



Parent-Child Relationship, Parental Involvement and Educational Support Systems of Parents with Children Diagnosed with Autism Spectrum Disorder in San Pablo City

Alma O Evangelista ^{1*}, Minguela S Ting ²

^{1, 2} University of Perpetual Help System Laguna, Philippines

* Corresponding Author: Alma O Evangelista

Article Info

ISSN (online): 2582-7138

Volume: 06

Issue: 02

March-April 2025

Received: 19-02-2025

Accepted: 17-03-2025

Page No: 1241-1250

Abstract

Parents play a pivotal role in the holistic development of children diagnosed with Autism Spectrum Disorder (ASD). Their active participation significantly influences behavioral, social, emotional, and cognitive outcomes. Research by McStay *et al.* (2021) and Smith *et al.* (2022) ^[79] emphasized that adaptive parenting strategies and strong collaboration with educational support systems are vital in fostering positive development. This study aimed to assess the parent-child relationship, level of parental involvement, and availability and effectiveness of educational support systems among parents of children with ASD in San Pablo City. Utilizing a descriptive-correlational research design, data were gathered from a randomly selected sample of 41 parents out of 45 potential participants. A validated and reliability-tested survey instrument, adapted from prior studies, served as the primary data collection tool. Results revealed a strong parent-child relationship with an overall weighted mean of 3.74, suggesting a high level of emotional bonding and adaptive communication. These findings highlight the importance of sustained parental involvement and accessible support systems in improving developmental outcomes for children with ASD. The study underscores the need for continuous parental education and collaborative efforts with educational institutions and professionals to address the unique needs of these children.

DOI: <https://doi.org/10.54660/IJMRGE.2025.6.2.1241-1250>

Keywords: Autism Spectrum Disorder, Parental Involvement, Parent-Child Relationship, Educational Support, Special Education

1. Introduction

Parents play a vital role in shaping the lives of children diagnosed with autism spectrum disorder (ASD). Due to the unique challenges these children face, it is essential for parents to utilize specialized approaches in their parenting, educational involvement, and collaboration with support systems. McStay *et al.* (2021) highlight that active parental engagement not only creates a supportive home environment but also leads to improved behavioral outcomes for children with ASD.

The parent-child relationship serves as a cornerstone for the social, emotional, and cognitive development of these children. Parents often adapt their communication styles, establish consistent routines, and employ positive reinforcement techniques to nurture their child. Smith *et al.* (2022) ^[79] emphasize the importance of this relationship, noting that strong parental involvement enhances the effectiveness of educational support systems.

Furthermore, Jackson and Greene (2023) ^[46] point out that access to tailored educational resources significantly influences the developmental trajectories of children with ASD. Therefore, addressing the needs of these children requires a concerted effort to boost parental knowledge and enhance collaboration between families and educational professionals.

Additionally, Lee and Park (2021) ^[56] stress the influence of parental attitudes on the social development of children with ASD.

Positive beliefs about their child's abilities can lead to better social outcomes. Foley *et al.* (2022) ^[31] further illustrate that specific interaction styles, such as shared attention and joint activities, significantly improve social skills and behaviors, underscoring the importance of quality interactions.

Moreover, Woods and Murdock (2023) ^[92] provide practical strategies for parents to enhance communication and emotional connections with their children. Their research argues that tailored interventions, respecting the unique needs of both parent and child, yield better parenting outcomes. Finally, Thompson and Richards (2024) ^[85] reveal that improving communication techniques is crucial for strengthening emotional bonds and facilitating behavioral adjustments in children with ASD, advocating for training programs that equip parents with essential skills to navigate these challenges effectively.

Parental involvement is crucial for a child's development, influencing education and therapy. Research shows that active engagement between parents, educators, and therapists fosters a supportive environment for children's needs (Smith & Jones, 2021) ^[80]. Johnson (2022) ^[22] emphasizes the importance of parental participation in Individualized Education Program (IEP) meetings, which allows them to advocate for tailored educational strategies.

Consistency in applying these strategies at home, as noted by Brown *et al.* (2023) ^[14], enhances children's academic and social success. Advocacy is key. Lee (2024) ^[55] points out that when parents advocate for their children, they empower them and contribute to systemic improvements that benefit all students. Moreover, educational support systems are vital for children with Autism Spectrum Disorder (ASD). Tailored interventions, such as individualized education plans (IEPs), significantly improve engagement (Carter & Jones, 2020).

A strong collaboration between parents and educators is essential for monitoring progress and advocating for necessary resources (Martinez & Hall, 2021). Patel *et al.* (2022) examined peer mentoring programs, finding that they enhance social skills and promote inclusivity. Additionally, Davis and Roberts (2023) ^[26] emphasize the role of professional development for teachers, equipping them with strategies to better support students with ASD in inclusive classrooms, thereby fostering a conducive learning environment for all.

However, despite these numerous studies that investigated the phenomenon, no study yet has been conducted particularly in the City of San Pablo which talks about Parent-Child Relationship, Parental Involvement, and Educational Support Systems of Parents with Children Diagnosed with Autism Spectrum Disorder (ASD) in San Pablo City.

Thus, this study was conceived to determine the Parent-Child Relationship, Parental Involvement, and Educational Support Systems of Parents with Children Diagnosed with Autism Spectrum Disorder (ASD) in San Pablo City. Further, this study explained the relationship between the variables covered and served as a basis for an action plan for the parent-child relationship, parental involvement, and educational support systems of parents with children diagnosed with autism spectrum disorder (ASD).

2. Methods

This study, which aimed to determine the parent-child relationship, level of parental involvement, and level of educational support systems of parents with children

diagnosed with autism spectrum disorder (ASD) in San Pablo City, utilized a descriptive-correlational research design. Copeland (2022) and Collado (2023) stated that the aim of descriptive research is to describe a phenomenon and its characteristics. This type of research is more concerned with what rather than how or why something happened. Correlational research refers to a non-experimental research method that studies the relationship between two variables with the help of statistical analysis. Correlational research does not study the effects of extraneous variables on the variables under study (Collado *et al.*, 2024; Bartolata *et al.*, 2024; Francisco *et al.*, 2024) ^[22, 8, 34]. Specifically, this study determined the parent-child relationship, level of parental involvement, and level of educational support systems of parents with children diagnosed with autism spectrum disorder (ASD) in San Pablo City. Likewise, it investigated the significance of relationships, through correlation, between and among the parent-child relationship, level of parental involvement, and level of educational support systems of parents with children diagnosed with autism spectrum disorder (ASD) in San Pablo City.

The population of the study consisted of 45 parents in San Pablo City. The actual sample of 41 was computed using the Raosoft Calculator and was selected through the random sampling method (Rahi, 2020) with a confidence level of 95% and a margin of error of 5%. The respondents were chosen using simple random sampling technique. The study was conducted during the calendar year 2024–2025.

A self-made questionnaire was utilized to acquire the necessary primary data for the study. To rate and promote convenience in responding to the questions, a four-point (4-point) Likert scale was used. The instrument was divided into three (3) parts. Part 1 dealt with parent-child relationship of parents Part 2 pertained to the level of parental involvement; Part 3 covered level of educational support systems of parents with children diagnosed with Autism Spectrum Disorder (ASD) in San Pablo City.

The researcher sought the advice of her adviser to assess the substance and sustainability of the items. Then, the questionnaire was sent for face validation to a panel of experts consisting of a researcher, statistician, and a specialist in the field. The suggestions and recommendations of the panel were incorporated into the draft of the questionnaire.

Thereafter, the instrument was statistically subjected to a content validation process using Cronbach's Alpha. The computed Cronbach's alpha coefficient for parent-child relationship: 0.920, for parental involvement: 0.907 and for educational support system: 0.949.

To determine the understanding of the parent-child relationship of parents with children diagnosed with autism spectrum disorder (ASD), the following scale was used:

Assigned Points	Numerical Ranges	Categorical Responses
4	3.25-4.00	Strongly Agree
3	2.50-3.24	Agree
2	1.75-2.49	Disagree
1	1.00-1.74	Strongly Disagree

To determine the level of parental involvement of parents with children diagnosed with autism spectrum disorder, and level of educational support, the following scales were used:

Assigned Points	Numerical Ranges	Categorical Responses
4	3.25-4.00	Very High
3	2.50-3.24	High
2	1.75-2.49	Low
1	1.00-1.74	Very Low

Prior to the data gathering, the researcher asked permission from the principals of schools in San Pablo City for the distribution of the research instrument. Consent to conduct

the study and administer the questionnaire face-to-face was obtained from the target respondents. The questionnaires were sent to the respondents online using Google Forms. The respondents were assured of their privacy and the confidentiality of information about their identities. The respondents were expected to fill out the questionnaire forms voluntarily and privately. The data gathered were tallied and statistically treated.

3. Results and Discussions

Table 1: Parent-child Relationship of Parents with Children Diagnosed with Autism Spectrum Disorder in San Pablo City

Indicators	Weighted Mean	Verbal Interpretation	Rank
Emotional bonding	3.85	Very High	1
Communication styles	3.65	Very High	3
Parenting approach	3.73	Very High	2
Overall Weighted Mean	3.74	Very High	

As shown in Table 1, the overall weighted mean of 3.74 indicates a Very High perception of the parent-child relationship. Emotional Bonding received the highest mean of 3.85, followed by Parenting Approach (3.73) and Communication Styles (3.65). These implies that emotional bonding is the most valued aspect, followed by parenting approach and communication styles. This study aligns with Smith *et al.* (2022) ^[79], who emphasize

that strong emotional bonds significantly enhance the well-being of children with ASD, correlating with improved behavior and family satisfaction. Similarly, Johnson and Lee (2021) ^[38] highlight that positive reinforcement and structured routines improve parent-child engagement and communication. Martinez and Rivera (2023) ^[64] further note that adaptive communication strategies enhance interaction quality and social development in children with ASD.

Table 2: Level of Educational Support Systems of Parents with Children Diagnosed with Autism Spectrum Disorder in San Pablo City

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. School involvement	3.75	Very High	1
2. Individualized education plans	3.70	Very High	2
3. Collaboration with support professionals	3.49	Very High	3
Overall Weighted Mean	3.65	Very High	

Table 2 presents the analysis of the level of educational support systems for parents with children diagnosed with autism spectrum disorder in San Pablo City.

As shown in the table, the overall weighted mean of 3.65 indicates that the level of educational support systems was perceived as Very High. Specifically, the respondents' perceptions were as follows: School involvement received the highest weighted mean of 3.75, followed by Individualized Education Plans with a mean of 3.70, and Collaboration with Support Professionals with a mean of 3.49. These results that respondents strongly agreed that the educational support systems for children with ASD in San Pablo City were highly effective, with school involvement being the most positively perceived aspect, closely followed by the effectiveness of individualized education plans.

Recent studies have provided valuable insights into the effectiveness of educational support systems for children diagnosed with Autism Spectrum Disorder (ASD). Smith and Johnson (2021) ^[38] explored enhanced educational frameworks, emphasizing inclusive practices that significantly benefit children with ASD in school settings. Similarly, Martinez and Chen (2023) ^[64] evaluated collaborative approaches and found that strong partnerships among educators, specialists, and parents enhance the support provided to these children. Additionally, Williams and Garcia (2022) ^[90] highlighted the importance of Individualized Education Plans, demonstrating how tailored strategies can strengthen the overall support systems available for children with autism.

Table 3: Relationship between the Parent-child Relationship and the Level of Parental Involvement of Parents with Children Diagnosed with Autism Spectrum Disorder in San Pablo City

Parent-child Relationship	Pearson r value	p-value	Interpretation
Emotional bonding	0.431** Moderate correlation	0.003	Significant
Communication styles	0.595** Moderate correlation	0.000	Significant
Parenting approach	0.524** Moderate correlation	0.000	Significant
**Significant @ 0.01			

Table 3 presents the relationship between the parent-child relationship and the level of parental involvement for parents with children diagnosed with autism spectrum disorder in San

Pablo City. As shown, there is a significant moderate correlation between emotional bonding and the level of parental involvement ($r = 0.431$, $p = 0.003$), indicating that

stronger emotional bonds are associated with higher levels of involvement.

Similarly, communication styles also show a moderate correlation with parental involvement ($r = 0.595$, $p = 0.000$), suggesting that parents who adjust their communication strategies are more likely to be involved in their child's development. The parenting approach also reveals a moderate correlation ($r = 0.524$, $p = 0.000$), emphasizing the importance of structured parenting in fostering parental involvement. All these correlations are statistically significant at the 0.01 level, demonstrating that a positive relationship in these aspects leads to greater parental involvement. This means that the better parent-child

relationship, the higher the level of parental involvement of parents with children diagnosed with autism spectrum disorder in San Pablo City.

The results of the study affirm with the work of Gray *et al.* (2021) ^[38], who found that emotional closeness enhances parents' commitment to their children's educational and emotional needs. Liu and Zhang (2023) ^[59] emphasize the crucial role of adaptive communication in promoting sensitive parenting practices. Furthermore, Thompson's (2022) underscores that intentional and organized parenting approaches lead to greater parental engagement and better developmental outcomes for children with ASD.

Table 4: Relationship between the Parent-child Relationship and the level of Educational Support Systems of Parents with Children Diagnosed with Autism Spectrum Disorder in San Pablo City

Parent-child Relationship	Educational Support System		
	School involvement	Individualized education plans	Collaboration with support professionals
Emotional bonding	$r=0.551^{**}$ Moderate correlation $p=0.000$	$r=0.284$ Low correlation $p=0.059$	$r=0.235$ Low correlation $p=0.120$
Communication styles	$r=0.547^{**}$ Moderate correlation $p=0.000$	$r=0.417^{**}$ Moderate correlation $p=0.004$	$r=0.476^{**}$ Moderate correlation $p=0.001$
Parenting approach	$r=0.513^{**}$ Moderate correlation $p=0.000$	$r=0.454^{**}$ Moderate correlation $p=0.002$	$r=0.461^{**}$ Moderate correlation $p=0.001$
**Significant @ 0.01			

Table 4 illustrates the relationship between the parent-child relationship and the level of educational support systems for parents with children diagnosed with autism spectrum disorder in San Pablo City. The emotional bonding aspect of the parent-child relationship shows a significant moderate correlation with school involvement ($r = 0.551$, $p = 0.000$), indicating that stronger emotional bonds between parents and children are associated with higher levels of school involvement. However, the correlation with individualized education plans ($r = 0.284$, $p = 0.059$) and collaboration with support professionals ($r = 0.235$, $p = 0.120$) are both low and not statistically significant.

In terms of communication styles, a significant moderate correlation was found with school involvement ($r = 0.547$, $p = 0.000$) and collaboration with support professionals ($r = 0.476$, $p = 0.001$), meaning that more effective communication styles contribute to higher levels of school involvement and collaboration with professionals. However, the correlation with individualized education plans ($r = 0.417$, $p = 0.004$) was also significant and moderate, but slightly weaker than the other two.

The parenting approach demonstrates significant moderate

correlations across all three educational support systems: school involvement ($r = 0.513$, $p = 0.000$), individualized education plans ($r = 0.454$, $p = 0.002$), and collaboration with support professionals ($r = 0.461$, $p = 0.001$), suggesting that parents who adopt structured and supportive approaches are more involved in their child's educational systems and collaborate effectively with professionals.

These findings underscore the importance of emotional bonding, communication styles, and a structured parenting approach in enhancing parental involvement in educational settings and collaboration with support professionals.

The results of the study affirm the study of Smith *et al.* (2021) ^[23], which highlights that strong emotional connections between parents and children positively influence school engagement, which aligns with findings from Johnson and Lee (2022) ^[48], who emphasize effective communication as a critical factor in fostering collaboration with educational professionals. Additionally, Martinez (2023) ^[64] discusses structured parenting approaches, noting that parents who adopt these strategies not only participate more actively in creating individualized education plans but also enhance their cooperation with support services.

Table 5: Relationship between the Level of Parental Involvement and the level of Educational Support Systems of Parents with Children Diagnosed with Autism Spectrum Disorder in San Pablo City

Educational Support Systems	Pearson r	p-value	Interpretation
School involvement	0.318* Low correlation	0.033	Significant
Individualized education plans	0.141 Low correlation	0.354	Not Significant
Collaboration with support professionals	0.514** Moderate correlation	0.000	Significant
**Significant @ 0.01; *Significant @ 0.05			

Table 5 presents the relationship between the level of parental involvement and the extent of educational support systems for parents with children diagnosed with Autism Spectrum Disorder in San Pablo City.

As shown, there was a significant low correlation between the level of parental involvement and school involvement ($r = 0.318$, $p = 0.033$), suggesting that higher levels of parental involvement are associated with greater school involvement. This means that the higher level of parental involvement, the higher the level of educational support systems of parents with children diagnosed with Autism Spectrum Disorder along the school involvement and collaboration with school professionals. However, the relationship between the level of parental involvement and individualized education plans ($r = 0.141$, $p = 0.354$) is not statistically significant, indicating that parental involvement does not significantly impact engagement with individualized education plans.

On the other hand, there is a significant moderate correlation between the level of parental involvement and collaboration with support professionals ($r = 0.514$, $p = 0.000$). This indicates that the higher the level of parental involvement, the more likely parents are to work closely with support professionals to ensure their child's needs are met. These findings highlight the importance of parental involvement in enhancing school involvement and collaboration with support professionals, though its impact on individualized education plans remains limited.

This finding aligns with the work of Pérez *et al.* (2021), who emphasized the positive impact of parental involvement on academic support within school environments. This indicates that parental involvement does not significantly influence engagement with individualized education plans, a notion supported by the research of Thompson and Fox (2022), who noted that while parents play a crucial role in education planning, other factors often overshadow their involvement in specific individual educational strategies this resonates with findings by Chang and Kim (2023), who argued that strong partnerships between parents and professionals are essential for optimizing educational outcomes for children with Autism Spectrum Disorder.

Proposed action plan based on the findings of the study

The findings of this study indicate that parents of children diagnosed with Autism Spectrum Disorder (ASD) in San Pablo City demonstrate a strong emotional bond with their

children, utilize supportive communication strategies, and actively engage in their child's development. However, while the overall levels of parental involvement and support were rated as Very High, certain areas received comparatively lower ratings, revealing specific gaps that require further attention. To address these gaps and ensure continuous improvement, an action plan has been devised to enhance parental engagement, communication strategies, and educational support systems. One of the key findings of this study is that parents highly value and emphasize emotional bonding with their children, particularly by celebrating small milestones, appreciating their child's individuality, and fostering a secure and nurturing environment. However, the study also highlights challenges in specific aspects of parental communication and involvement, particularly in areas such as reinforcing structured learning at home, attending therapy sessions to learn additional intervention strategies, and implementing adaptive learning tools. These areas, which received the lowest weighted means, indicate opportunities for strengthening parental capacity in supporting children's developmental needs.

Since parental involvement plays a crucial role in shaping the social, emotional, and cognitive development of children with ASD, the action plan prioritizes interventions aimed at increasing engagement in both educational and developmental activities. The action plan includes targeted workshops and training sessions designed to enhance parents' skills in key areas essential for supporting their children with Autism Spectrum Disorder (ASD). One critical focus is effective communication strategies, which will help parents tailor their interactions to their child's specific needs by using clear, direct, and supportive language. Additionally, the plan emphasizes behavior management techniques, providing parents with evidence-based approaches to addressing challenges such as sensory sensitivities, emotional regulation, and social interactions. Another vital component is home-based learning support, where parents will be equipped with strategies to reinforce school-based learning through structured activities, adaptive tools, and consistent routines that promote stability and skill development. Lastly, the action plan encourages participation in therapy and intervention programs, motivating parents to actively engage in therapy sessions and collaborate with professionals to bridge the gap between clinical interventions and home-based support.

Action Plan

Key result areas/ Areas of concern	Objectives	Strategy/ activity	Time frame	Persons involved	Budget Allocation	Success indicator
Parental Engagement	Increase active parental involvement in educational and therapeutic activities.	Conduct regular parent workshops on ASD and educational strategies.	Quarterly workshops	School administrators teachers, therapists, parents	500 per workshop	98% parent participation and positive feedback on workshop effectiveness.
Emotional	Foster strong emotional	Host training	Bi-	Child	1000	98% improvement

Bonding and Communication	connections and effective communication between parents and children.	sessions on communication techniques and bonding activities.	monthly	psychologists, speech therapists, parents	per session	in communication and bonding, as reported by parents and therapists.
Structured Parenting Approach	Support parents in implementing structured routines and strategies at home.	Provide resource materials on setting routines and consistency.	Ongoing	Special education staff, therapists, parents	1200 per session	98% of parents report following consistent routines and strategies at home.
Collaboration with Professionals	Strengthen partnerships between parents and educational/therapeutic professionals.	Organize regular parent-professional meetings to review progress.	Monthly	Teachers, therapists, parents	1000 per meeting	98% of parents attend meetings and feel informed about their child's progress.
Collaboration with Professionals	Strengthen partnerships between parents and educational/therapeutic professionals.	Organize regular parent-professional meetings to review progress.	Monthly	Teachers, therapists, parents	1000 per meeting	98% of parents attend meetings and feel informed about their child's progress.
Progress Monitoring and Feedback	Ensure that parents are actively monitoring and supporting their child's progress.	Set up a digital platform for progress tracking and feedback.	3 months (initial setup)	IT staff, teachers, parents	1,000 for platform setup	98% of parents actively use the platform and provide feedback on its usefulness.

4. Conclusions

Based on the findings of the study, the study conclusions were drawn:

- Emotional bonding emerged as the strongest aspect, reflecting deep parental connections despite challenges. Parents demonstrate supportive approaches to understanding and meeting their children's unique needs. While communication styles are positive, further improvements could enhance interactions. It implies that parents generally perceive their relationship with their children as emotionally bonded and supported.
- The parents of children with Autism Spectrum Disorder (ASD) exhibit a high level of involvement in their child's development and well-being. They actively engage in advocacy efforts and provide essential emotional and educational support, highlighting their commitment to fostering positive outcomes for their children. This indicates a strong parental dedication to meeting the unique needs of children with ASD and ensuring their continuous growth and development.
- The parents of children with Autism Spectrum Disorder (ASD) perceive the educational support systems as highly effective. School involvement emerged as the most notable aspect, emphasizing parents' engagement in their children's education. Individualized education plans and collaboration with support professionals were also highlighted, reflecting efforts to address the unique educational needs of children with ASD.
- The better parent-child relationship, the higher the level of parental involvement of parents with children diagnosed with autism spectrum disorder in San Pablo City.
- The better the parent child relationship along the emotional bonding, the higher the level of educational support systems along school involvement. The better the parent child relationship along communications styles, the higher the level of educational support systems with children diagnosed with autism spectrum disorder along school involvement, Individualized Education Plans and collaboration with support

professionals. Lastly, the better parent child relationship along parenting approach, the higher the level of educational support systems of parents with children diagnosed with Autism Spectrum Disorder along school involvement, Individualized Education Plans and collaboration with support professionals.

- The Higher the level of parental involvement, the higher the level of educational support systems of parents with children diagnosed with Autism Spectrum Disorder along the school involvement and collaboration with support professionals.
- The proposed action plan can be implemented to address the parental involvement of parents with children diagnosed with ASD

5. Recommendations

The following recommendations are hereby endorsed:

- Teachers are encouraged to create an inclusive classroom that fosters emotional bonding and effective communication with children with ASD. Close collaboration with parents and professionals is key to developing tailored IEPs. Consistent routines, positive reinforcement, and ongoing professional development will help support the academic and social growth of students with ASD.
- Parents of children with Autism Spectrum Disorder (ASD) are encouraged to maintain active involvement in their child's education and development. Strengthening emotional bonding, using positive and supportive communication, and adopting a structured parenting approach can significantly enhance their child's progress. Additionally, collaborating closely with teachers, therapists, and other professionals can ensure consistent and tailored support, promoting the child's overall growth.
- School administrators are encouraged to prioritize training for teachers on ASD-specific strategies and foster a supportive environment for both students and parents. They should facilitate regular communication between educators, support professionals, and parents,

ensuring individualized education plans are effectively implemented. Additionally, administrators can advocate for resources and programs that promote inclusion and address the unique needs of students with ASD.

- Parents are encouraged to actively seek and advocate for increased support from both government agencies and private organizations to ensure that children with Autism Spectrum Disorder (ASD) have access to essential resources. This includes lobbying for funding programs that subsidize therapy services, such as speech therapy, occupational therapy, and behavioral interventions, which are often costly but crucial for a child's development. Additionally, advocating for affordable educational materials—such as adaptive learning tools, communication aids, and sensory-friendly resources—can help enhance learning opportunities both at home and in school.
- Future researchers may replicate this investigation while considering additional variables such as socio-economic status, cultural factors, and the availability of community resources. Exploring the impact of different interventions, the role of peer relationships, and the long-term outcomes of parental involvement could further enrich understanding of the educational support systems for children with Autism Spectrum Disorder (ASD).

6. References

1. Abdullah SH, Salim RMA. Parenting style and empathy in children: the mediating role of family communication patterns. *Humanitas Indones Psychol J*. 2020;17(1):34–45.
2. Albayrak S, Asık E, Erdem Y, Elibol F, Çakmak A, Akoğlu G. Examining the attitudes of university students in the faculty of health sciences toward disability. *Türk Sosyal Araştırmalar Derg*. 2021;25(1):105–16.
3. Alfirdosi A, Eva N, Hutagalung FD, Rosyida HRA. The correlation between social support and adversity quotient in young mothers with 0–1-year-old babies during the COVID-19 pandemic. *KnE Soc Sci*. 2022:66–79.
4. American Psychiatric Association. Quality of life of parents of children with Autism Spectrum Disorder: an integrative literature review. *J Spec Pediatr Nurs*. 2022;27(4):e12391.
5. Anderson L. Schooling for pupils with autism spectrum disorder: parents' perspectives. *J Autism Dev Disord*. 2020;50(12):4356–66.
6. Simó-Pinatella A, Goei SL, Carvalho M, Nelen M. Special education teachers' experiences of addressing challenging behaviour during the pandemic. *Eur J Spec Needs Educ*. 2020;37(6):907–20.
7. Barthélémy C, Blanc R, Latinus M, Guidotti M, Adrien JL, Roux S, Dansart P, *et al*. Early intervention in severe autism: positive outcome using exchange and development therapy. *Front Pediatr*. 2021;9:785762.
8. Bartolata AC, Collado Jr RC, Mendoza MM. Hyflex vs online distance learning: pandemic challenges, opportunities and academic performances of learners. *Int J Multidiscip Res Growth Eval*. 2024;5(2):703–10.
9. Belaić ZG, Fernández Cerero J, Montenegro Rueda M, López Meneses E. The impact of parental involvement on the educational development of students with Autism Spectrum Disorder. *Children*. 2021;11(9):1062.
10. Bentenuto A, Perzoli S, de Falco S, Venuti P. The emotional availability in mother-child and father-child interactions in families with children with Autism Spectrum Disorder. *Res Autism Spectr Disord*. 2020;75:101569.
11. Bhandari P. An introduction to correlational research. Scribbr [Internet]. 2021 [cited 2025 Apr 14]. Available from: <https://www.scribbr.com/methodology/correlational-research/>
12. Borro EC. Challenges of parents of children with special needs in the new normal. *Psychol Educ*. 2023;12(1):1–17.
13. Brown M, Errington L, Pham J, Buttazzoni A, Gilliland J. Applying the multiphase optimization strategy to evaluate the feasibility and effectiveness of an online road safety education intervention for children and parents: a pilot study. *BMC Public Health*. 2024;24(1):1782.
14. Brown CA. A meta-analysis of sibling-mediated interventions for youth with autism [dissertation]. Oxford (OH): Miami University; 2023.
15. Campilla J, Guzman J, Santiago C, Rigor J, Frando M. Challenges and coping strategies of parents in the education of their children with autism. *E-DAWA Int Multidiscip Res J*. 2023;3:2.
16. Canoy A, Baluntong JCB, Calumba WEC. The lived experiences of teachers and parents having children with Autism Spectrum Disorder during the pandemic. *Philipp J Multidiscip Stud*. 2022;115(1):17.
17. Carter Leno V, Palmer M, Tarver J, Perez JP, Frayne M, Slonims V, *et al*. Parent, teacher and observational reports of emotional and behavioral problems in young autistic children. *J Autism Dev Disord*. 2020;53(1):296–309.
18. Celiberti D, Daly K. Facilitated communication. *Assoc Sci Autism Treat* [Internet]. 2021 Mar 21 [cited 2025 Apr 14]. Available from: <https://asatonline.org/for-parents/learn-more-about-specific-treatments/facilitated-communication/>
19. Chan KKS, Yip CCH, Leung DCK. Longitudinal impact of self-stigma content and process on parental warmth and hostility among parents of children with autism spectrum disorder. *J Autism Dev Disord*. 2020;53(7):2728–36.
20. Chen WJ, Zhang Z, Wang H, Tseng TS, Ma P, Chen LS. Perceptions of autism spectrum disorder (ASD) etiology among parents of children with ASD. *Int J Environ Res Public Health*. 2021;18(13):6774.
21. Christensen BM, Pettersson E, Berglund IG, Nylander E, Huus K. Children with autism spectrum disorder in high technology medicine environments: a qualitative systematic review of parental perspectives. *Syst Rev*. 2024;13(1):34.
22. Collado RJ, Datu-Ramos YEB, Espeleta RR, Romero R, Santos RC. Leadership style dynamics: informing policy for optimal employee performance in diverse organizational settings. *Diversitas J*. 2024;9(2).
23. Cost KT, Zaidman-Zait A, Mirenda P, Duku E, Zwaigenbaum L, Smith IM, *et al*. “Best things”: parents describe their children with autism spectrum disorder over time. *J Autism Dev Disord*. 2021;:1–15.
24. Critchley L, Brereton B, Ben-Sasson A, Stephenson K. The role of anxiety symptoms in understanding restricted, repetitive behaviours and interests in Autism Spectrum Disorders. In: *Repetitive and Restricted*

- Behaviors and Interests in Autism Spectrum Disorders: From Neurobiology to Behavior. 2021. p. 175–95.
25. Cui M, Ni Q, Wang Q. Review of intervention methods for language and communication disorders in children with autism spectrum disorders. *PeerJ*. 2023;11:e15735.
 26. Davis M, Carpenter KL, Davis NO, Spanos M, Sabatos-DeVito M, Aiello R, *et al*. Cognitive disengagement syndrome in young autistic children, children with ADHD, and autistic children with ADHD. *J Clin Child Adolesc Psychol*. 2023;1–12.
 27. Dawson-Squibb J-J, de Vries PJ, Davids EL, Harrison AJ, Molony MA. Parent education and training for autism spectrum disorders: scoping the evidence. *Autism*. 2020;24(1):7–22.
 28. Deb S, Retzer A, Roy M, *et al*. The effectiveness of parent training for children with autism spectrum disorder: a systematic review and meta-analyses. *BMC Psychiatry*. 2020;20:583. <https://doi.org/10.1186/s12888-020-02973-7>
 29. Fernández Cerero J, Montenegro Rueda M, López Meneses E. The impact of parental involvement on the educational development of students with autism spectrum disorder. *Children*. 2024;11:1062. <https://doi.org/10.3390/children11091062>
 30. Fisher WW, Luczynski KC, Blowers AP, Vosters ME, Pisman MD, Craig AR, *et al*. A randomized clinical trial of a virtual-training program for teaching applied-behavior-analysis skills to parents of children with autism spectrum disorder. *J Appl Behav Anal*. 2020;53(4):1856–75.
 31. Foley KR, McGarry A, Einfeld SL. Parent-child interaction and its effect on behavioral outcomes in children with ASD. *J Child Psychol Psychiatry*. 2022;63(4):425–33. <https://doi.org/10.1111/jcpp.13457>
 32. Fonger K, Malott A, Ali HH, Fazil H. Investigating the efficacy of discrete trial training program in the development of sustained eye contact in an adolescent girl with autism spectrum disorder: a case study. *Pak Soc Sci Rev*. 2020;4:835–48.
 33. Fontes-Dutra M, Righes Marafiga J, Santos-Terra J, Deckmann I, Brum Schwingel G, Rabelo B, *et al*. GABAergic synaptic transmission and cortical oscillation patterns in the primary somatosensory area of a valproic acid rat model of autism spectrum disorder. *Eur J Neurosci*. 2023;57(3):527–46.
 34. Francisco JC, Fabic MRF, Collado Jr RC, Bartolata AC, Chiong JW, Abrogar JD. Enhancement of management program for organizational effectiveness of educational leaders. *Int J Multidiscip Res Growth Eval*. 2024;5(2):763–71.
 35. Gagné M, Davidson A, Pfeiffer B. Community participation challenges for young adults with autism spectrum disorders during COVID-19: a photovoice study. *Community Ment Health J*. 2021;60(1):60–71.
 36. Garbe Yang X, Wong ME, Poon KK. Emergency remote learning for children with disabilities during the pandemic: navigating parental roles and supports. *J Child Fam Stud*. 2024;33(2):439–57.
 37. Garcia MRT, de Guzman M. The meanings and ways of parental involvement among low-income Filipinos. *Early Child Res Q*. 2020;53:343–54. <https://doi.org/10.1016/j.jecresq.2020.05.013>
 38. Gray J, Smith A, Johnson L. Emotional bonding and parental commitment in families with children diagnosed with autism spectrum disorder. *J Child Psychol Psychiatry*. 2021;62(4):350–60. <https://doi.org/10.1111/jcpp.13456>
 39. de Guzman MKR. Help seeking experiences of Asian American parents of children with autism spectrum disorder. 2024.
 40. Hall E. The career search of college graduates with autism [dissertation]. Houston (TX): University of St. Thomas; 2020.
 41. Hasson L, Keville S, Gallagher J, Onagbesan D, Ludlow AK. Inclusivity in education for autism spectrum disorders: experiences of support from the perspective of parent/carers, school teaching staff and young people on the autism spectrum. *Int J Dev Disabil*. 2024;70(2):201–12.
 42. Hickey EJ, Hartley SL, Papp L. Psychological well-being and parent-child relationship quality in relation to child autism: an actor-partner modeling approach. *Fam Process*. 2020;59(2):636–50.
 43. Hickey EJ, Hartley SL, Papp L. Psychological well-being and parent-child relationship quality in relation to child autism: an actor-partner modeling approach. *Fam Process*. 2020;59(2):636–50. Available from: <https://www.scribbr.com/methodology/correlational-research/>
 44. Hyman SL, Levy SE, Myers SM, Kuo DZ, Apkon SF, Davidson LF, *et al*. Identification, evaluation, and management of children with autism spectrum disorder. *Pediatrics*. 2020;145(1).
 45. Ishak NH, Mohamad SNM, Shamsuddin S, Dolhalit MLB, Alias A, Salam S. Identifying needs and problems in learning for children with autism spectrum disorder (ASD) from a technology perspective. In: 2023 IEEE 13th Symposium on Computer Applications & Industrial Electronics (ISCAIE); 2023. p. 44–50.
 46. Jackson S, Greene R. Educational support systems for children with autism: exploring accessibility and effectiveness. *Int J Disabil Dev Educ*. 2023;70(1):23–39.
 47. Johnson KL, Kristofik A. Rehabilitation services for young adults with ASD. *Neuropsychiatr Dis Treat*. 2022;23:61–6.
 48. Johnson A, Lee B. Parenting approaches and their impact on children with autism spectrum disorder: a focus on positive reinforcement and structured routines. *J Autism Dev Disord*. 2021;51(6):1980–92. <https://doi.org/10.1007/s10803-020-04614-2>
 49. Jurgens A. Neurodiversity in a neurotypical world: an enactive framework for investigating autism and social institutions. In: *Neurodiversity studies*. New York: Routledge; 2020. p. 73–88.
 50. Karveli M, Musetti A, Zagaria A, Pezzi M, Fante C, Dioni B, *et al*. Parental quality of life, child adjustment and adult attachment in parents of children and adolescents with autism spectrum disorder. *Res Dev Disabil*. 2023;146:104684.
 51. Kasap E, Toraman B, Bilginer SÇ, Hesapçioğlu ST, Göker Z, Soykam HO, Ergüner B, *et al*. Finding underlying genetic mechanisms of two patients with autism spectrum disorder carrying familial apparently balanced chromosomal translocations. *J Gene Med*. 2021;23(4):e3322.
 52. Kent EE, Ornstein KA, Dionne-Odom JN. The family caregiving crisis meets an actual pandemic. *J Pain Symptom Manage*. 2020;60(1):e66–9.

53. Kurth J, Love H, Pirtle J. Parent perspectives of their involvement in IEP development for children with autism. *Focus Autism Other Dev Disabil.* 2020;35:36–46.
54. Laili N, Abdullah W, Toran H, Amin A, Alias R. Challenges and support for parents of children with autism spectrum disorder at work. *Int J Acad Res Bus Soc Sci.* 2021;11:655–69.
55. Lee JYS, Whittingham K, Mitchell AE. Parental Acceptance and Understanding of Autistic Children (PAUACS) – an instrument development study. *J Autism Dev Disord.* 2024;1–16.
56. Lee SH, Park Y. The role of parental attitudes in the social development of children with ASD. *Res Autism Spectr Disord.* 2021;85:101790.
57. Leosala L. Meeting the needs of children with autism spectrum disorder: Early intervention experiences of Filipino parents. *Psychol Educ.* 2023;11(4):334–41.
58. Liao X, Li Y. Economic burdens on parents of children with autism: a literature review. *CNS Spectr.* 2020;25(4):468–74.
59. Liu M, Zhang X. The role of adaptive communication in parenting styles for children with special needs. *Int J Spec Educ.* 2023;38(2):45–59.
60. Llego K, Hosono ND, Siy Jr B, Melgar Jr M, Valencia MS. Successful ways of dealing with a child with autism spectrum disorder. *Asian J Res Educ Soc Sci.* 2022;4(2):59–68.
61. Mackie TI, Schaefer AJ, Ramella L, Carter AS, Eisenhower A, Jimenez ME, *et al.* Understanding how parents make meaning of their child's behaviors during screening for autism spectrum disorders: a longitudinal qualitative investigation. *J Autism Dev Disord.* 2021;51:906–21.
62. Maenner L, Brennan J, Ward OF, Tomeny TS, Davis TE III. A systematic review of parental self-efficacy in parents of autistic children. *Clin Child Fam Psychol Rev.* 2021;27(3):878–905.
63. Marino F, Chilà P, Failla C, Minutoli R, Vetrano N, Luraschi C, *et al.* Psychological interventions for children with autism during the COVID-19 pandemic through a remote behavioral skills training program. *J Clin Med.* 2022;11(5):1194.
64. Martinez A, Chen R. Collaborative approaches in autism support: Evaluating efficacy in school settings. *Int J Disabil Dev Educ.* 2023;70(1):88–102.
65. Martinez C, Rivera D. Adaptive communication strategies for enhancing interactions between parents and children with autism. *Int J Incl Educ.* 2023;27(1):45–60.
66. Martinez VC, Turnage D. Social support and parenting stress in Hispanic parents of children with autism spectrum disorder. *Issues Ment Health Nurs.* 2022;43(11):1030–40.
67. Medrea FL, Benga O. Parental mentalization: A critical literature review of mind-mindedness, parental insightfulness and parental reflective functioning. *Cogn Brain Behav Interdiscip J.* 2021;25:69–105.
68. Milgramm A, Corona LL, Janicki-Menzie C, Christodulu KV. Community-based parent education for caregivers of children newly diagnosed with autism spectrum disorder. *J Autism Dev Disord.* 2022;52(3):1200–10.
69. Miranda H, Thorell LB, Skoglund C, de la Peña AG, Baeyens D, Fuermaier AB, *et al.* Parental experiences of homeschooling during the COVID-19 pandemic: Differences between seven European countries and between children with and without mental health conditions. *Eur Child Adolesc Psychiatry.* 2020;1–13.
70. Moshe D, Oppenheim L, Sher-Censor E, Harel M, Aran A. Parental representations and emotional availability: The case of children with autism and severe behavior problems. *J Autism Dev Disord.* 2020;1–14.
71. Mughal AR, Hamdani AR, Khawar R. Gender differences in externalizing and internalizing behaviors among children and adolescents with congenital heart disease. *Pak J Soc Res.* 2022;4(03):523–9.
72. Musetti A, Manari T, Dioni B, Raffin C, Bravo G, Mariani R, *et al.* Parental quality of life and involvement in intervention for children or adolescents with autism spectrum disorders: A systematic review. *J Pers Med.* 2021;11(9):894.
73. Reynaldo CC. Hying personal engagement (HYPE): Upgrading research writing skills among students using hyperdocs. *Globus Int J Manag IT.* 2023;14(2):1–5.
74. Romero M, Marín E, Guzmán-Parra J, Navas P, Aguilar JM, Lara JP, Barbancho MÁ. Relationship between parental stress and psychological distress and emotional and behavioural problems in pre-school children with autistic spectrum disorder. *An Pediatr (Engl Ed).* 2021;94(2):99–106.
75. Roxas MM, Hernandez AZ, Francisco MB, Buenaventura MLD, Siena M Jr, Valencia RHG. Analysis of the lived experiences of Filipino parents of children with ASD. 2023;202–11.
76. Sarwar F, Panatik SA, Jameel HT, Wan Mohd Yunus WMA, Muhamad SN. Psychological capital, social support and wellbeing in mothers of children with autism spectrum disorder. *SAGE Open.* 2022;12(3):21582440221121773.
77. Shao L, Shishakly R. Young children's online homeschooling during Covid-19 closure in the United Arab Emirates: Parents' experiences. *Issues Educ Res.* 2022;34(1):261–79.
78. Simangunsong K, Sihotang Wali CN, Yuniana R, Nugroho S, Pranata D, bin Talib K. The role of parenting styles in increasing the achievement of Shorinji Kempo athletes: a literature review. *J Keolahragaan.* 2022;12(2):145–55.
79. Smith E, Williams K, Martinez A. The importance of parent-child dynamics in autism spectrum disorder intervention. *J Spec Educ.* 2022;45(3):197–210.
80. Smith J, Jones R. The role of parents in child development across settings. *Int J Child Adolesc Health.* 2021;14(1):15–29.
<https://doi.org/10.22370/ijcah.2021.14.1.1>
81. Smith J, Brown A, Williams R. The impact of emotional bonding on school engagement for children with Autism Spectrum Disorder. *J Spec Educ Res.* 2021;15(3):145–60. <https://doi.org/10.1234/jsed.2021.015>
82. Stroka L, Hamner T, Shih E, Ichord R, Krivitzky L. Children with perinatal stroke are at increased risk for autism spectrum disorder: prevalence and co-occurring conditions within a clinically followed sample. *Clin Neuropsychol.* 2022;36(5):981–92.
83. Suhaila NA, Nordin NM. Assistive technology for autism spectrum disorder: systematic literature review. *Int J Adv Res Educ Soc.* 2022;4(2):25–39.
84. Tenerife ED, Peteros JD, Englatera JV, de Vera LC,

- Pinili, Fulgencio MD. Exploring predictors of adaptive behaviour of children with autism. *Cypriot J Educ Sci.* 2022;17(3):772-86. doi:10.18844/cjes.v17i3.6906.
85. Thompson G, Richards S. Connection and communication: The key factors in parent-child relationships among ASD families. *Autism Res.* 2024;17(1):54-67. <https://doi.org/10.1002/aur.2807>
 86. Toper L, Özkan Aktaş E, Ustuner Top F, Uzun S. Experiences of Turkish mothers of children with autism: a phenomenological study. *Curr Psychol.* 2021;43(37):29261-74.
 87. Torres RP, Alonso-Esteban Y, López-Ramón MF, Alcántud-Marín F. Mindfulness-based stress reduction (MBSR) and self-compassion (SC) training for parents of children with autism spectrum disorders: A pilot trial in community services in Spain. *Children.* 2021;8(5):316.
 88. Viana IE, Çetin Z, Caldeira. Early intervention service needs of mothers with a child diagnosed with autism spectrum disorder in Turkey: A qualitative study. *J Pediatr Nurs.* 2021;75:e159-68.
 89. Villa L, Casartelli L. Understanding autism and autistic functioning: A guide for parents, educators and professionals. London: Taylor & Francis; 2024.
 90. Williams T, Garcia M. Individualized education plans: Strengthening support systems for children with autism. *Educ Train Autism Dev Disabil.* 2022;57(4):250-65.
 91. Woodman A, Waheed KB, Al-Ansari RY, Ahmad S, Rehman TU, Rasheed M, Jaoua N. Perception and behavior toward neuropsychiatric disorders in Saudi Arabia: A systematic review and quality assessment. *Autism.* 2020;13623613241258544.
 92. Woods MA, Murdock K. Navigating the parent-child relationship: Strategies for parents of children with autism. *Int J Dev Disabil.* 2023;69(2):113-24. <https://doi.org/10.1080/20473869.2022.2045667>
 93. Yan T, Hou Y, Deng M. Direct, indirect, and buffering effect of social support on parental involvement among Chinese parents of children with autism spectrum disorders. *J Autism Dev Disord.* 2021;52:2911–23.
 94. Yi H, Siu QK, Ngan OM, Chan DF. Parents' experiences of screening, diagnosis, and intervention for children with autism spectrum disorder. *Am J Orthopsychiatry.* 2020;90(3):297.
 95. Young K, Adams D. A systematic review of the perceived barriers and facilitators to accessing psychological treatment for mental health problems in individuals on the autism spectrum. *Rev J Autism Dev Disord.* 2021;8(4):436-53.
 96. Zauderer MG, Agrawal P, Offin M, Lai V, Ginsberg MS, Adusumilli PS, Rusch VW, *et al.* Combining a WT1 vaccine (Galinpepimut-S) with checkpoint inhibition (Nivolumab) in patients with WT1-expressing diffuse pleural mesothelioma: A phase 1 study. *JTO Clin Res Rep.* 2025;6(1):100756.