

2021 Gatlinburg Conference Symposium Submission

Symposium Title: Parents and Teachers: Collateral Benefits for Children with ASD

Chair: Lisa A. Ruble ¹

Discussant: Brian Boyd ²

Overview: At the conclusion of early intervention, children with autism spectrum disorder (ASD) transition to school with all of its requisite challenges, such as getting along with peers and teachers. Although about 40% of children with ASD are included in general education classrooms, their teachers may not have received the training to accommodate them and their parents. Parent-teacher communication quality has implications for both coordination of educational goals for school and at home, as well as for the development of optimal student-teacher relationships. Four papers address aspects of parent and teacher interaction that have positive, collateral effects on children. The first paper reports on a parent-to-parent program (Parents Taking Action) to help urban, low income Black parents understand ASD and to better prepare them and their children for school (Dababnah et al.). The second paper involves parents and teachers (K- 5) working more effectively with each other as part of the Partners in School model (Azad et al.). The third paper examines whether parent-teacher relationships have any bearing on student-teacher relationships (Losh et al.). The final paper presents the first phase of the development of an IES-funded intervention to improve student-teaching relationships (Smooth Sailing; Bolourian et al.).

Paper 1 of 4

Paper Title: A Feasibility Study of a Peer-to-Peer Parenting Program for Urban Black Families Raising Children with Autism

Authors: Sarah Dababnah ³, Wendy E. Shaia ³, Irang Kim ³, Sandy Magaña ⁴

Introduction: While racial and socioeconomic disparities in autism diagnoses and treatment in the U.S. have been well-documented, there is a dearth of intervention research focusing on low-income families of Black children with autism. We will report the results of a feasibility trial of an adapted version of a peer-led, 14-week manualized program, Parents Taking Action (PTA), among urban caregivers raising Black children with autism in low-income neighborhoods. PTA aims to increase autism knowledge, improve advocacy skills, build social support, reduce parenting stress, and manage challenging child behavior.

Methods: We used a mixed-methods approach to adapt, implement and evaluate PTA. We formed an advisory board composed of local parents, providers, and other stakeholders to recommend program adaptations. We trained four Parent Leaders (caregivers of Black children 9 years and older with autism) to deliver the in-home program to caregivers of Black children ages 8 and younger with or at-risk for autism. Social workers provide case management for material needs. Participants complete measures on service use, parenting stress, depression, autism knowledge, family functioning, and child behavior before, mid (session 7), and after the 14-week program. Parent Leaders submit fidelity checklists weekly. Additionally, researchers observe the Parent Leaders twice during the 14-week program for fidelity.

Results: We will present preliminary results on program feasibility and participant baseline results. Parent Leaders have delivered the program sessions to seven mothers with a high level of fidelity. All participants have significant concrete needs, such as homelessness and food insecurity. The average time between sessions is three weeks, with the primary reasons for session cancellations related to meeting these material needs.

The average participant age is 32.6 years ($SD=5.1$). Approximately 29% of the participants are single; the remaining are married (29%) or living with a partner (43%). 80% of participants have annual incomes lower than \$40,000. The average child age is 5.7 years ($SD=1.4$). The average child age when parents had first developmental concerns was 14.6 months ($SD=8.2$) and the average age of autism diagnosis was 3.9 years ($SD=1.4$). About 66% of participants indicated they were stressed and 57.1% of participants reported they were depressed at pre-intervention assessment. At baseline, 43% of participants indicated they understood their

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child's strengths, needs and abilities and about 30% of participants indicated they had access to local autism resources and supports. Approximately 14% of parents reported they had support systems, knew their rights, and advocated for their child at pre-intervention assessment.

Discussion: We describe our efforts to culturally and contextually adapt an intervention aimed at families living in low-income urban neighborhoods, with significant input from a community-based advisory board. Parent Leaders can deliver the program as intended in the PTA manual. At baseline, participants on average reported experiencing high levels of stress and depression, and limited access to local autism services and supports. Delivering the program on a weekly basis is challenging due to participants' other needs. Our findings can inform current and future efforts to better serve communities experiencing the multiple effects of poverty.

Paper 2 of 4

Paper Title: Partners in School: An Implementation Strategy to Optimize Parent-Teacher Communication for Children with Autism Spectrum Disorder

Authors: Gazi F. Azad ⁵, Kayla Minton ⁶, Yeon Jang ⁶, Rebecca Landa ⁶

Introduction: Effective communication is essential to ensure that parents and teachers are addressing pervasive concerns and implementing the same interventions across settings (i.e., problem-solving), as well as for sustaining high quality relationships. However, little is known about what communication skills parents and teachers need to successfully work together. To examine key areas for optimizing parent-teacher communication in the Partners in School model. In this implementation strategy, parents and teachers: (1) identify a mutual concern, (2) define mutually agreed upon evidence-based interventions to address the concern, and (3) implement those steps at home and school. We examined the communication skills that parents and teachers reported needed training in, and the extent to which those communication skills were related to problem-solving and relationship quality.

Methods: Participants were 21 teachers and 36 parents of children with ASD. Parents were mothers (72.2%) and averaged 35.6 (SD = 7.5) years of age. They identified as white (44.4%), black/African American (41.7%), American Indian/Native Alaskan (5.6%) and Asian (8.3%). Almost a third (36.1%) reported an annual income of less than 45K (36.1%). Teachers were all female, with an average age of 33.5 years (SD = 10.3). Approximately 86.1% of the teachers were white, 16.7% were black/African American, and 2.8% were Asian. Teachers reported teaching for 6.8 years (SD=7.4); 70% reported no training in working with parents. The students were in pre-kindergarten through 5 grade, and were on average 5.4 years (SD = 2.5). Parents and teachers completed the Participation in Problem-Solving Scale. Relationship quality was assessed with two subscales (joining and communication to the other) on the Parent-Teacher Relationships Scale.

Results: On average, teachers reported needing communication training in information exchange (1.81; SD=.51), time management (2.00; SD=.68), and identification of problems (2.15; SD=.47). Linear regression models suggested that teachers with better time management also reported more problem-solving with parents (B= 2.92, p= .007). Age and time management were related to relationship quality. More specifically, older teachers reported more joining (i.e., partnership) with parents (B= 2.23, p= .034) and more positive communication with them (B= 2.33, p= .027). The extent to which teachers managed their time was also related to joining with parents (B= 2.26; p= .032) and communicating more effectively with them (B= 2.59, p=.015). On average, parents reported needing communication training in intervention adherence (2.20; SD=.54), time management (2.36; SD=.49), and shared decision-making (2.45; SD=.46). For parents, older age was also associated with more joining with teachers (B= 2.77, p= .010). The better parents managed their time, the more effective their communication was with teachers (B= 2.41, p= .023).

Discussion: These results highlight the communication skills that parents and teachers need to more effectively work together, and sustain positive relationships with each other. Our findings also indicate that age and time management skills are essential to

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consider in parent-teacher communication. This information was used to develop parent-teacher communication training as part of the Partners in School model.

Paper 3 of 4

Paper Title: The Impact of Parent-Teacher Relationships on Student-Teacher Relationship Development for Young Students with ASD

Authors: Ainsley Losh ⁷, Abbey Eisenhower ⁸, Jan Blacher ⁷

Background: Student-teacher relationship (STR) quality in early elementary is a key predictor of later academic, social, behavioral, and emotional functioning (Zeedyk et al., 2016). In addition to facing unique challenges during the transition into early school due to social communication barriers and commonly co-occurring behavioral challenges, students with autism spectrum disorder (ASD) have poorer-quality STRs (i.e., higher conflict and lower closeness; Blacher et al., 2014). Specific risk factors for poorer-quality STRs include externalizing behaviors, autism symptom severity, and parent intrusiveness, whereas protective factors include IQ and language skills (Caplan et al., 2016). Parent-teacher relationships (PTRs), which have been found to predict student engagement and socio-behavioral functioning among typically developing (TD) students, may be another key predictor of STRs (Kim et al., 2013). Externalizing behavior problems are a risk factor for poorer-quality PTRs (Garbacz et al., 2016), thus, students with ASD may be at compounded risk for poorer academic, social, and behavioral outcomes via lesser-quality PTRs and STRs. Although child risk and protective factors are emerging, the conjunction of PTRs and child factors in STR development for young students with ASD remains unexplored. The present study examined whether PTR quality predicted change in STR quality over the course of one school year for young students with ASD, above and beyond child background predictors of STRs.

Methods: Participants were 135 students with ASD (4-7 years) who were enrolled in a longitudinal study examining early school transition for students with ASD (see Table 1). At the beginning of the school year (Time 1), their teachers completed the Parent-Teacher Relationship Scale (PTRS) and Student-Teacher Relationship Scale (STRS), their parents completed the CBCL and SRS, and students completed the WPPSI and CASL. At the end of the same school year (Time 2), teachers again completed the PTRS and STRS (see Table 1).

Results: Bivariate Pearson correlations between PTRS Time 1 scores, child characteristics (WPPSI, CASL, CBCL externalizing, SRS), and STRS Time 2 scores revealed significant correlations between STRS Time 2 and the following: (a) PTRS Time 1, (b) WPPSI, (c) CASL, and (d) STRS Time 1 (see Table 2). In order to assess whether PTRS scores significantly predicted change in STRS over the school year above and beyond WPPSI and CASL, multiple regression analysis was conducted using STRS Time 2 as the outcome and STRS Time 1 as a covariate. The model explained 34% of the variance in STRS Time 2, but only PTRS significantly predicted outcomes alongside the covaried STRS Time 1 (see Table 2).

Discussion: Findings indicate that PTR quality at the beginning of the school year predicted change in STR quality over the remainder of the school year for students with ASD, above and beyond child predictors of STR quality. Because STRs are critically important for student outcomes across several domains, and young students with ASD are at risk for poorer-quality STRs, future research should explore specific key characteristics of positive and negative PTRs and aim to develop teacher interventions to promote proactive, positive PTRs in this at-risk student population.

References/Citations:

- Zeedyk, S. M., Cohen, S. R., Eisenhower, A., & Blacher, J. (2016). Perceived social competence and loneliness among young children with ASD: Child, parent and teacher reports. *Journal of Autism and Developmental Disorders*, 46(2), 436–449. <https://doi.org/10.1007/s10803-015-2575-6>

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- Blacher, J., Howell, E., Lauderdale-Littin, S., DiGennaro Reed, F. D., & Laugeson, E. A. (2014). Autism spectrum disorder and the student teacher relationship: A comparison study with peers with intellectual disability and typical development. *Research in Autism Spectrum Disorders, 8*(3), 324–333. <https://doi.org/10.1016/j.rasd.2013.12.008>
- Caplan, B., Feldman, M., Eisenhower, A., & Blacher, J. (2016). Student-teacher relationships for young children with autism spectrum disorder: Risk and protective factors. *Journal of Autism and Developmental Disorders, 46*(12), 3653–3666. <https://doi.org/10.1007/s10803-016-2915-1>
- Kim, E. M., Sheridan, S. M., Kwon, K., & Koziol, N. (2013). Parent beliefs and children’s social-behavioral functioning: The mediating role of parent–teacher relationships. *Journal of School Psychology, 51*(2), 175–185. <https://doi.org/10.1016/j.jsp.2013.01.003>
- Garbacz, S. A., McIntyre, L. L., & Santiago, R. T. (2016). Family involvement and parent–teacher relationships for students with autism spectrum disorders. *School Psychology Quarterly, 31*(4), 478–490. <https://doi.org/10.1037/spq0000157>

Table 1
Participant Characteristics and Variable Descriptive Statistics (N = 135)

Variable	Majority or Mean
Child Age	4 years (range 4-7; SD = 1.0)
Child Gender	Male (79%)
Child Race	White (56%), Bi/Multiracial (20%), Latinx (10%), Asian-American (7%), Other (4%), African-American or Black (3%)
Child CASL Score	164.4 (range 84-259; SD = 35.9)
Child WPPSI Score	88.7 (range 48-139; SD = 18.6)
CBCL Externalizing Score (Parent)	60.3 (range 32-92; SD = 10.9)
SRS Total T Score (Parent)	80.1 (range 46-91; SD = 10.9)
Child School Type	Public (70.1%; vs. private, parochial, or specialized school)
Teacher Gender	Female (88.2%)
Teacher Race	White (67.5%), Latinx (15.9%), Other (7.9%), Asian-American (6.3%), African-American or Black (2.4%)
STRS Time 1 Total Relationship Quality (Teacher)	109.1 (range 79-138, SD = 13.0)
STRS Time 2 Total Relationship Quality (Teacher)	108.8 (range 59-135, SD = 14.4)
PTRS Time 1 Total (Teacher)	49.7 (range 26-60, SD = 6.3)

Table 2
Summary Statistics from Multiple Regression Analysis with STRS Time 2 as Outcome
Model: $R^2 = .34$, $F(4, 101) = 13.03$, $p < .001$

Variable	Correlation with STRS Time 2	b	β	t
CASL	.33***	.04	.11	.77
WPPSI	.30***	.06	.07	.54
PTRS Time 1	.24*	.37*	.17	2.00
STRS Time 1	.55***	.49***	.45	5.18

* $p < .05$, ** $p < .01$, *** $p < .001$

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Paper Title: Smooth Sailing: Iterative Development of a Teacher-Directed Intervention

Authors: Yasamin Bolourian ⁷, Narmene Hamsho ⁸, Abbey Eisenhower ⁸, Jan Blacher ⁷

Background: Funded by IES, the Smooth Sailing study involves general education teachers, grades K-2, in the iterative process of developing a teacher-directed professional development (PD) intervention to improve teacher readiness to work with students with autism spectrum disorder (ASD), including their ASD-specific knowledge, their self-efficacy to teach students with ASD, and the quality of their relationships with students with ASD. The intervention contains three components (i.e., educational modules, coached parent-teacher interviews, and semi-structured student-teacher interactions). The current study presents data from initial focus groups conducted with partnering general education teachers to obtain their perceptions and input on their experiences with children with ASD in their classrooms, including a description of the initial iterative development process of the PD program. Primary aims of the focus group were to understand general education teachers' perceptions of (1) autism, (2) pedagogical practices for including students with autism in the classroom, and (3) strategies for building positive relationships with these students. Ultimately, these perspectives were utilized in the iterative development of the intervention, particularly in the development of the student-teacher relationship-building component of the program, the Time2Connect sessions.

Methods: Focus groups were conducted with participating teachers ($N=18$). Teachers were from schools that served culturally and socioeconomically diverse populations in California and Massachusetts. Three prompts were pre-determined to address the objectives of the focus group. Participants engaged in a series of guided activities (i.e., free-listing and ranking). In response to prompts, teachers were asked to write down words/phrases on individual cards. Next, they reviewed their cards and the cards of other participants to individually rank responses. Saliency scores were calculated (Cohen & Miguel, 2018; Grinker et al., 2015), with higher scores indicating greater consensus across participants. Finally, participants were asked to sort cards under a single category and label them based on determined categories. Pile-sorting helped determine which responses were similarly perceived.

Results: Teachers' most salient perceptions of ASD generally focused on observable behaviors that were not overly negative or positive; rather, they reflected teachers' understanding of common social and behavioral traits that are often characteristic of students with ASD. Teachers' inclusive practices varied, relating to the physical classroom environment, visual supports, classroom routines, positive feedback, and family-school collaborations. Relationship-building strategies included both broad and specific strategies, many of which focused on developing closeness and communication.

Discussion: Findings indicate that teachers recognized difficulties associated with ASD, but did inconsistently identified positive attributes of ASD. Findings also reflect a high level of awareness around ASD among participating teachers, given that two out of the four emerging themes in their perceptions of ASD align with the core DSM-V diagnostic criteria. A description of the iterative development process thus far will be presented. Future steps include conducting a small pilot study in the Fall of 2020. We expect the Smooth Sailing program to lead to improved student-teacher relationship quality between young students with ASD and their general education teachers.

References/Citations:

- Cohen, S. R., & Miguel, J. (2018). *Amor* and social stigma: ASD beliefs among immigrant Mexican parents. *Journal of Autism and Developmental Disorders*, 48(6), 1995-2009.
- Grinker, R. R., Kang-Yi, C. D., Ahmann, C., Beidas, R. S., Lagman, A., & Mandell, D. (2015). Cultural adaptation and translation of outreach materials on autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 45, 2329–2336.