller et al. (2023), a qualitative case study was a complex examination that provided real-life experiences about a specific activity that evoked discussion. Purposive sampling was used to recruit 25-30 parents and teachers of children with autism. Data were collected and triangulated through a questionnaire and interviews. Data analysis followed the Braun and Clark's (2006) six-step thematic analysis. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationships as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada.

Chapter 4 included a discussion of the trustworthiness of the data. The chapter also contained a detailed description of the results organized by research questions and an evaluation of the findings and explanations of how the results aligned with the current literature. The chapter concluded with a summary of the chapter.

Chapter 4: Findings

The problem addressed by this study was that children with autism experienced lower achievement due to poor parent-teacher relationships. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada. Gedik and Urkmez (2023) argued that education outcomes for children with autism were improved with home-school partnerships but found there a lack of family-teacher engagement. Without efficient support, children with autism may experience challenges in learning and academic outcomes can be compromised. Hasson et al. (2024) confirmed that parents play a role in the educational support of a child with autism. Without active parental involvement, the learning needs of children with autism may not be consistently met, as adequate support and assistance are not always available within the learning environment. The following research questions were addressed by this study:

RQ1: How do parents and teachers describe the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5?

RQ2: How do parents and teachers describe family school engagement as an influence on the academic achievement of students with autism in grades kindergarten through 5?

Chapter 4 includes a discussion of the four elements of trustworthiness of the study—credibility, transferability, dependability, and confirmability as well as a summary of the sample characteristics, demographics, and data collected. In addition, this chapter also includes a discussion of the data results organized by research questions and identified themes and an evaluation of the findings. The chapter concludes with a summary of key points from the study.

Trustworthiness of the Data

Trustworthiness in qualitative research ensures the research is accurate and the findings are reliable. According to Bekmezci and Surucu (2025), trustworthiness evaluates the quality of the research. Subedi (2023) stated that to accept research as trustworthy, a researcher needs to conduct a rigorous and thorough thematic analysis. Quality research can be effectively evaluated through the use of reliable data. Lincoln and Guba (1985) established the framework of trustworthiness, which is based on the four criteria of credibility, transferability, dependability, and conformability. Using these criteria, trustworthiness is further described for this study.

Credibility

Credibility refers to the confidence in the accuracy and validity of the study's findings. Noble and Smith (2024) stated that although quantitative studies use statistical methods to ensure validity, qualitative studies incorporate strategies to ensure credibility. Subedi (2023) stated that credibility relies on the rigorous methods of attaining and analyzing data. Arslan (2022) considered credibility as internal validity which establishes a relationship between study variables. Qualitative internal validity is grounded in the participants' experiences and verified through the analytical perspectives of data triangulation and member checking.

Data triangulation and member checking were used to ensure credibility. Morgan (2024) emphasized that with the use of multiple data sources, the research becomes more complex and less subjective. Data were triangulated through a questionnaire and semi-structured interviews. Schlunegger et al. (2024) described qualitative questionnaires as a valuable tool to gather detailed responses by prioritizing written explanations over numerical answers. Dunwoodie et al. (2022) suggested qualitative interviews provide a holistic description that uncovers meaning to social experiences. Interviews allowed participants to speak in own words about experiences and

viewpoints to gain insight and meaning to the study topic. An interview protocol was created and field tested. The protocol consisted of 18 questions, of which eight questions addressed RQ1, seven questions addressed RQ2. The interview was field-tested with two volunteers, a mother of a child with autism and a female special education teacher (see Table 1). Field tests were conducted using Zoom and resulted in 18 pages of double-spaced interview transcripts and 82 minutes of verbal interviews. As a result, wording was slightly altered to become simpler so the researcher was not required to explain any interview questions. This wording change ensured thick, rich data without researcher input.

Table 1

Field Test

Field Test Volunteer	Setting	Duration	#of Pages Transcribed	Codes Produced
FTVOL 1	Zoom Video Conference	38 minutes	8	4
FTVOL 2	Zoom Video Conference	44 minutes	10	3

Interviews were conducted with 32 individuals - 25 parents and 7 teachers - using an interview protocol. The interview protocol delineated the structured sequence of questions directed toward parents and instructors. As part of the study's confirmation process, each interview was transcribed word-for-word to generate transcripts which were then emailed to the participants for member checking. Participants were invited to comment on, modify, or add to any part of the interview transcripts as each individual felt was necessary. Urry et al. (2024) emphasized the significance of member checking to ensure that the researcher's interpretations are both accurate and align with the participants' perspectives. Participants had seven days to edit, redact, and return transcripts. However, none of the participants required the full seven days

to review the transcripts. All but one transcript was returned within one day. Teacher 1 took three days to review the transcript due to the necessity to complete work obligations first. No changes were made to the 32 original transcripts and all the transcripts were marked “member checked.”

Transferability

Transferability is often regarded as a key pillar of trustworthiness in qualitative research. Lincoln and Guba (1985) defined transferability as the extent to which a study’s findings can be applied to other contexts beyond the original study. Stalmeijer et al. (2024) highlighted that transferability is achieved when the research findings evoke a sense of familiarity. Drisko, J. (2024) stated that transferability requires careful and detailed descriptions to assess if the study findings can relate to additional circumstances or settings. From a qualitative perspective, the responsibility for determining whether findings can be transferred is the responsibility of the individual assessing the findings.

Purposive sampling and thick descriptions of data collection and data analysis processes were used to ensure transferability. Stratton (2024) described purposive sampling as a research sampling process based on the study participants’ population presence. Participants are deliberately selected to align with the specific needs and objectives of the research. Tajik et al. (2024) indicated that purposeful sampling enables researchers to explore complex research topics while offering advantages such as being cost-effective and time-efficient. Participants were purposefully selected to ensure participants could provide robust data. Participants were parents and teachers of students with autism in grades kindergarten to grade 5. According to Riazi (2025), thick descriptions extend beyond the surface level of facts, providing descriptive and interpretive insights into participants’ opinions and experiences. Ranaweera (2024) concluded that thick descriptions enable researchers to capture the complexity of human experiences in a

manner that makes the findings relatable to the reader while providing the necessary context for interpreting the findings. For this study, participants were intentionally recruited who accurately represented the population that was being studied. Using a qualitative case study approach, in-depth personal perspectives of real-life occurrences were explored through questionnaires, and interviews to generate rich and contextual data. The data were then systematically analyzed using thematic analysis to identify recurring patterns and key themes aligned with the research questions.

Dependability

Dependability is another component of trustworthiness in qualitative research. Lincoln and Guba (1985) described dependability as the stability, consistency, and reliability of qualitative research findings found over time. Lim (2025) paralleled dependability in qualitative research to the concept of reliability in quantitative research, where consistency is measured through results, over time, and within the internal instrument. Gunbayi (2024) confirmed that to increase the dependability in research, the findings need to be presented accurately and precisely. Dependability also aligns with consistency; therefore, detailed documentation throughout the research process is important to follow.

An audit trail and evidence that support the research was used to ensure dependability. Abidin et al. (2024) specified that an audit trail is a rigorous approach to support the inquiry process. Zia Ul Haq et al. (2023) emphasized the need for detailed descriptions so similar studies can be repeated. For this research, a substantial amount of Data were generated through the use of research protocols designed to promote transparency and systematic documentation. Thick descriptions of the methodological process for collecting and analyzing data were provided. Recruitment and interview protocols were followed. Consent forms were given and approved by

the participants. Data were collected from 32 participants through semi-structured interviews. The interviews were audio and video recorded via Zoom and back-up recorded with the researcher's cell phone. Recorded data from the semi-structured interviews were transcribed word-for-word. Data from interview transcripts and questionnaires were reviewed and approved by the participants. Lastly, the approved Data were analyzed, codes were formed, and themes were developed following Braun and Clark's (2006) six-step thematic analysis process. Triangulation of Data were achieved using data from the questionnaire and interviews. Coleman (2021) claimed that without statistical tests, dependability requires consistent collection methods and data sources. The research evidence is clearly traceable and verifiable.

Confirmability

Confirmability is the final component for establishing trustworthiness in a qualitative research study. Abidin (2024) argued that confirmability promotes objectivity and therefore relies on participant responses and not the researcher's beliefs. Research, including the data collection and analysis, needs to remain neutral. Enworo (2023) further emphasized the importance of demonstrating confidence in the research needs by having the findings grounded in verifiable data. Megheirkouni and Moir (2023) identified personal bias as a significant challenge that researchers commonly face when conducting research about sensitive or complex. Therefore, to reduce researcher barriers, checkpoints are needed throughout the research process.

Researcher reflexivity and coding was used to establish confirmability. Olmos-Vega et al. (2023) emphasized the goal of reflexivity includes neutralizing the subjectivity influence by being aware of one's own position and potential bias as well as recognizing the relational aspect between the researcher and participant. According to Jamieson et al. (2023), reflexivity examines one's own assumptions and judgements regarding the research process as qualitative research

encourages participants' unique ideas and responses. Karcher et al. (2024) insisted on reflexive methods to be integrated into qualitative research by exploring why the topic was chosen and writing research notes throughout the research process. The research notes act as a journal and be a tool for documenting thoughts, decisions, and reflections. Reflexivity was continuously practiced to ensure the researcher was aware of personal bias and assumptions. A bound notebook was used to document thoughts and reflections throughout data analysis. Data were analyzed using Braun and Clark's (2006) six-step thematic analysis process. The data analysis process began with the transcription of the interviews, followed by repeated review of the transcripts in order to gain a thorough understanding of the participants' perspectives. Initial codes were formulated to unite meaningful units of information, which were eventually grouped into categories and labelled as themes. There were defined and renamed themes, and the results are presented below in a written narrative that highlights identified themes relative to how parents and teachers described the parent-teacher relationships as an influence on the academic achievement of students with autism in grades kindergarten through five.

Results

The final sample for this study was 32 participants. The sample was comprised of parents and teachers of children with autism in grades K-5 from three Canadian provinces. Recruitment began after IRB approval was obtained from National University. The recruitment process began on August 28, 2025. The recruitment poster was placed on the websites of two Canadian autism organizations (See Appendix B). The recruitment flyer contained the study purpose, participant eligibility, and an overview of what to expect as a research participant. The bottom of the recruitment flyer contained the contact information for the researcher. Interested individuals who self-identified as meeting the study's inclusion criteria emailed the researcher expressing interest

in participating in the study. Interested individuals indicated being a parent of a child with autism in grades k-5 or a teacher of student with autism in grades in k-5. Parents of children with autism were quick to volunteer to participant in the study, but recruiting teacher participants required a longer period of time. Recruitment of parents for the study concluded on September 22, 2025. However, the recruitment of teachers for the study concluded on October 2, 2025.

Questionnaire

Data were collected using an online questionnaire administered through Qualtrics, an online survey distribution platform. A link to the questionnaire was emailed to each participant that expressed interest in participating in the study. After clicking on the link, participants first had to complete the informed consent before proceeding to the questionnaire. The questionnaire included four open-ended questions that addressed RQ1 and RQ2. The questionnaire was completed by 32 participants - 25 parents and 7 teachers. All parents had a child with autism in kindergarten through grade 5, of which 13 of the children are male and 12 are female. There were five children in kindergarten, one child in grade 1, 11 children in grade 2, four children in grade 3, two children in grade 4, one child in grade 5, and one child for which a grade was not identified. Of the 25 parents, seven identified as living in a single-parent household. Sixteen of the parents had 1-2 additional children. Two parents had three or more additional children (See table 2).

Of the seven teachers, five teachers were male and two teachers were female. All the teachers were certified and held additional certifications to work with students with special needs. The grades the teachers taught varied. There was one kindergarten teacher, two 1st grade teachers, one 2nd grade teacher, two 3rd grade teachers, and one fifth grade teacher; teachers from fourth grade were not represented in this study. The length of time the teachers have worked with

students with autism varied from two to five years. One teacher worked with students with autism for two years, 4 teachers worked with students for three years, 1 teacher worked with students with autism for four years, and 1 teacher worked with students for five years (Table 3)

Table 2

Parent Demographics

Participant ID	Gender	Grade of Child	Household	Siblings in Household
P1	Male	Grade 2	Single parent	0
P2	Female	Kindergarten	Two parents	1-2
P3	Female	Grade 2	Two parents	1-2
P4	Female	Grade 3	Single parent	1-2
P5	Male	Grade 2	Two parents	1-2
P6	Male	Grade 4	Two parents	3+
P7	Female	Kindergarten	Two parents	1-2
P8	Male	Grade 3	Two parents	1-2
P9	Male	Grade 2	Two parents	1-2
P10	Male	Grade 2	Single parent	0
P11	Female	Kindergarten	Two parents	1-2
P12	Female	Kindergarten	Single parent	1-2
P13	Male	Grade 2	Two parents	1-2
P14	Male	Grade 3	Single parent	1-2
P15	Male	Grade 2	Single parent	0
P16	Female	Grade 2	Two parents	1-2
P17	Male	Grade 2	Two parents	0
P18	Female	Grade 2	Two parents	3+
P19	Female	Grade 1	Two parents	1-2
P20	Male	Grade 3	Two parents	0
P21	Male	Kindergarten	Two parents	1-2
P22	Female	---	Two parents	0
P23	Female	Grade 4	Two parents	1-2
P24	Female	Grade 2	Single parent	0
P25	Male	Grade 5	Two parents	1-2

Table 3*Teacher Demographics*

Participant ID	Gender	Teaching Grade	Teaching length for students with autism
T1	Male	Grade 5	2 years
T2	Male	Kindergarten	3 years
T3	Male	Grade 3	3 years
T4	Male	Grade 3	5 years
T5	Male	Grade 1	3 years
T6	Female	Grade 1	3 years
T7	Female	Grade 2	4 years

Interviews

Interviews were conducted via Zoom, an online video conferencing platform, with 25 parents and seven teachers. All participants who completed a questionnaire also completed an interview. Interview data collection began on September 1, 2025, and ended on October 7, 2025. Participants were friendly, cooperative, and eager to be part of the process. At the beginning of each interview, confidentiality was reviewed. The researcher reiterated how the research notes and transcripts would only contain the initials and not the names of the participants. Informed consent was verbally obtained from each participant prior to the start of the interview. Often, the participants wanted to simply talk and got off topic. Participants had to be redirected to make sure interview questions were adequately addressed. Two participants answered the interview questions without hesitation. The time range for the interviews varied, with the shortest interview being 19:58 minutes and the longest interview being 53:23 minutes (Table 4). The interviews were recorded in both audio and visual formats, transcribed word-for-word, and subsequently returned to the participants for review and accuracy confirmation (member checking). Participants had seven days to edit, redact, and return transcripts. However, none of the participants required the full seven days to review the transcripts. All but one transcript was

returned within one day. Teacher 1 took three days to review the transcript due to the necessity to complete work obligations first. No changes were made to the 32 original transcripts and all the transcripts were marked “member checked.”

Table 4

Recording and Transcription Length

Participant	Length of Recording	Number of Pages
P1	51:20	9
P2	48:12	7
P3	49:31	7
P4	44:54	6
P5	45:11	6
P6	45:33	6
P7	50:05	8
P8	53:23	10
P9	49:40	9
P10	20:48	5
P11	46:22	7
P12	49:20	8
P13	44:40	6
P14	45:55	6
P15	51:33	8
P16	19:58	5
P17	47:55	7
P18	45:02	6
P19	48:28	7
P20	50:42	9
P21	46:39	6
P22	21:03	5
P23	48:09	7
P24	49:44	8
P25	47:51	8
T1	47:25	7
T2	23:50	5
T3	45:33	6
T4	48:01	8
T5	49:32	8
T6	48:12	7
T7	47:47	7
Total	23:52:18	224
Mean	47:76	7

Data Analysis

Data were analyzed using a six-step thematic analysis process. Jowsey et al. (2021) indicated that using a thematic analysis for qualitative data is a popular research method in aiding the researcher in understanding the participants' experiences and perceptions. Braun and Clarke (2022) encouraged that during data analysis procedures, the researcher needed to ensure certain the methodological processes conformed with the researcher's values and thematic analysis. Christou (2023) further addressed the thematic analysis as a critical tool for rich description of the entire data set. This study was analyzed using Braun and Clark's (2006) six-step thematic analysis.

Step 1: Familiarization of the Data

The first step in analyzing Data were becoming familiar with the entire body of research data. Data were collected from the questionnaires and the interviews. The completed questionnaires were downloaded as PDF files and reviewed multiple times, as each answer was compared with the corresponding questions. Transcripts from the interviews were compiled and approved by the participants. During the interviews, notes were also taken to capture details or observations that stood out. Insights included recognizing repeated words or phrases used by the participants. Each recording was listened to multiple times and compared to the transcripts. The transcripts were de-identified and uploaded into NVivo software to assist in the organization of the data.

Step 2: Generating Initial Codes

The second phase was generating initial codes. Braun and Clark (2006) implied the stage of initial code generation as imperative to the qualitative approach. After becoming familiar with the data, specific words or phrases were assigned to pieces of transcribed data. These specific

words and sentences were initially highlighted on the approved transcripts. These words and phrases were also written in the researcher's journal for comparison and to look for similarities. Codes were assigned to the data, which demonstrated patterns (Table 4). Codes similarities were noted. The patterns were reviewed multiple times and refined. Maguire and Delahunt (2017) recognized that generating initial codes reduced the data from the first stage into small chunks of meaning. Byrne (2022) stated that generating codes is a flexible process that allows the researcher to continue to learn about the data and find new patterns of meaning. The codes derived from the merged datasets helped to establish themes.

Table 5

Initial Codes

Code	Code Name	Definition	Coded Segment
ES	Emotional Support	Emotional support influencing learning	<i>Understanding and listening to each other</i>
LD	Leadership	Leadership behaviors and their influence on student learning	<i>Family or parent is primary source of education.</i>
MOT	Motivation	Factors that motivate parents and teachers.	<i>It's essential for consistency and the optimizing the autistic student's growth and success</i>
ACK	Acknowledgement	The acknowledgement of parents' and teachers' efforts	<i>Teacher is my partner in my children's learning</i>
COLL	Collaboration	Working together for a common goal	<i>Work together as a team</i>
ADVO	Advocacy	Action taken on behalf of student	<i>I go in when something is wrong. I speak up.</i>
COMM	Communication	Information giving to improve learning	<i>I give examples, describe what is happening</i>
XFS	Extended Family support	Support from family members and its effect on parents and children	<i>My sister helps me, gives emotional support to me and my son</i>

Step 3: Searching for Themes.

After codes were established, potential themes were identified. Codes were turned into potential themes involved organizing data extracts into recurring ideas and patterns. Therefore, similar codes were combined into individual themes as connections between the codes were identified. By recognizing the similar codes, themes were assigned to the corresponding codes. Morgan and Nica (2020) implied data collection ends and preliminary theme creation occurs when new data no longer offers the researcher new information. Kiger and Varpio (2020) outlined the search for themes as a reflection of all the data. Themes were organized and evaluated relative to research questions. Duplicate themes were either combined into one theme or eliminated completely. Throughout this process, new themes were also identified. At the conclusion of Step 3, the researcher constructed themes based on the data, the codes, and the researcher's interpretive understanding.

Table 5

Identifying Themes from Initial Codes

Code	Emerging Themes
ES	Supportive environment and relationships
LD	Leadership impact on student learning
MOT	Motivational factors driving parents and teachers
ACK	Acknowledgement of efforts of teachers' efforts
COLL	Working together for a common goal
ADVO	Parental positive impact on shaping child's education
COMM	Fostering a partnership to enhance student learning
XFS	Extended family support

Table 6*Finalized Themes*

Code	Theme
ES	Consistent Parent-Teacher Meetings Contribute to the Learning Needs of a Child with Autism.
COMM	Bilateral Communication is an Important Aspect for the Parent-Teacher Relationship
ADVO	Advocacy is Crucial in the Learning for a Child with Autism
XFS	Extended Family Partnerships Impact Academic Learning

Step 4: Reviewing Themes

The identified themes were reviewed once again. Jowsey et al. (2021) confirmed the process of critiquing the original themes to give a fuller understanding of the data. Reviewing themes also resulted in combining a couple more themes together. The theme review also ensured the themes fit the two research questions. Coates et al. (2021) insisted that theme refinement and creating accurate depictions of the research data are vital to yield comprehensive research results. Morgan (2020) interpreted the reviewing of themes as an evaluation of the original themes and the process of reconstruction to give identity and meaning to the given themes. In review, initial themes were created in the prior step; themes were then reviewed by re-reading the data. By re-reading the data, the themes either changed when the themes did not fit with the codes or were discarded. The newly founded themes were then reviewed again to ensure the themes answered the research question.

Table 7*Themes Adjustment*

Initial Theme	Evaluation	Adjustment
Supportive Relationships Influence Learning	Well-supported by consistent data extracts.	Keep
Parent Involvement Influences Educational Learning	Strong support by data.	Keep
All Family Members Can Potentially Influence the Learning of a Child with Autism	Strong support by data	Keep

Step 5: Defining and Naming Themes

Once the themes were finalized, each theme was defined and named. Kiger and Varpio (2020) suggested that during the fifth stage of the thematic analysis, the researcher needs to create a narrative description of every theme which incorporates the most significant aspect of each theme. A name or title to the themes was assigned to themes that were designated in step 4. The theme titles reflect extracts from the data. Hemming et al. (2021) noted how each original theme's name should be replaced with concise, yet dynamic titles. The working titles in the previous steps were never meant to be permanent, so the new names become an important descriptive aspect of the study. Naeem et al. (2023) interpreted the definition of themes as a conceptualization through the interpretation of keywords. Therefore, for a researcher to accurately name themes, the keywords refer to the actual data from participants and not assumptions from the participants or the researcher. The themes were further refined and redefined during this step before the final report was written.

Table 8*Defining and Naming Themes*

Theme	Description	Example extracts
Consistent Parent-Teacher Communication Support Academic Learning	The sense of stability and assurance for parents and teachers are actively involved in the learning for students with autism.	<i>When I pick my child up from school, I meet one one-on-one with his teacher to understand whatever instruction is given to my child.</i>
Collaboration is Essential for a Positive Parent-Teacher Relationship	The importance of communication in the parent-teacher relationship in supporting the learning of a child with autism,	<i>I am always speaking to my child's teacher. I say what I think is best for my child and the teacher says what he thinks too.</i>
Parental and Teacher Advocacy Support Academic Learning	Parents make decisions that may impact a student's education.	<i>When my kid had problems with his teachers and all that, I did go to the school and talk to the other teachers, talk to the school head too.</i>
Extended Family Support Fosters Academic Learning	The appreciation and/or acknowledgment of family's' contributions	<i>Full family involvement, support in homework, school pickup, tuition</i>

Step 6: Producing the Report

The final step of a thematic analysis was the production of the report. Christou (2023) reported that a final report is comprised of a complicated story written in a logical and coherent manner. Data were collected and was triangulated using a questionnaire and interviews from two different groups to address the research questions. Donkoh (2023) defined triangulation as a process to ensure robust and rigorous qualitative findings. This write-up was prepared to enhance the credibility and transparency of the research analysis, ensuring that different researchers would be confident in the validity of the research. This final report provided a narrative account in which the themes were organized according to research questions and key findings.

Data were triangulated collected a questionnaire and semi-structured interviews. The research questions used to address the problem were based upon Bronfenbrenner's ecological systems theory (1994), the conceptual framework that undergirded the study relative to how parents and teachers describe the parent-teacher relationship (RQ1) and family school engagement (RQ2) as an influence on the academic achievement of students with autism in grades kindergarten through. The data were organized by each research question, and direct quotes were extracted from the three sources to prove the results and illustrate the corroboration of thick, rich data.

RQ1

RQ 1 was *How do parents and teachers describe the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5?* Questionnaires and semi-structured interviews were used to collect data for the first research question. Two questionnaire items and four interview questions examined the parent-teacher relationship and how this relationship influenced academic learning. Analysis of the data revealed the following themes.

Theme 1: Consistent Parent-Teacher Communication Support Academic Learning.

Participants indicated that consistent communication between parents and teachers was essential to supporting students' academic needs. Participants described consistent communication as corresponding by phone, via text or email, and scheduled or impromptu weekly or daily in person meetings. Parent 7 described the communication efforts with the teacher.

The main way to understand is to make sure we talk. We talk consistently to see how my child is progressing so we could see good progress. I prefer to talk when I drop my child off. I prefer onsite, where I can see the teacher. We actually discuss more.

Relative to the relationship with the teacher, Parent 25 stated:

We do talk a lot. He's [the teacher] like a friend to me. Phone calls are best for me.

Sometimes I go see him in person. Even after school, we talk. I am really cool with him.

It is a lot easier [we] when talk about things on a normal basis.

Parent 14 stated, "We talk all the time. I also sometimes reach out through emails or notes or the school communication app. You know whereby parents have proper time to communicate with parents and stuff. We also have regular scheduled parent-teacher meetings." Teacher 3 shared: "It's the 21st century, so communication can go both ways. I feel [they the parents] can chat to me on the phone. Give me a call. Talk to me when you see me."

Parent 16 strongly believed in parent-teacher communication:

I communicate with my son's teacher in-person or on the phone. It is about helping my child learn. They give me ideas to help my child. The relationship is very good. Parent and teacher relationships is one of the most important relationships anyone could have. It is based on trust.

Parents indicated that planned weekly and daily meetings with teachers, whether scheduled or impromptu, and other forms of communication supported the children's academic learning.

Parent 9 stated, "I usually talk to them [the teachers] often. Very often. Like every week." Parent 4 said, "Weekly scheduled parent-teacher meetings are important because it makes the parents relaxed and have confidence their child is well taken care of when in school." Parent 3 mentioned, "I mainly go to the school weekly to have a one-to-one conversation... because it is more of a solution than other means of communication." Parent 16 described regular communication as "weekly meetings in-person, but more often on the phone."

Parent 1 also loved the idea of weekly meetings:

I mainly go to the school weekly – have a one-on-one conversation with the teacher. She understands. I always go to the school because it is more vital than communicating through the phone or email. It is more of a solution than other means of communication.

Parent 2 described how regular contact with the teacher does not always occur in-person:

I believe in consistency and respect in communication and support. Regular check-ins by email. I drop an email or I call a few times a week. I also have regular short meetings with the teacher. I attend regular meetings at school too.

Parent 5 indicated that parent-teacher check-ins were important to the child's education.

“We communicate through emails and phone calls a lot. Parent-teacher meetings too. I also check in regularly, I'd say weekly, to make sure my child is really learning. Parent 6 stated that the teacher does not also respond to communications in a timely manner so he needs to keep trying.

For me, I usually use email. I actually send a lot of emails. They don't always reply fast enough, so I ask for weekly meetings. Sometimes I just take these little regular meetings in school. I take a few minutes, but most times, I feel rushed.

Parent 12 shared information about the relationship with the teacher.

It think it is easy to communicate. I communicate all the time with my child's teacher through online email and through texts. I prefer in-person though. I just want to have the regular contact from my child's teacher so I can communicate with him.

Parent 13 indicated a preference for in-person meetings.

I talk to my child's teacher in-person, I don't really like talking a lot over the phone, so in-person whenever I'm at school. That's my best communication-whenver I see his

teacher. So almost every day, every week at the longest. Education is very, very important, so we need to talk about it all the time so my child learns the best he can.

Parent 14 shared how communication with teachers is about addressing academic needs.

Together we always discuss the resources that can support my child. This back and forth helps a lot. It helps to stay on the same page. We talk all the time – at least once a week. Usually towards the end of every week to make sure everything is going okay.

Parent 17 stated:

I'm always the one getting a hold of my teacher. It's kind of tough, but I try to talk to her weekly. I always take my time to focus on her and everything concerning our school. I like to meet with her when I drop my child off at school.

Parent 18, who referred to the relationship with her child's teacher as "a very good one," indicated a preference for in-person communication.

Ever since knowing him, I have liked him. We can talk, even by text or email. The best way for me is actually in person. Easier to just have a very quick conversation every day when I drop my son off or come to pick him up.

Parent 20 described frequent communication with the teacher:

We do talk a lot of times. Communication with us is common. To communicate to my teachers. I would say by phone calls, that's what I use. I also go personally and talk to the teacher in person. I would say I speak daily to the teacher.

Parent 23 indicated:

My son's teacher always gives me day-to-day learning of how my son has done because it is not easy to teach a class of other students who are not the same. So we have to talk. I

would call these meetings, but they are not formal. We just talk every day when my son is at school.

Parent 25 indicated a preference for talking by phone and in person to support the child's learning:

When this new teacher came in, I was so happy because things changed entirely. It is a lot easier. We talk on the phone often. I want to talk to him every day but I know he is busy with other students too. So sometimes I just go see him in person. No matter what - our in-person meetings are now scheduled. These are now at least once a week.

Teachers agreed that weekly meetings with parents were beneficial but felt the mode of communication was irrelevant. The teachers often believed if parents spoke to the teacher, regardless of the method, phone, email, or in-person, the students with autism were well supported. Teacher 5 stated "regular communication in any way that's preferable for the parent."

Teacher 1 had an open-communication policy with parents:

Give me a call. Talk to me when you see me. I really don't mind. If they [parents] want me to keep an extra eye out. They can reach out to me, tell me what is going on. Regular meetings are good. I like to keep in touch, weekly meetings work for me.

Teacher 4's view of communicating with parents was similar to Teacher 1:

It's the 21st century, so communication goes both ways – you can chat with me and hit me up whenever. I don't really mind. I try my best. I'm just thankful for the kind of parents I have. My parents know I am always there to talk.

Teacher 2 echoed the same sentiments:

I communicate in any way that's preferable for the parent. I keep things friendly with the parents. When we meet weekly, the child is supported and we can collaborate properly.

In the end though, it depends on what works with the parents.

Participants indicated that consistent communication between parents and teachers was essential to supporting students' academic needs. Participants indicated that regular and ongoing communication allowed parents and teachers to better understand students' needs, challenges, and progress. Participants indicated that consistent communication helped parents and teachers to align expectations, provide targeted support, and more effectively address students' needs. The modes of communication varied from phone, text, and email to scheduled or impromptu weekly or daily meetings. Nevertheless, participants viewed consistent parent-teacher meetings as an important factor in promoting addressing academic learning.

Theme 2: Collaboration is Essential for a Positive Parent-Teacher Relationship.

Participants viewed parent-teacher collaboration as a necessary element of a positive relationship. Parent 2 stated, "[We] work as [a] team and we keep the goals aligned." Parent 17 described the relationship with the teacher as "more like a collaborative partnership...I talk to the teacher. I create these bonds if we want to collaborate and train the child. In general, it's all about the children, all the kids there." Parent 7 stated, "I always have to make sure that I get feedback... We talk whenever my kid is having an issue. I share my observation. Yes, I listen. I am a very good listener too [concerning receiving feedback about my child]. Parent 12 described the relationship with the teacher as:

Unified. It's easy to communicate with him. I think he feels the same with me. We are always helping my kid to make sure he's doing the right thing...A good relationship means good communication. A lot of good talking. It keeps the collaboration.

Parent 13 indicated having a positive collaborative relationship with the teacher.

It has been very positive, We talk openly. I only talk in-person. It is not personal, but it is confidential. I tell my teacher [about my child's] behavior [at home] and everything and he tells me how my child is in school. We support each other.

Parent 14 viewed collaboration as a non-negotiable.

You just have to do it with unity...I collaborate with the teacher...approaching... academic needs as a team effort. I listen to the teacher's feedback about school. I tell him about what happens at home. It is about being able to talk about everything.

Parent 5 spoke of having a respectful and collaborative relationship with teacher:

We share the same goal, you know – supporting my child...We talk well together. When a teacher suggests strategies for improvement, I reinforce them at home. I also share what works for my child at home, so the teacher can also use similar approaches in the classroom. It is about talking together and letting each other know everything.

Parent 4 described collaborating with the teacher as a mutual exchange:

Sometimes I just call them up and check on how my kid is doing in school and all that. I do give my opinion on everything. I ask questions. Then I listen to my child's teacher. I want to know what they think. We need to be honest with each other. We both want what is best for my child.

Teachers also spoke highly of open communication with parents to effectively collaborate with parents. Teacher 2 stated:

...I try to hear what they want and give my opinion and everything. See how we work together for the best of the kids. We all have one goal, to support their child in learning new skills. We work together, discuss what is happening. Be open with each other.

Teacher 7 emphasized the importance of open, honest dialogue as essential to positively collaborate with parents.

Teachers need to really talk to parents. It is about talking, describing, and giving examples. You need to be truthful to parents. Tell them as it is. Some parents can be so naïve so we talk about things, discuss problems, give suggestions to each other.

Teacher 6 explained collaborating with parents:

We work together hand-in-hand with the parent to give the child the best. You don't want to offend any parents. You just want to convey your message honestly, so you sometimes have to be extra careful. We want what is best for the students. Parents want [what] is best for their child.

Parent 21 described a positive collaborative parent-teacher relationship:

Vital partnering is crucial. I would say I am one of the lucky ones. We work hand-in-hand. We talk about everything – how my child is doing at home and at school. Even when my child is not feeling well...I am always updated to what is going on at school. I also always update my child's teacher. We talk and work well together.

Parent 3 described a positive parent-teacher collaborative relationship as one of mutual respect in which “we support each other.” Parent 4 describe the relationship as one in which “we really collaborate. We just talk to each other. Be open with each other.” Parent 22 echoed these sentiments, stating, “It is about being open and supportive...Sometimes we have honest conversation.” Parent 19's parent-teacher relationship with the teacher is also a collaborative one:

I have a positive collaborative relationship with my child's teacher. We communicate regularly, show mutual respect and work together to support my child's progress.

Everything is based on the support and everything. We listen to each other; we explain to each other so we can be on the same page. We want to make it better for my kid.

Like the other parents, Parent 20 affirmed the importance of collaborating with the teacher:

I'll say this is how my kid behaves at home. Try and understand and collaborate with him (the teacher), so we are on the same page. He tells me how my kid is doing in school. Collaboration...I ask him questions when my kid is having issues. We just try to talk more. Be on the same page.

Participants indicated that effective communication is essential to the parent-teacher relationship and should be maintained by both parents and teachers. Participants further revealed that effective communication included meaningful two-way communication which was characterized by openness and a shared commitment to supporting students' academic progress. Parents and teachers believe that sharing opinions and ideas with the opportunity for a response becomes a two-way response and a collaborative experience.

Theme 3: Parental and Teacher Advocacy Support Academic Learning. Participants (parents and teachers) emphasized that speaking up on behalf of the child with autism was essential for promoting a positive and inclusive learning environment. Parent 22 described a specific time when she needed to advocate for her child.

I had concerns about daily interactions. There was a time when I thought my child needed more time or social skills activity. The teacher felt academics should take priority. I wanted my son's teacher to know he can and he should interact with schoolmates.

Parent 1 stated, "I think [parental advocacy] is a natural responsibility. Because my child cannot advocate for himself. I am glad that I am able to make him a better person." Parent 15 expressed also the importance of advocating for his child's education:

I literally advocate for my child by staying actively involved in his learning and stuff...

[As the parents] I know what is best. When I feel something is not working, I go back to the school and inform the teacher respectfully. I raise my concerns and suggest some alternatives which work better for me.

Parent 16 describe advocating for the child if feeling the teacher is not responsive:

I go in if something was wrong, I would go right to the teacher and speak up. I needed to do that. I don't always get support from the teacher, so I need to speak up. My child needs to come first. If I don't like something, I need to say something.

Parent 19 described advocating for the child by giving going directly to the teacher: "Talk to teachers...tell what you feel is best." Parent 20 also described a similar advocacy approach saying, "Let's try this and they try it and see how things work out." Parent 12 also advocated for straight forward approach to address the needs of the child: "I go right to the teacher.... I had to stand out and stand up for my child."

Parent 17 had a more specific approach to child advocacy.

It matters how you approach the teacher as it will determine how the teacher is going to respond to your questions. You own your behavior. Try not to be too harsh. I feel it needs to be the best possible. Be calm, polite. I don't make fun of everything. I just try to act a little more free. If you are making sense, someone will listen to you. From the formal stage to the informal stage.

Parent 25 identified the importance of being an advocate for the child.

When my kid had problems with his teachers and all that, I did go to the school and talk to the other teachers, talk to the school head and that too. Problems can be solved. I talk

to the teachers. I express myself. Sometimes teachers take things to the extreme, so I do go to the school. This is how I get things done. How change can happen.

On being a parent advocate, Parent 2 stated:

I speak on his behalf. I am the voice of my child because I make sure the teachers and staff know my child's strengths. I am supposed to know everything. If there are challenges, she [the teacher] should let me know.

Parent 4 described the need to advocate for her child:

Sometimes I do give my opinion on everything. I want the best for my kid and so I have to communicate with the teacher so we can be on the right track. I have expressed concerns about the lengthy assignments and projects the teacher has assigned. I go to the school to make things right.”

Parent 19 described a need for teachers to know “what is right for my child – what he best in or what he needs a bit more help with.”

Parents often make a strong effort to be heard and to tell their teacher what is right for their children. Parent 7 acknowledged, “As a parent, not everything the school says is gonna be right for you. I share my observation with task detail.” Parent 18 shared an example of how she has advocated for her child.

Like, when I want him to always be at the front of the class. So, at that time the teacher was like, no. I told the teacher, oh, please. My child is very, very intelligent, and he wants to learn more, so can you just put him at the front? So, she was like, no, no, no, we're going to follow the school line. But please, I want my child's education to always be in a good place. She said I'm going to do this if your child, and if he keeps up with good record and doesn't disturb. I told her, no problem. I trust him. It's not going to disturb

you, not going to stress you. So she tried it for two weeks. The child was really good at the front. I was like, wow, I told you.

Whereas most parents were considered to be advocates for the child, the teachers took on the advocacy role as well. Teacher described them when parents were unwilling to take the advice of the teachers and the teachers had to advocate for the needs of the child must to the chagrin of the parents. Teacher 6 stated:

I have been a good advocate to the parents and their kids. It is about doing the right thing, ethics. Good teachers have good ethics. Not all teachers can boldly walk up and say something, but I can, so I look at it as a blessing.

Teacher 2 remarked:

I'm in a position where I have to advocate for a kid. I make sure to see them learn. I probably do a one-on-one discussion with parents. I tell them everything they need to know about the kid, how the kid behaved in school. It is about everything for better development.

Teachers 3 stated:

At the end of the day growth is what matters, so try to put it aside and focus more on the child. Talk to the parents. I believe it is the teacher's job to give advice. Sometimes parents don't want to hear it. Sometimes teachers do know what is best.

Teacher 4 described the unwillingness of some parents to listen to the teacher:

Most times [parents] don't listen. It depends on the parents of the child though. If you don't want to work with me, it's fine. I try my best. You know, they [parents] are not entirely good because you still have bad parents who think they know everything.

Teacher 6 expressed advocacy comes from having good ethics.

My students and their parents know I am a very calm person and I am understanding. I always like to hear what they say. I always want to hear what they have to say. I have been a good advocate to the parents. It's about doing the right thing, ethics. Good teachers have good ethics.

Participants expressed how parents and teachers shared ideas and strategies to facilitate the education of children with autism. Both parents and teachers advocated for the child's individual needs. Parents and teachers viewed advocacy as essential for promoting consistency between home and school environments and for strengthening communication between parents and teachers. Overall, participants emphasized that advocacy played a significant role in supporting children's academic progress and social development.

RQ2

RQ 2 was How do parents and teachers describe family school engagement as an influence on the academic achievement of students with autism in grades kindergarten through 5? Questionnaires and semi-structured interviews were used to collect data for the first research question. Two questionnaire items and six interview questions examined how family and school engagement influenced academic learning. Analysis of the data revealed the following themes.

Theme 4: Extended Family Support Fosters Academic Learning.

Participants expressed that supporting children with autism often expands beyond the nuclear family, involving extended family members who play a role in the child's academic and social development. These family members were described as providing emotional support, assisting with educational needs, and reinforcing strategies used at home and school. Participants emphasized that the involvement of extended family members helped create a more consistent and supportive environment for the child.

Parents 3 and 4's brothers played an integral part in each of their children's learning. Parent 3 pointed out that family involvement was very important. "I have a brother. He is creative and supportive when he helps to teach his nephew. My brother is always educational, creative. My brother, when he comes around, he also teaches my child. He has been so supportive." Parent 4 stated, "My brother makes learning easier for him. Like I said, sometimes the questions and the assignments are too lengthy for my child, so my brother often helps him. Academics are not just in school, they happen at home too..."

Parent 6 claimed echoed the same sentiments as Parents 3 and 4 relatives to extended family involvement, being grateful for the emotional support of extended family.

Family is everything. When family is involved, it helps a lot. My extended family offers emotional support – My parents, they understand mine and my kid's emotions. They always assist us in understanding when I get overwhelmed with everything...My parents are a source of encouragement for the kid to keep going and trying.

Parent 14 explained that extended family are a source support and motivation for the child and the parents.

My parents reinforce what aligns with his school. They stay informed about his progress and any areas that may need extra support...When families, more than just me and my wife, are engaged, children become more motivated. My parents are very active with our son. They help with homework. They encourage reading and other educational activities at home. They have also attended parent-teacher meetings.

Parent 5 greatly appreciated when extended family helps with the child's homework and study together.

I do not know what I would do without my child's aunts and uncles. My child actually talks to them about his education when he goes visiting. They help him. They even give him gifts for his good grades. Things like that. It has been very positive.

Parents 6, 14, and 19 believed extended family give encouragement, support, and make children feel more comfortable as children complete projects and homework. Parent 18 is appreciative when extended family helps with the child's homework and study together.

Parent 15 his extended family as being invested in his child's education:

[My family is] involved, you know, physically, financially, everywhere. They are invested in my child's education. My family has been very interested in my child's education. They help with homework. They take him to school. They really care and only want what is best for my child and me.

Parent 18 had a very involved family and described the importance of family involvement.

Family involvement is very, very important for every child's education. When your family's involved, your child... my child actually talks to his aunts and his uncles about his education when he goes for visiting. They always study together. They give gifts for his good grades, things like that. So, family involvement has been great. It's been very positive. I can remember some beautiful gifts my child got from his auntie, due to his grades. He had good grades in school, so his aunt promised him something, and she actually got it for him. So that has been great.

Parent 19 described family involvement as being beneficial to the entire school environment:

Family involvement works, a supportive environment. The kids feel supported. Excited to have someone when I don't know what is happening in the school. It is really important

on this. Everyone is familiar. So much easier. It helps a lot. You come out with good grace and everything.

Teachers also agreed that family support was beneficial to the academic learning of students with autism. Teacher 1 expressed family support as a positive aspect in the learning of a child with autism.

I think family involvement is good if they impact the child positively... Checking the homework, access them by day-to-day activities in school. To make sure there is not too much pressure on these kids. Family involvement is the importance of everything. It helps the teacher. It helps your child.

Teacher 2 concluded:

When families are involved, kids feel supported, feel happy, they feel motivated. This reinforces what they are doing in class and it shows how good they really are...When parents say something or help, kids tend to learn faster. There's more communication, there's a flow of energy.

Teacher 7 discussed the benefits of family engagement

Family involvement was everything. I believe with the family, we definitely see a proper child in the right path, in the right direction. If the child is having problems at school, I usually trace it back to the family.

Teacher 3 emphasized how family engagement is important.

Family helps and checks the homework. Helps with projects. Family involvement actually helps teachers.

Teacher 5 indicated:

Family members actually help the students. Some family members drop the kids off at school...When parents say what works, it makes the children safer. I feel that is a good advantage. I give them little lessons and homework so they can help them. They make the children safe and happy.

Participants describe the role of the extended family as important role in the academic development of children with autism. Participants considered family participation included everything from homework assistance, support in learning academic routine to financial assistance. When families contributed in these ways, not only was practical support provided, but a child's motivation and confidence were also enhanced. In contrast, participants also described relatives as overbearing and unreliable, which created additional stress for parents and, at times, disrupted educational support. Participants (both parents and teachers) indicated that that while extended family involvement played a meaningful role in supporting academic development, the quality and consistency of that involvement were critical factors in determining the overall impact on a child's academic development.

Evaluation of the Findings

The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada. Data were collected using semi-structured interviews with 32 participants in a session spanning approximately 20-50 minutes. Data were analyzed using Braun and Clarke's (2021) six-step thematic analysis. Four themes emerged from the study: *Consistent Parent-Teacher Communication Support Academic Learning (RQ1)*, *Open Collaboration is Essential for a Positive Parent-Teacher Relationship*

(RQ1), and *Parental and Teacher Advocacy Support Academic Learning (RQ1)*. and *Extended Family Support Fosters Academic Learning (RQ2)*.

RQ 1. *How do parents and teachers describe the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5?* Findings indicated that collaboration between family and teachers was essential to advancing the academic learning of students with autism. Results revealed parent-teacher meetings offered a vital opportunity for parents to engage with teachers and develop strategies for academic growth for children with autism. Participants indicated that regular and ongoing communication allowed parents and teachers to better understand students' needs, challenges, and progress. According to Ibrahim (2020), family and teachers were necessary for young students with autism to improve academic performance. Cerero et al. (2024) explained active parental involvement was important for the academic success and development for children with autism spectrum through school meetings and collaboration with teachers. Syeda and Bruck (2022) emphasized learning outcomes for children with diverse needs could be improved through frequent communication meetings. Participants indicated that consistent communication helped parents and teachers to align expectations, provide targeted support, and more effectively address students' needs. The modes of communication varied from phone, text, and email to scheduled or impromptu weekly or daily meetings. Nevertheless, participants viewed consistent parent-teacher meetings as an important factor in promoting addressing academic learning. Strengthened partnerships and an improved understanding of the individual needs of a student with autism can be more easily obtained through regular, planned parent-teacher meetings.

Findings indicated that collaboration is necessary for positive-parent teacher relationships to support children with autism. According to Bashir et al. (2023), when goals and expectations

were discussed by parents and teachers stronger connections were built and learning was enhanced. Paseka and Schwab (2020) characterized that open and responsive communication from both parents and teachers was required for a positive, inclusive classroom. Participants further revealed that effective communication included meaningful two-way communication which was characterized by openness and a shared commitment to supporting students' academic progress. Parents and teachers believe that sharing opinions and ideas with the opportunity for a response becomes a two-way response and a collaborative experience. Levinson et al. (2020) revealed that although parents and teachers wanted what was best for a child with autism, their learning approaches may differ. Therefore, parents and teachers need to talk out any differences and decide together what may work for the child.

Findings indicated that parents of teachers view selves as advocates for the students with autism. Participants expressed how parents and teachers shared ideas and strategies to facilitate the education of children with autism. Both parents and teachers advocated for the child's individual needs. According to Attard and Booth (2023) contended the parent-teacher relationship were invaluable for a child with autism. Parents and teachers viewed advocacy as essential for promoting consistency between home and school environments and for strengthening communication between parents and teachers. Ovati et al. (2024) concurred, noting that teachers who had strong collaboration with parents as a mechanism of positive reinforcement for children with disabilities. Therefore, advocacy plays a significant role in supporting children's academic progress and social development.

RQ 2. *How do parents and teachers describe family school engagement as an influence on the academic achievement of students with autism in grades kindergarten through 5?*

Findings indicated that the extended family engagement contributes to the learning support for

children with autism. Lehl et al. (2020) acknowledged that all family members found in home environment were predictors of a child's educational and social development. Participants describe the role of the extended family as important role in the academic development of children with autism. Ibrahim (2020) asserted that school-age children with autism require specific approaches from family and teachers to enhance academic performance. Participants considered family participation included everything from homework assistance, support in learning academic routine to financial assistance. Walker et al. (2019) also found that family and the activities in the home impacted the overall development of a child with disabilities. Goodall and Montgomery (2023) further emphasized the importance of extended family involvement in supporting children's learning, noting that participation from relatives both at home and within the school environment can strengthen educational outcomes. Participants indicated that when families contributed in these ways, not only was practical support provided, but a child's motivation and confidence were also enhanced. In contrast, participants also described relatives as overbearing and unreliable, which created additional stress for parents and, at times, disrupted educational support. Family involvement in the education of children with autism can make a difference in the learning process of a child as academic performance and overall well-being may be enhanced.

Summary

The problem addressed by this study was that children with autism experienced lower achievement due to poor parent-teacher relationships. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada. Data were triangulated using questionnaires and semi-structured interviews

involving 32 participants, comprising of 25 parents and 7 teachers, as well as a field test, comprising of 2 participants. Trustworthiness was established by the acknowledgement of credibility, transferability, dependability, and confirmability. Data were analyzed using Braun and Clarke's (2006) six-step thematic analysis. The findings indicated that academic success was impacted by several variables, which were developed into themes. Four themes emerged from the data analysis, three themes from research question 1, and one theme from research question 2. The parent-teacher relationship was analyzed with the aid of the first research question. The three themes that emerged were *Consistent Parent-Teacher Communication Support Academic Learning*, *Open Collaboration is Essential for a Positive Parent-Teacher Relationship*, and *Parental and Teacher Advocacy Support Academic Learning*. A strong educational foundation for children with autism was linked to mutual trust and effective interactions between parents, teachers, and extended family. For RQ2, extended family and school engagement were explored. The data revealed one additional theme: *Extended Family Support Fosters Academic Learning*. Challenges such as unilateral communications and overbearing family involvement were also noted to impact the learning performance of children with autism. Ultimately, through continuous data analysis, the findings suggested that parental involvement in the academic development of children with autism was a complex and multifaceted process influenced by various personal, familial, and systemic factors.

Chapter 5 include a discussion of the implications of the study relative to the theoretical framework that undergirded the research. The chapter also includes descriptions of the recommendations for practice. In addition, the chapter includes recommendations for future research. Finally, the chapter concludes with a summary of key findings.

Chapter 5: Implications, Recommendations, and Conclusions

The problem addressed in this study was that children with autism experienced lower achievement due to poor parent-teacher relationships. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada. Data were collected and triangulated using questionnaires and semi-structured interviews with 32 participants and a field test with 2 participants. The data were analyzed using Braun and Clark's (2006) six-step thematic analysis. The following research questions were addressed by this study:

RQ1: How do parents and teachers describe the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5?

RQ2: How do parents and teachers describe family school engagement as an influence on the academic achievement of students with autism in grades kindergarten through 5?

Four themes emerged from the data relative to each of the research questions. Theme 1: *Consistent Parent-Teacher Communication Support Academic Learning* (RQ1), Theme 2: *Open Collaboration is Essential for a Positive Parent-Teacher Relationship* (RQ1), Theme 3: *Parental and Teacher Advocacy Support Academic Learning* (RQ 2), and Theme 4: *Extended Family Support Fosters Academic Learning* (RQ 2). The findings of this research suggested that the learning performance of children with autism can be improved when parents and teachers communicate and collaborate effectively, without interference from overly opinionated family members. Limitations for this study included the teacher sample size and the exclusive use of qualitative research methods.

Chapter 5 includes a discussion of the theoretical implications. The chapter includes three recommendations for practitioners and three recommendations for future research. The chapter concludes with a summary of the study, the problem addressed, and the importance of the study.

Implications

Bronfenbrenner's ecological systems theory (1994) was the conceptual framework that undergirded this study. Bronfenbrenner (1994) postulated that a child's environment had the ability to influence a child's emotional, physical, and psychological development. The ecological systems theory focused on various interconnected and interactive environmental systems: the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. El Zaatari and Maalouf (2022) concurred, stating that a child's learning and sense of belonging at school was enhanced by the interactions between students and the school's environment over time. Rosa and Tudge (2013) further aligned the ecological systems theory as a representation of a child's growth in relation to the complexity of the real-world and various influences within the child's environment. Bandura (1977) suggested social learning was a complex process that went beyond the learner's environment and utilized various forms of interaction. Ertmer and Newby (2013) postulated that every learner constructed knowledge through new meanings and ideas based on experiences. Mukhalalati et al. (2022) further argued that social learning theory emphasized social influences and environments as reasons for learning and learning reinforcement. The ecological systems theory and social learning theory postulate that learning and the growth that occurred as a child interacts with the environment.

RQ1

Study results relative to RQ1, *How do parents and teachers describe the parent-teacher relationship as an influence on the academic achievement of students with autism in grades*

kindergarten through 5?, were consistent with the conceptual framework that emphasized the importance of relationships and interactions between parents and teachers in shaping in students with autism learning development. According to Bronfenbrenner (1994), the connection between home and school plays a powerful role in a child's development. For children with autism, academic learning is shaped and revealed through interactions between parents and teachers. Results from this study revealed that consistent communication between parents and teachers regarding student needs, instructional strategies, and progress demonstrated support and consistency between home and school learning environments. Most parents found that regular interactions were easiest achieved when picking up or dropping off their child at school as this was a daily occurrence and the teacher was always present. Results from this study indicated that the way parents and teachers behave and respond to each other has a direct impact on how a child with autism learns.

Study results relative to RQ1 were consistent with the conceptual framework indicating that parent-teacher collaboration is a necessary element of positive parent-teacher relationship to support students with autism. According to Bronfenbrenner's ecological systems theory (1994), the mesosystem encompasses the interactions and connections between different microsystems, such as the link between home and school . The mesosystem also plays a vital role in children's development by influencing how experiences in one setting affect outcomes in another. Results from this study highlighted the critical role of communication between teachers and parents of children with autism. The findings demonstrated that effective two-way communication positively influenced a child's learning process. Participants noted that open communication helped create a supportive school learning environment by encouraging parents and teachers to listen to one another and collaboratively identify strategies to support the child in different

contexts. As one participant described, “it’s more like a collaborative partnership,” while another participant emphasized the value of mutual understanding, stating it allows “to have both of us [to] understand each other’s opinion.” Several participants highlighted the personal and relational aspects of parent-teacher communication, noting, “We talk a lot. He’s like a friend to me.” A back-and-forth exchange of information between parents and teachers can build trust and learning partnerships that benefit student success. Results from the study indicated that when teachers shared academic goals and expectations, parents more often provided insight into their child’s strengths and challenges, and a collaborative interaction was formed.

Study results relative to RQ1 were also consistent with the conceptual framework indicating that parental and teacher advocacy support students with autism’s academic learning. Bronfenbrenner (1978) argued that a child is at the center of the child’s environment and that environment then expands past the immediate surroundings. Results indicated that parents and teachers were fierce advocates for the child with autism, putting the needs of the child with autism regardless of how others (the teacher or parent) may feel. According to Goldman and Mello (2025), advocacy is a specific type of parent-teacher involvement that influences a child with autism’s learning outcomes. Results indicated that parents advocated for what parents believed was in the best interest of the child. Parents believed advocacy was a natural part or responsibility of the role of parents.

RQ2

Study results relative to RQ2 were consistent with the conceptual framework that suggests extended family support fosters academic learning in students with autism. According to Bronfenbrenner (1994), extended family members are included in the child’s microsystem and contribute to development through meaningful interactions that support learning. For these

contributions to be effective, family members need to be actively engaged and viewed as an integral member of the family unit. Results from the study indicated that supportive family members helped students develop learning skills that shape the students' academic success and overall educational experience. When relatives were involved in the learning and support for the child, additional layers of support were added. The extended family often "helps with school assignments and projects" and "picks my child up from school." One participant shared that relatives have even "helped pay for my child's schooling as it is a specialized school and costs a lot of money." Involvement from extended relatives can reduce the burden and stress often experienced by primary caregivers, thus creating a more supportive environment for the child's academic and developmental growth. In contrast, participants also noted that families could be "less understanding" and "add pressure or stress to the child." Results indicated that these family dynamics could exacerbate existing challenges by creating increased expectations or minimizing the child's difficulties. As a result, the home environment, rather than being a source of reassurance, could become an additional source of stress that could impede the learning of the child.

These layers of support have the capacity to expand the child's microsystem through consistent, direct interactions with the child across settings, including home and school, while also strengthening the mesosystem by enhancing the quality and frequency of connections between these environments. Consistent with Bronfenbrenner's ecological systems theory (1994), development is not shaped by only the child's immediate environments but also by the dynamic relationships connected by these environments. By fostering communication, collaboration, and shared understanding between parents, family, and teachers, these mesosystem connections work together to create a more cohesive and supportive network around the child.

Results revealed that when supports are aligned across environments, children with autism are more likely to experience continuity in learning expectations, strategies, and outcomes. Together, these aligned systems create a more coherent learning context which encourages school success for a child with autism.

Recommendations for Practice

Structured communication opportunities between parents and teachers should be established. While parent-teacher exchanges were often identified as informal, regular, scheduled meetings would ensure consistent sharing of information and timely support for the child's learning and development. Results indicated that weekly in-person meetings between parents and teachers created a foundation of open and positive communication. Slay et al. (2025) concurred with the findings that open communication and connectedness play an important role in positive parent-teacher relationships. Ibrahim (2020) noted that school-age children with autism require specific support from family and teachers to promote stronger academic achievement. The support includes responsive communication between parents and teachers to enhance a more effective learning environment. According to Paccaud et al. (2021), communication breakdowns often occur as soon as a child enters the classroom, largely because the responsibility for family-school collaboration was placed mostly on teachers. Consistent contact and meetings would help build a foundation of clear and productive communication between parents and teachers. Stanley and Kuo (2022) proposed that establishing a cooperative partnership between families and educators leads to better support for a child's needs and enhances the learning experience. Structured parent-teacher meetings or updates would create a consistent and engaged dialogue. These practices would allow both parents and teachers to share observations, coordinate learning strategies, and respond promptly to the child's needs.

Educating extended family members about autism would offer increased understanding, patience, and appropriate interactions, providing tailored support for the child's learning. Sim et al. (2021) also supported family engagement in education and same family involvement as a contributing factor in the enhancement of learning outcomes. Wondim et al. (2021), however, found that school involvement was often minimal with children with disabilities compared to children without disabilities. This family involvement discrepancy included decision-making and volunteering in schools. Garcia-Melgar et al. (2022) strongly supported family involvement and indicated parental involvement had a direct correlation with student academic performance for students with disabilities. Extending education to families about disabilities and related supports will empower family members to become even more active and thus enhance the learning outcomes of students with autism.

Recommendations for Future Research

Future research should continue to explore parents' and teachers' perceptions of home-school collaboration and pedagogical approaches for students with autism through the use of a mixed-methods research design. According to Dawadi et al. (2021), mixed methods research combines the strengths of both qualitative and quantitative research by obtaining multiple perspectives to expand research evidence. Sarawati and Devi (2023) asserted that a mixed methods methodology offers a holistic approach by integrating the richness of qualitative data with the precision of quantitative data, thus giving a more comprehensive analysis. Incorporating quantitative research methods along with qualitative data would allow for greater generalizability and identification of patterns and relationships across larger and more diverse participant samples. Mohajan (2020) supported that quantitative research focuses on statistical data to derive conclusions that can be extrapolated to the broader population. Throughout the course of this

study, important information emerged regarding the challenges, strengths, and opportunities with these collaborative relationships; however, increasing the use of mixed-methods research design would further strengthen the validity and transferability of the findings.

A limitation is that the study only included seven teachers. Additional qualitative research is needed to capture the voices of teachers relative to the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through five. Numisi et al. (2020) revealed that teachers increasingly perceived a lack of respect from parents of children with autism. Additionally, Paccaud et al. (2021) noted that parental involvement can sometimes lead to teacher frustration when expectations or demands are unclear. While parental perceptions were explored in depth in this present study, incorporating additional teacher perspectives would provide a more balanced and comprehensive understanding of the factors that influence academic learning and learning engagement for children with autism.

Quantitative research should be conducted on this topic. Valid and reliable instruments could be used to measure such variables as teacher and parental self-efficacy, training, preparedness, etc. influence home-school collaboration and ultimately affect the academic outcomes of students with autism. Similarly, Blackwell (2023) highlighted that children with autism frequently encountered learning barriers resulted from conflicting viewpoints between parents and teachers. By examining both of these perspectives fully, future research can generate evidence-based recommendations that not only strengthen the home-school partnerships but also contribute to the development of effective instructional practices and improved educational outcomes for children with autism.

Conclusions

The problem addressed in this study was that children with autism experienced lower achievement due to poor parent-teacher relationships. The purpose of this qualitative descriptive case study was to explore how parents and teachers described the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5 in Canada. Wahyuni and Mangunsong (2022) suggested conducting research to explore the role of parent involvement in the education of children with special needs. Mann and Gilmore (2021)'s research on the influence of parent-teacher partnerships on positive student academic outcomes was limited to Australian schools, thus results were not transferable to other geographic locations. McIntyre et al. (2023)'s research was on parent-teacher relationship quality and family school engagement was limited to only one region of the United States. Four major themes emerged from this study: Theme 1 was *Consistent Parent-Teacher Communication Supports Academic Learning*. Theme 2 was *Collaboration is Essential for a Positive Parent-Teacher Relationship*. Theme 3 was *Parental and Teacher Advocacy Support Academic Learning*. Theme 4 was *Extended Family Support Fosters Academic Learning*.

Results from this study aligned with existing literature and Bronfenbrenner's ecological systems theory. Bronfenbrenner (1994) posited that an individual's learning depends on the individual's immediate environment and the direct relationships within, such as parents and teachers. Findings from this study confirmed that collaboration between home and school shapes the child's development and learning outcomes. According to Tabassum et al. (2022), effective student learning can only be achieved through consistent and open parent-teacher communication; with only trust and honesty can the specific needs of a child be met. Structured communication between parents and teachers could help build strong relationships, facilitate the

sharing of student progress, and promote student success through ongoing dialogue and constructive feedback. Also, educating family members about autism could foster increased understanding and patience, thus enabling family members to provide specific support that meets the unique learning needs of the child. Open, transparent parent-teacher communication is important in the academic learning of children with autism. Future research should continue to explore parents' and teachers' perceptions of home-school collaboration and pedagogical approaches for students with autism through the use of a mixed-methods research design. Due to the limited teacher participation, additional qualitative research is needed to better capture the voices of teachers relative to the parent-teacher relationship as an influence on the academic achievement of students with autism. Quantitative research should also be conducted using instruments to measure the relationship between variables as teacher and parental self-efficacy, training, preparedness, etc., home-school collaboration, and academic learning of students with autism.

Children with autism commonly have struggles with traditional learning environments, and school staff primarily focus on these difficulties. However, educational experiences should instead be built around the unique strengths, interests, and ways of learning. Parents have deep insight into these individual qualities; therefore, parents' voices should be heard and valued. Parents should be active partners with teachers in the child's educational journey. By using collaborative input to highlight abilities and not disabilities, a foundation built on academic success and not failure should be created and followed.

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Appendix A

IRB Approval

Date: 11-16-2025

IRB #: IRB-FY24-25-1071

Title: Descriptions of Parent-Teacher Relationships as an Influence of Academic Achievement for Students with Autism

Creation Date: 6-18-2025

End Date:

Status: Approved

Principal Investigator: Gaylyne Archibald

Review Board: NU IRB

Sponsor:

Study History

Submission Type	Initial	Review Type	Exempt	Decision	Exempt
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Key Study Contacts

Member Derrick Tennial	Role Co-Principal Investigator	Contact dtennial@ncu.edu
Member Gaylyne Archibald	Role Principal Investigator	Contact g.archibald9923@o365.ncu.edu
Member Gaylyne Archibald	Role Primary Contact	Contact g.archibald9923@o365.ncu.edu

Appendix B

Informed Consent Form

My name is Gaylyne Archibald, and I am a doctoral student at National University (NU).

I am asking you to take part in a research study about the impact a parent-teacher relationship can have on a child with autism's academic achievements. The name of this research is "Descriptions of Parent-Teacher Relationships as an Influence for Students with Autism."

You may participate in this research if you meet all of the following criteria:

1. You are age 18 or older.
2. You identify as a teacher or a parent of a child with autism in grades K-5.
3. You live in Canada.

I hope to include 25-30 people in this research.

Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

What you will be asked to do: If you decide to participate in this study, you will be asked to do the following activities:

1. Participate in an online interview via Zoom for approximately 60 minutes
2. Review the interview summary via email for 10-15 minutes

During these activities, you will be asked questions about:

- Your relationship with the parent/teacher of children with autism
- How you advocate for a child with autism
- Family involvement in the learning of a child with autism

Risks: There are no foreseeable risks or discomforts associated with this study. You can skip any question you do not wish to answer, skip any activity, or stop participation at any time.

Benefits: If you participate, there are no direct benefits to you. This research may increase the body of knowledge in the subject area of this study.

Recording: I would like to audio/video record your responses with Zoom during the interview. You can disable the video function of the online meeting platform at any time.

Compensation: After you complete the interview, you will be entered into a draw for a \$25 gift card. The draw will be held within 7 days after completion of the final interview. The researcher will contact the winner. If the winner has not responded within 3 days, the winner will forfeit the prize and another draw will be held to determine a winner.

Confidentiality: I will keep the records of this study private and take reasonable measures to protect the security of all your personal information. In any report I make public, I will not include any information that will make it possible to identify you. I will securely store your data for 3 years. Then, I will delete electronic data and destroy paper data.

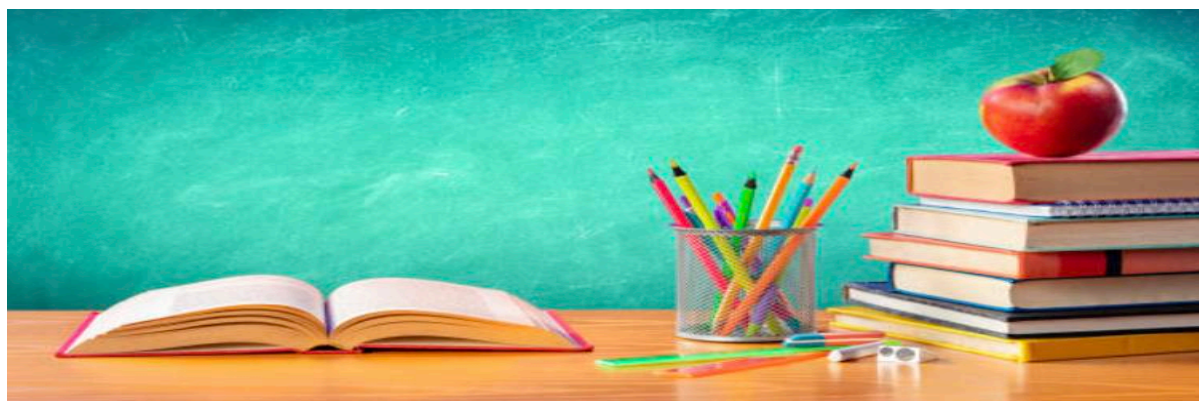
Taking part is voluntary: Participation in this study is completely voluntary. You may quit at any time.

If you have questions: Please ask any questions you have now. If you have questions later, you may contact me g.archibald9923@o365.ncu.edu or at (604) 556-1708.

If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) via email at irb@nu.edu

Appendix C

Recruitment Poster



Study Purpose: Parent-teacher relationships as an influence on a child with autism's academic achievements

You are eligible for this study if you meet all of the following criteria:

1. You are age 18 or older
2. You identify as a teacher or a parent of a child with autism in grades K-5
3. You live in Canada

In this study, participants will:

1. Complete a short questionnaire and/or
2. Participate in an online interview via Zoom for approximately 60 minutes
3. Review the interview summary via email for 10-15 minutes

Participants will be asked questions about:

1. Your relationship with the parent/teacher of children with autism
2. How you advocate for a child with autism
3. Family involvement in the learning of a child with autism

Research Volunteers Needed



Scan Me

To participate in this study, please contact:
Gaylyne Archibald, Doctoral Student at National University

g.archibald9923@o365.ncu.edu

Thank you for considering participating in this voluntary research!

Appendix D

Questionnaire

<p>Questionnaire Research Question 1: How do parents and teachers each describe how the parent-teacher relationship influences the academic achievement of students with autism in grades kindergarten to grade 5?</p> <p>Research Question 2: How do parents and teachers describe family involvement as an influence on the academic achievement of students with autism in grades kindergarten through 5?</p>	
DEMOGRAPHIC QUESTIONS	
Parents	Teachers
1. What is the current grade of your child?	1. What grade do you teach?
2. What is your gender?	2. What is your gender?
3. What type of household do you have? a. Single parent household b. Two parent household c. Blended family	3. How many years have you been teaching?
4. How many siblings are in the household? a. 0 b. 1-2 c. 3+	4. How many years have you been teaching students with ASD?
5. Describe your role in the education of your child.	5. What specific certifications do you have for working with students with special needs?
6. How often do you contact your child's teacher? a. Daily b. Weekly c. Monthly	6. How often do you contact your student's parent? a. Daily b. Weekly c. Monthly
QUESTIONNAIRE	
7. In a few words, describe the overall importance of the parent-teacher relationship when supporting a student with autism?	
8. Describe the main factor in the school environment that you have witnessed hinders family involvement in the learning of a child with ASD.	
9. Describe the primary factor in the home environment that hinders family involvement in the learning of a child with ASD.	

Appendix E

Interview Protocol

I. Participant Invitation Process: Participants will be invited to participate in the initial portion of the study via an email communication sent by the researcher. They will be provided with a brief explanation of the study topic, purpose of the study, importance of the study, and how the study may benefit the participants. The initial portion of the study will involve a brief online questionnaire. Participants will be given the opportunity to provide their contact information if they agree to participate in an interview via telephone or teleconference.

II. Interview Setup and Location:

Interview Location	Via Zoom teleconference with video. The Zoom interview will be recorded.
Materials:	Hard copy of interview questions for researcher, notebook for field notes to be taken by researcher during interview.
Interviewer:	

III. Interview Overview:

Study purpose:	Via Zoom teleconference with video. The Zoom interview will be recorded.
Value of the participant's information:	Participant information is valuable to this study as it will help share the described mentoring relationships and how attachment factors can contribute to successful relationship outcomes.
How you will share study results with participants:	Each participant will be provided a descriptive study summary.
Length of interview:	Approximately 45-60 minutes
Process for the interview:	The researcher will ask each question and provide the participant with the opportunity to answer in full and will ask follow-up questions. The interview will be digitally recorded. The researcher may also provide the participants a written list of the questions (in case of hearing impairment or other potential limitations).
End this section with the question:	Do you have any questions before we begin the interview?

IV. Consent Form/Ethical Considerations:

Cover the conditions in the Consent Form, whether they have previously signed it or not especially points such as the following.

How/if confidentiality will be maintained:	Your confidentiality will be maintained if/when any information from the interview is published in the final study. If you are quoted, an alias name will be assigned for anonymity. All transcripts and recording of the interview will be housed on private, password-protected computer, accessible only to the researcher.
Their ability to stop at any time without any consequences:	You may end the interview at any time without any consequences.

V. Interview Questions:

INTERVIEW PROTOCOL

TOPIC			
How parents and teachers each describe how the parent-teacher relationship influences the academic achievement of students with autism in grades kindergarten to grade 5.			
THEORETICAL FOUNDATION			
The theoretical foundation for this study is Bronfenbrenner 's (1979) ecological systems theory. The ecological systems theory includes five interconnected and interactive environmental systems which include the microsystem, mesosystem, exosystem, macrosystem, and chronosystem.			
RQ1			
How do parents and teachers describe the parent-teacher relationships as an influence on the academic achievement of students with autism in grades kindergarten through 5?			
Interview Question		Probing Question or Follow-up Question	
1.	Describe the relationship you have with the teacher/parents of children with ASD currently in your class.	1.	
2.	Describe how you communicate with parents/teacher to address academic needs.	2.	
3.	Describe how you collaborate with parent/teacher to address academic needs.	3.	
4.	Describe a time when you disagreed about the student's academic needs.	4.	How did you work through that disagreement? Provide another example.

			How did you work through that disagreement?
5.	Describe a time when you disagreed about the student's academic plan.	5.	How did you work through that disagreement? Provide another example. How did you work through that disagreement?
6.	How do you advocate for the child with parent/teacher to make sure the needs of the child are met?	6.	
7.	How would you describe the support you receive from the parent/teacher affects the student's learning?	7.	
8.	How do you describe the overall parent-teacher relationship when supporting a student with autism?	8.	

RQ2

How do parents and teachers describe family involvement as an influence on the academic achievement of students with autism in grades kindergarten through 5?

Interview Question		Probing Question	
9.	Describe the importance of family involvement in academic learning for a student with ASD.	9.	
10.	Describe how you and your family are involved in the child's academic learning? Teacher: Provide examples of how parents and family members are involved in academic learning of children with ASD in your class.	10.	That's interesting. Provide an example. That's interesting. Provide an example.
11.	Describe an advantage of family involvement in the academic learning for a student with ASD?	11.	That's interesting. Provide another example of advantage.
12.	Describe a disadvantage of family involvement in the academic learning for a student with ASD?	12.	That's interesting. Provide another example of advantage.
13.	What factors hinder family involvement in the learning of a child with ASD?	13.	

14.	Describe a factor in the school environment that you have witnessed hinders family involvement in the learning of a child with ASD .	14.	
15.	Describe a factor in the home environment that you know of hinders family involvement in the learning of a child with ASD.	15.	

CLOSING QUESTIONS	
1.	Are there any other comments you would like to make?
2.	Is there anything you would like to clarify?
3.	Do you have any questions for me?

VI. Summary/Closing: Close the interview ensuring you cover the following points:

1. Let them know how and when you will share the information from the study (e.g., provide them an overview, how they can get a copy of the final study/dissertation, etc)
2. Thank them for their time and valuable input.

VII. Reviewing Interview Guide/Questions with Experts: It is important to get feedback on your interview guide before using it for research. Identify 2-4 people to review it. This can include: Your content expert, faculty who are experts in the area, authors of articles on this topic, professionals, or people in the field you are studying, etc. Send the complete guide to them so they can see that the Interview Questions are to come out of the Theoretical Foundation and Research Question.

Who: Identify who you will ask to review and their expertise and role

Individual to Do the Review of this Interview Protocol	Individual's Role (faculty, author in this area, professional in this area, etc)	Identify the reason you selected them	Revisions they suggested making based on their review.

VIII. Piloting the Interview: It is important to pilot the interview with at least 1-2 individuals who are representative of your participants and are not members of the target population for the study. The purpose is to test that this process works as well as that they understand and can answer questions on the interview. For this piloting process first use the guide to conduct the interview. Ask them to identify anything they do not understand as you go through it. In addition, at the end ask them to identify things should be removed or changed or added.

Field Test Volunteer	How are they representative of your final participants? (e.g., I will be interviewing school principals. They are currently a principal in [LOCATION])	Test Setting	Test Duration [00:00:00]	Transcribed Pages (should be 45-60 minutes; no less than 8-10 pages of participant responses/speech in the transcribed data per interview without interview questions, single spaced, 12 pt. Times New Roman)	Codes Produced
FTV 1					
FTV 2					

Appendix F

Code Book (Parents)

Code	Description	Examples from Transcripts
ES	Emotional Support: Emotional support influencing learning	<ul style="list-style-type: none"> • Understanding and listening to each other • She understands. She listens. (P1) • Teacher has been helpful and understanding (P3) • Respectful and collaborative relationship (P5) • I listen. I want my child to learn better (P7) • They have become friends (P8) • She is always calm and respectful (P9) • The teacher has been supportive. (P12) • The teachers are always supportive, very supportive. (P13) • The support from the teachers is excellent. (P19) • We relate a lot (P22)
LD	Leadership: Leadership behaviors and their influence on student learning	<ul style="list-style-type: none"> • Family or parent is primary source of education. • My own role at home. Homework. Reading (P2) • My child is my child (P3) • He is always there to support my child's learning and makes it easier for him (P7) • It's all about my kid (P8) • We are his parents and it is our job. (P8) • My wife and I are active in my kid's learning (P9) • Teacher is responsible for him when he is there (school) (P10) • I love my son and will do whatever I can to help him grow and learn easier (P10) • He's the one teaching my child. He always helps and confirms that my child is doing very, very good at school (P12) • My wife and I have played a very good role in my child's education. (P13)

		<ul style="list-style-type: none"> • My child learns from him (teacher) so that is what matters (P16) • We assist my child with the homework, ask questions, then we interact, and about studies. (We do everything we can. P16) • I trust him (teacher) (P18) • He (teacher) is really spot on-100%. (P19)
MOT	Motivation: Factors that motivate parents and teachers.	<ul style="list-style-type: none"> • It's essential for consistency and the optimizing the autistic student's growth and success • Childcare is. Very important Mothers love their child no matter what. (P1) • I always make sure I get feedback. It is important to me. Whenever my kid has an issue. (P7) • It's all about our kid (P8) • Our kid's education is important to us (P8) • It is about doing what is what is best for my child. (P12) • I am the parent, so it is up to me to say something. I have too. (P12) • Education is very, very important so we need to talk about it all the time so my child learns the best he can. (P14) • I do get feedback, good feedback. (P20)
ACK	Acknowledgement: The acknowledgement of parents' and teachers' efforts	<ul style="list-style-type: none"> • Teacher is my partner in my children's learning • It's (parents) natural responsibility (P1) • My child relates with the teacher (P2) • We talk constantly to see how my child is progressing so we could see good progress (P7) • It's about making the right choices (P12) • It's about helping my child learn. (P16) • Always giving me feedback (P18) • Vital partnering is crucial. I would say I am one of the lucky ones. We work hand-in-hand. (P21) • We mothers , we already have that connection to our children. (P22)
COLL	Collaboration: Working together for a common goal	<ul style="list-style-type: none"> • Work together as a team

		<ul style="list-style-type: none"> • Share the same goal in helping my child succeed academically and socially. Problem-solve together. Keep goals aligned. I do work with the teacher. (P2) • Each give advice(P3) • When the teacher suggests strategies for improvement, /I reinforce them at home (P5) • Agreed on a balance between strengthening areas and providing enrichment. Share the same goals (P5) • I bring my opinion and he brings his opinion (P6) • The teacher listens. We listen too. (P8) • We do work together (P9) • We talk (P10) • Unified (P12) • I tell my child’s teacher his behaviour and everything. I want him to tell me what is happening in the classroom too (P13) • I see the teacher as my partner in my child’s learning. You have to do it with unity. Setting goals. (P14) • I create these bonds if we want to collaborate and train the child. (P17) • We talk things out. We listen to each other. It works for both of us. (P17) • We work together to be on the same page. It takes effort. (P20)
ADVO	Advocacy: Action taken on behalf of student	<ul style="list-style-type: none"> • I go in when something is wrong. I speak up. • Child cannot advocate for himself. I keep pushing (P1) • I speak on his behalf (P2) • I do give my opinion. I want what is best for my kid. I go to the school to make things right. (P4) • I do talk to other teachers. Talk to friends, other parents with similar issues (P6) • If we see something we don’t like, we will say something (P8)

		<ul style="list-style-type: none"> • I advocate for my kid by maintaining open communication. When necessary, I go to the school and talk to the teacher directly (P9) • If there is something I don't like, I will say something (P10) • I am the parent, I need to say something when I don't agree with something (P12) • I go in if there is something wrong. I would go right to the teacher and speak up. (P16) • I advocate for my child in a very good way. (P18) • My child does not talk a lot, so I do it for him.
COMM	Communication: Information giving to improve learning	<ul style="list-style-type: none"> • I give examples, describe what is happening • Mainly go to the school – have one on one conversation with the teacher (P1) • Believe in consistency and respect. Regular check-in by email. Regular meetings at school (P2) • Talk very often. Like every week. Have one-on-one conversation. Communication is important. (P3) • I ask questions. Give my opinion on everything (P4) • Weekly scheduled meetings (P4) • I check in regularly, weekly (P5) • Send a lot of emails. Weekly meetings at school. (P6) • We communicate openly (P7) • I prefer to talk when I drop my child off (P7) • Phone calls are the best. We talk often. Like every week. (P9) • Communication is about openness (P10) • I communicate all the time. Not with the school app. (P12) • We talk openly. We talk in-person. Almost every day, every week at the longest. (P13) • I communicate with my child's teacher in respectful ways to address academic needs. We talk all the time. (P14)

		<ul style="list-style-type: none"> • Weekly in-person, but more often on the phone It's about helping my child learn. (P16) • Open communication, more like a collaborative relationship. (P17) • Easier to just have a quick conversation every day when I drop off or come pick him up. (P18) • I do use every opportunity to talk to my kid's teacher. (P19) • We talk a lot of times (P20) • Phone call and physical meet up. I would say daily talking, meeting up weekly (P22) • We just talk. I would talk to her every day if I could. (P25)
EFS	Extended Family Support: Support from family members and its effect on parents and children	<ul style="list-style-type: none"> • My sister helps me, gives emotional support to me and my son • Families are less understanding (P1) • Family plays a big role. • I have a brother. He is always educational, creative. He teaches my child. So supportive. (P3) • Finances make it difficult. Why don't you withdraw him? (P3) • My brother often helps him (P4) • I don't know what I would do without my child's aunts and uncles. (P5) • Grandparents support him. Sometimes add pressures or stress to the child. (P5) • Family is everything – emotional support. Do projects, assignments (P6) • Grandparents are not too involved in my son's learning (P8) • Family involvement, my auntie, has a key advantage – someone is always at home to help with homework, assignments • My sister has been great. She sometimes comes over with dinner and then helps with homework. (P10) • My family is incredible. (P12) • Family is crucial. My parents are very active with our son. (P14)

		<ul style="list-style-type: none"> • They (family) are involved, you know physically, financially, everywhere. (P15). • Helping out. (P16) • The family makes it easier. They help with financial. P18) • Family involvement works, a supportive environment (P19) • Each family is to involved. (P20)
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Code Book (Teachers)

Code	Description	Examples from Transcripts
ES	Emotional Support: Emotional support influencing learning	<ul style="list-style-type: none"> • Try to respectful and nice to the parents • It's a mixed feeling for me (T4) • Understanding and always listening to the teachers (T5) • Mutual understanding (T6)
LD	Leadership: Leadership behaviors and their influence on student learning	<ul style="list-style-type: none"> • At the end of the day growth is what matters.so try to put it aside and focus more on the child. (T2) • The parents are active in my student's schooling. (T4) • You don't want to offend any parents (T6) • Most students come to me for problems and for solutions (T6) • Teaching is like a calling for me. It is my life (T7)
MOT	Motivation: Factors that motivate parents and teachers.	<ul style="list-style-type: none"> • At the end of the day, growth is what matters, so try to put it (advocacy) aside, focus more on the child (T1) • We need an academic plan. We need something to follow, something that we can see progression (T4) • I believe every parent wants what is best for they child (T6)

ACK	Acknowledgement: The acknowledgement of parents' and teachers' efforts	<ul style="list-style-type: none"> • When parents say something or help, kids tend to learn faster (T2) • You know to be a teacher is a lot of work (T6) • I just do my job (T7)
COLL	Collaboration: Working together for a common goal	<ul style="list-style-type: none"> • Collaboration depends on the parents of the child (T1) • I hear what they (parents) want and give my opinion and everything (T2) • Depends on the parents of the child (T3) • Working together, side-by-side (T4) • I want to work with parents. I think this is what is best for my student (T5) • I don't really want to get mix up, myself with the parents. (T7) • I do more of day-to-day conversations (T7)
ADVO	Advocacy: Action taken on behalf of student	<ul style="list-style-type: none"> • For the bad parents, I just braise up, and do my job (T1) • I'm in a position where I have to advocate to the parents and the kids. I do a one-on-one discussion with parents (T2) • I try to say something (T4) • You have to be bold and speak up and know what to say at the right time to the parents. Good teachers have good ethics. (T6)
COMM	Communication: Information giving to improve learning	<ul style="list-style-type: none"> • Communication goes both ways (T1) and (T4) • Give me a call (T1) • I keep things friendly and open with the parents (T2) • That's on the parents; I usually do want they want (T2) • They (parents) can chat with me and hit me up whenever (T4) • I like to communicate with the parent facially, physically. (T6)
EFS	Extended Family Support: Support from family	<ul style="list-style-type: none"> • Family involvement is good if they're impacting the child positively (T1) • Sometimes if a family is too involved it could put pressure on the kids to perform perfectly (T2)

	members and its effect on parents and children	<ul style="list-style-type: none">• Family helps and checks the homework (T3)• Support and help is good, pressure is not (T4)• Family involvement is good, but it can be too much. (T4)• Family is everything. Family involvement is very, very important. (T5)• Teachers are not to get involved in it (T7)
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Appendix G
Code Mapping

Research Questions	RQ1: How do parents and teachers describe the parent-teacher relationship as an influence on the academic achievement of students with autism in grades kindergarten through 5?	RQ2: How do parents and teachers describe family school engagement as an influence on the academic achievement of students with autism in grades kindergarten through 5?
Initial Codes	ES – Emotional Support LD – Leadership MOT – Motivation ACK - Acknowledgement COLL – Collaboration ADVO – Advocacy COMM Communication	EFS – Extended Family Support ES – Emotional Support COLL – Collaboration
Emerging Themes	<ol style="list-style-type: none"> 1. Supportive environment and relationships 2. Leadership impact on student learning 3. Motivational factors driving parents and teachers 4. Working together for a common goal 5. Parental positive impact on shaping child’s future 6. Fostering a partnership to enhance student learning 	<ol style="list-style-type: none"> 1. Working together for a common goal 2. Fostering a partnership to enhance student learning 3. Extended family support
Themes	<p>T1: Consistent Parent-Teacher Communication Support Academic Learning</p> <p>T2: Collaboration is Essential for a Positive Parent-Teacher Relationship</p> <p>T3: Parental and Teacher Advocacy Support Academic Learning</p>	T4: Extended Family Support Fosters Academic Learning