SPECIAL ARTICLE: Evidence-Based Psychotherapy in Child and Adolescent Psychiatry
J Korean Acad Child Adolesc Psychiatry 2026;37(1):14-21
https://doi.org/10.5765/jkacap.250042

eISSN 2233-9183

Parent Employment Status and Race/Ethnicity as Predictors of Social Skills Outcomes in Autistic Children in PEERS® for Preschoolers

Julianna L Martinez, Nastassia J Hajal, Kyra L Fisher,
Elizabeth C Turner, Christine T Moody, and Elizabeth A Laugeson
University of California, Los Angeles, Semel Institute for Neuroscience and Human Behavior, Los Angeles, CA, USA

Objectives: PEERS® for Preschoolers (P4P) is an evidence-based, parent-assisted social skills program for young autistic children and children with other social challenges. The program aims to promote age-appropriate social skills and improve peer relationships. Parent employment status and cultural background may influence families' engagement in the program and their relationship with providers, which can affect use of P4P skills outside weekly sessions. This study examined whether these parent demographic characteristics predicted program response in P4P.

Methods: Participants were 46 autistic children (mean age=4.50 years; 78.3% male) and their caregivers who completed P4P between 2015 and 2019. Families took part in a 16-week curriculum with parallel child and parent groups. Program outcomes were measured using parent-report instruments, including the Social Responsiveness Scale–Second Edition, Social Skills Improvement System subscales of Social Skills and Problem Behaviors, Quality of Play Questionnaire, and Parenting Stress Index, Fourth Edition, Short-Form.

Results: Significant improvements were found in child social responsiveness, social skills, behavior problems, number of playdates, and parenting stress from pre- to post-P4P. Parent employment status and race/ethnicity did not significantly predict any program outcomes.

Conclusion: Results indicate that P4P benefits families broadly, with no observed effect of parent employment status or race/ethnicity on outcomes. Future research should replicate these findings in a larger, more diverse sample and examine additional potential predictors of program response to inform clinical decision-making.

Keywords: Autism spectrum disorder; Child; Child, preschool; Parent; Social skills; Treatment outcome; Early intervention, educational; Ethnic groups.

Received: August 1, 2025 / **Revised:** October 31, 2025 / **Accepted:** November 18, 2025

Address for correspondence: Julianna L Martinez, University of California, Los Angeles, Semel Institute for Neuroscience and Human Behavior, 300 UCLA Medical Plaza, Los Angeles, CA 90095, USA
Tel: +1 (323) 736-2351, E-mail: jlmartinez@ucla.edu

INTRODUCTION

The early years of childhood are critical for social skill development, as young children begin to communicate and express themselves, forming the basis for later social relationships [1]. Autistic children often show early differences in social communication that affect their ability to interact with others, resulting in fewer friendships, lower-quality peer connections, and increased isolation and loneliness compared to neurotypical peers [2-5]. These challenges can affect autistic youth throughout their lives and place significant demands on their parents, who have an important role in their child's development [6].

Parent-assisted interventions actively involve caregivers in their child's therapy, helping children apply learned strategies during and between sessions and reinforcing skills in daily settings to support generalization [7-9]. These interventions provide parents with skills training, which often improves children's social functioning, reduces parenting stress, and enhances overall family functioning [10]. Previous research shows that parent-assisted interventions improve child outcomes in autism and behavioral parent-training programs [7,11]. While broader early interventions, such as Naturalistic Developmental Behavioral Interventions, often involve parents to support children's social engagement, structured social skills programs across development rarely include parents as active social coaches within the intervention [12]. One exception is the Program for the Education and Enrichment of Relational Skills (PEERS®), which directly addresses the translation and generalization of learned social skills into naturalistic settings by involving parents and caregivers in

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (https://creativecommons.org/licenses/by-nc/4.0) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Copyright © 2026 Korean Academy of Child and Adolescent Psychiatry

PEERS® programs for preschoolers, adolescents, and adults [13-16].

The PEERS® for Preschoolers (P4P) program is an evidence-based, 16-week program that aims to improve friendship skills in young autistic children and train parents in social coaching strategies [16]. After completing P4P, parents reported significant improvements in their child's social skills, fewer problem behaviors, and more playdates [17]. In a long-term follow-up study conducted 1−5 years later, parents indicated that most program gains were maintained and qualitatively described P4P as helpful and beneficial for both their child and themselves [18,19]. Positive outcomes of P4P have also been replicated in a real-world clinical setting [20]. Such findings are consistent with research showing the efficacy and replicability of the PEERS® model across age groups [21,22].

Parent involvement is often included in interventions for young autistic children; however, few studies have directly examined how parent-related factors influence program outcomes [23,24]. Existing research indicates that parent characteristics, such as socioeconomic status, education, employment, cultural background, and parenting stress, may affect both parent participation and outcomes in parent-assisted interventions [24-27]. These factors influence parents' ability to attend sessions, support social practice at home, and access developmental resources. For example, employment demands may reduce opportunities for out-of-session skill practice, such as arranging playdates [28,29], while cultural values and systemic inequities may shape families' views of program goals and relationships with providers [30-32]. Tuli et al. [20] found that baseline parenting stress did not predict outcomes for families who completed P4P in a clinic setting. However, no studies have examined the effects of other parent demographic characteristics on P4P outcomes. Investigating these variables can clarify which families benefit most from social skills programs such as P4P and help ensure these programs remain accessible and culturally responsive.

Building on previous findings from P4P and other PEERS® programs [21,22], this study examined whether parent employment status and race/ethnicity predicted program response. We assessed changes in children's social responsiveness, overall social skills, problem behaviors, playdate frequency, and parenting stress from before to after program participation.

Language note

In this paper, we use identity-first language (e.g., "autistic children") in recognition of the preferences expressed by many in the autistic community. We acknowledge that preferences vary across individuals and families, and we intend this usage respectfully.

METHODS

Participants

Participants were families with children aged 3 to 6 years who attended the P4P social skills program in person at the UCLA PEERS® Clinic from 2015 to 2019. This study utilized de-identified archival clinical data originally collected as part of routine program evaluation at the University of California, Los Angeles (UCLA). The UCLA Institutional Review Board (IRB No.: 13-000279) approved the use of these data for secondary analysis for research purposes and granted a waiver of informed consent due to the minimal-risk nature of the study, yielding a sample similar to that in Tuli et al. [20]. Families were included if the child had a historical diagnosis of autism spectrum disorder and the family completed both pre- and post-program assessments (n=46).

Eligibility for participation in P4P was determined through a structured enrollment process, which included a phone screening with a team member and an in-person intake appointment with a licensed clinical psychologist or postdoctoral psychology fellow. Eligibility criteria were: 1) difficulties with peer interactions, 2) sufficient expressive language skills (at least 4−5-word spontaneous phrase speech), 3) no physical or medical conditions that would prevent participation, and 4) a parent fluent in English who was willing to participate. During intake, children's expressive language abilities were assessed through interactive play, responsiveness to instructions, and age-appropriate interview questions to confirm their ability to understand and use sentence-level speech and participate fully in group activities based in verbal communication.

Table 1 presents the demographic characteristics of the participating parents and children. Children ranged from 3 to 6 years old (mean=4.50 years, standard deviation=0.72 years), with 78.3% male and 21.7% female. Most parents were mothers (82.6%; n=38) and married (84.8%; n=39). All parents who reported educational attainment had at least a bachelor's degree, and nearly half held a master's or doctoral degree (n=19). For employment status, 45.7% reported full-time employment (n=21), 28.3% part-time (n=13), and 19.6% unemployed (n=9); employment status was missing for 6.5% (n=3). Regarding race and ethnicity, 30.4% identified as White (n=14), 32.6% as Asian or Asian American (n=15), 8.7% as Hispanic/Latino (n=4), 8.7% as Middle Eastern (n=4), and 4.3% as Multiracial (n=2). Race and ethnicity data were missing for 15.2% (n=7).

Procedures

Parents completed assessment measures at the intake appointment (T1) and after the 16-week program (T2). These

Table 1. Sample demographic characteristics

Characteristic	Value (n=46)
Child age (yr)	4.50±0.72
3 years	2 (4.3)
4 years	23 (50.0)
5 years	17 (37.0)
6 years	4 (8.7)
Child gender	
Male	36 (78.3)
Female	10 (21.7)
Parent relationship to child	
Mother	38 (82.6)
Father	7 (15.2)
Missing	1 (2.2)
Parent education level	
Less than high school	0 (0.0)
High school	0 (0.0)
Some college, no degree	0 (0.0)
Associate's degree	0 (0.0)
Bachelor's degree	26 (56.5)
Master's degree	10 (21.7)
Doctoral degree	9 (19.6)
Missing	1 (2.2)
Employment status	
Unemployed	9 (19.6)
Part-time	13 (28.3)
Full-time	21 (45.7)
Missing	3 (6.5)
Parent race/ethnicity	
White	14 (30.4)
Hispanic/Latino	4 (8.7)
Asian or Asian American	15 (32.6)
Middle Eastern	4 (8.7)
Multiracial	2 (4.3)
Missing	7 (15.2)
Parent marital status	
Married	39 (84.8)
Unmarried	2 (4.3)
Widowed	1 (2.2)
Divorced	3 (6.5)
Missing	1 (2.2)

Values are presented as mean±standard deviation or number (%).

assessments included questions about child and parent demographics, such as race/ethnicity, educational level, age, and gender, as well as measures of children's social functioning, problem behaviors, play dates, and parenting stress.

PEERS® for Preschoolers

P4P is a 16-week, evidence-based social skills program that teaches friendship and play skills to autistic or socially challenged preschool and kindergarten children. Parents participate at the same time, learning social coaching strategies and practicing these techniques with their child.

Adapting evidence-based methods from other PEERS® curricula for adolescents and young adults [14,15], the program includes didactic lessons, role-play demonstrations, behavioral rehearsal exercises, and structured homework assignments to support generalization of skills across settings. Groups include 8 to 10 families who meet once weekly for 90 minutes, with concurrent parent and child sessions led by licensed clinical psychologists or postdoctoral psychology fellows, and supported by graduate students and trained research assistants serving as behavioral coaches.

Each week, a new social skill is introduced and practiced during a 20-minute mock playdate called "Parent-Coached Play," which allows caregivers to apply the "4 Ps" of social coaching (priming, prompting, praising, and providing corrective feedback) during real-time interactions (Supplementary Table 1). Additional implementation information is available in the P4P manual [16].

Measures

Demographic questionnaire

This questionnaire collects general information, including child and caregiver gender, ethnicity, education, family history, family composition (e.g., structure of family), and the child's developmental and medical history. It was administered only at pre-test.

Social Responsiveness Scale–Second Edition

The Social Responsiveness Scale–Second Edition (SRS-2) [33] is a standardized 65-item assessment that measures social responsiveness and autism features, requiring about 15 minutes to complete. The SRS-2 School-Age form, suitable for youth ages 4–18, was administered to parents before and after P4P. Parents rated each item on a 4-point scale from "1" (not true) to "4" (almost always true). The form covers repetitive behaviors and restricted interests, social communication, social awareness, social cognition, and social motivation [33]. The SRS-2 yields a Total T-score, with a mean of 50 and a standard deviation of 10; higher scores indicate more autism-related symptoms.

Social Skills Improvement System Rating Scales

Social Skills Improvement System Rating Scales (SSiS) [34] are rating scales that measure social skills and problematic behaviors in children ages 3–18, using national norms from a representative sample for demographic categories such as age and gender [34]. The 79-item form uses a 4-point Likert scale from “never” to “always” to indicate behavior frequency. The SSiS provides a Social Skills domain score based on seven subscales (communication, cooperation, assertion, responsibility, empathy, engagement, and self-control) and a Problem Behaviors domain score based on five subscales (internalizing, externalizing, bullying, hyperactivity/inattention, and autism spectrum) [34]. Domain scores are standardized with a mean of 100 and a standard deviation of 15; scores from 85 to 115 are considered average. Higher Social Skills Scale scores indicate better social functioning, while higher Problem Behaviors Scale scores indicate more problematic behavior. Parents completed the SSiS Parent Report form at T1 and T2, and all scores were normed using the preschool category (ages 3–5) for both timepoints.

Quality of Play Questionnaire

The Quality of Play Questionnaire (QPQ) [35] assesses the frequency and quality of playdates in the past month using 12 items and requires about 5 minutes to complete at both pre- and post-test [35]. According to the QPQ, a playdate is defined as a one-on-one interaction. The QPQ was administered to parents during pre- and post-assessments. Historically, the QPQ has been used to evaluate the effectiveness of social skills programs and is considered a “real-world” indicator of social engagement [35].

Parenting Stress Inventory, Fourth Edition, Short-Form

The Parenting Stress Inventory, Fourth Edition, Short-Form (PSI-4-SF) [36] is a 36-item questionnaire that enables practitioners to quickly identify parent-child problem areas and caregiver stress in parents of children ages 0–12. It includes three domains: parental distress, parent-child dysfunctional interaction, and difficult child, which together form a Total Stress scale. The measure uses a 5-point Likert scale, allowing parents to rate items from “strongly agree” to “strongly disagree.” Higher scores on the PSI-4-SF, based on a T-score profile from a population sample, indicate greater parenting stress. The PSI-4-SF is widely used in research on stress among parents of autistic or developmentally disabled children [37,38]. Internal reliability is strong, and there is evidence of convergent validity with other measures [39]. The PSI-4-SF was administered at pre- and post-test to assess parenting stress before and after P4P.

Data analytic plan

Before the primary predictor analyses, we conducted paired-samples t-tests to compare pre- and post-program outcomes for five variables: SRS-2 Social Responsiveness, SSiS Social Skills, SSiS Problem Behaviors, QPQ Playdates, and PSI Total Stress.

We then analyzed the five primary outcome measures to determine whether parent employment status and parent race/ethnicity identity predicted post-program outcomes. For each outcome, we ran an analysis of covariance (ANCOVA) model with the T2 score as the dependent variable, the corresponding T1 score as a covariate, and the demographic variable as the between-subjects factor.

Parent employment status was coded as unemployed, employed part-time, or employed full-time. Parent race/ethnicity was categorized as White, Asian/Asian American, or Other. The “Other” category included parents identifying as Hispanic/Latino (n=4), Middle Eastern (n=4), and Multiracial (n=2) because small cell sizes required this grouping.

RESULTS

Table 2 presents descriptive statistics for the five outcome

Table 2. Descriptive statistics and pre- to post-intervention change in outcome variables

Outcome variable	Time point	n	Mean±SD	t
SRS – Total	1	45	73.36±9.70	5.33**
	2	45	66.62±9.38	
SSiS – Social Skills	1	46	83.04±11.02	-3.09**
	2	46	88.52±9.85	
SSiS – Problem Behaviors	1	41	114.66±11.58	3.50**
	2	41	108.49±12.01	
QPQ – Number of Playdates	1	41	2.39±2.31	-4.78**
	2	41	3.80±2.74	
PSI – Total Stress	1	45	55.87±6.73	2.52*
	2	45	53.31±6.94	

*p<0.05; **p<0.01. PSI, Parenting Stress Index; QPQ, Quality of Play Questionnaire; SRS, Social Responsiveness Scale; SSiS, Social Skills Improvement System Rating Scale.

Table 3. Association of parent employment status with program outcomes

Measure	Un-employed	Part-time	Full-time	F	p
SRS – Total	66.19±2.57	66.47±2.11	65.21±1.70	0.12	0.89
SSiS – Social Skills	90.49±3.18	88.77±2.64	88.88±2.08	0.11	0.90
SSiS – Problem Behaviors	108.28±4.15	107.77±3.61	108.71±2.41	0.02	0.98
QPQ Playdates	4.19±0.64	3.46±0.52	4.05±0.42	0.53	0.59
PSI – Total Stress	54.78±2.01	54.82±1.67	51.51±1.35	1.56	0.22

Values are presented as mean±standard deviation. PSI, Parenting Stress Index; QPQ, Quality of Play Questionnaire; SRS, Social Responsiveness Scale; SSiS, Social Skills Improvement System Rating Scale.

Table 4. Association of parent race/ethnicity with program outcomes

Measure	White	Asian/Asian American	Other	F	p
SRS – Total	65.22±2.00	68.87±1.93	68.09±2.49	0.94	0.40
SSiS – Social Skills	92.01±2.53	84.62±2.38	88.97±3.14	2.36	0.11
SSiS – Problem Behaviors	108.78±2.90	110.79±2.67	105.57±3.53	0.70	0.51
QPQ Playdates	4.63±0.53	3.15±0.47	3.69±0.57	2.26	0.12
PSI – Total Stress	51.77±1.78	52.57±1.63	56.25±2.09	1.39	0.26

Values are presented as mean±standard deviation. PSI, Parenting Stress Index; QPQ, Quality of Play Questionnaire; SRS, Social Responsiveness Scale; SSiS, Social Skills Improvement System Rating Scale.

variables (SRS, SSiS Social Skills, SSiS Problem Behaviors, QPQ Playdates, and PSI Total Stress) and results of paired-samples t-tests assessing pre- to post-P4P change. Consistent with previous findings from a similar archival clinical sample [20], all outcome variables showed significant change in the expected directions, indicating improvements in social functioning and reductions in problem behaviors and parenting stress.

Table 3 presents results from all ANCOVA models assessing the effect of parent employment status on T2 outcomes, controlling for T1 scores. For all outcomes, parent employment status was not significantly associated at the $p<0.05$ level.

Table 4 presents results from all ANCOVA models assessing the effect of parent race/ethnicity on T2 outcomes, controlling for T1 scores. For all outcomes, parent race/ethnicity was not significantly associated at the $p<0.05$ level.

DISCUSSION

This study examined whether parent employment status and race/ethnicity predicted child and family outcomes after participation in the P4P program. Consistent with previous findings in a similar outpatient sample [20], results showed significant improvements in children's social functioning, reductions in problem behaviors, and decreases in parenting stress after P4P participation. To build on these findings, the current analyses assessed whether parent employment status or race/ethnicity explained differences in program response. Because P4P depends on parent involvement to support skill generalization, understanding how these contextual factors influence outcomes is important for informing the program's accessibility and relevance for diverse families.

Parent employment status did not significantly predict outcomes after P4P participation. Although parents often report difficulty balancing caregiving and therapeutic needs for their autistic child with employment demands [40,41], the structured, manualized format of P4P may have supported consistency among families with varying schedules. Parents receive structured social coaching handouts that outline homework assignments and provide guidance on coaching strategies. The program also emphasizes integrating social coaching into daily family routines, which may have supported participation for both working and non-working parents. As a parent-assisted, rather than fully parent-implemented, model, P4P may be less affected by differences in out-of-session engagement because the program provides direct interaction, instruction, and coaching with participating children each week.

Parent race/ethnicity was not a significant predictor of child or family outcomes in P4P. One possible explanation is that P4P's didactic lessons and concrete behavioral coaching may reduce opportunities for cultural mismatch, leading to similar gains across groups. The structured format is complemented by individualized homework review in each session, during which P4P group leaders address parent-reported successes and challenges. By consistently responding to parent questions and needs, P4P may support positive therapeutic alliance, trust, and collaboration with parents. These results suggest that P4P is an accessible, evidence-based social skills program that can effectively support autistic youth and their families, including those with diverse parental employment and cultural backgrounds. This finding is consistent with recent reports that baseline psychosocial characteristics did not predict P4P response [20], further supporting P4P's generalizability across family contexts.

Limitations and future directions

Although the findings are encouraging, several limitations of the current sample and analyses must be acknowledged. First, the small sample size and limited heterogeneity in family characteristics restrict the generalizability of these results to the broader population. For example, collapsing race/ethnicity into broad categories, which was necessary because of small cell sizes, may obscure important cultural differences in therapeutic experiences, engagement, and outcomes [42-44]. In this study, the "Other" race/ethnicity category included families identifying as Hispanic/Latino, Middle Eastern, and Multiracial, whose experiences and cultural contexts may differ significantly.

Most participating parents in this sample were highly educated, married mothers. Prior research indicates that these factors may influence outcomes; for example, while mothers are often primary caregivers, greater involvement of fathers is linked to improved social communication outcomes [45-47]. Future studies should recruit larger, more diverse samples across dimensions such as race/ethnicity, parent education, marital status, relationship to the child, and socioeconomic status to examine more detailed between- and within-group differences in program response and engagement. This limitation may also reflect a broader issue of selection bias, as families using the UCLA outpatient service system may have greater resources, with parent educational attainment serving as an indicator of high socioeconomic status [48,49]. Future community-based and partnership-driven studies could help ensure equitable access by identifying barriers to enrollment and confirming generalizability to families with fewer resources.

Second, the absence of direct and systematic measurement of engagement and process factors (e.g., homework completion, therapeutic alliance) limits the ability to examine how these variables relate to family characteristics and predict program outcomes. This is an important area for future research because previous literature indicates that parent demographic characteristics may influence therapeutic outcomes through these processes. Including observational outcomes of child social interactions, parent use of P4P social coaching skills, teacher reports, and peer sociometric data would strengthen the evidence base for P4P and provide greater insight into how parent factors affect program outcomes. Playdate frequency, although a meaningful indicator of social opportunity, may not reflect the quality or reciprocity of children's peer interactions. Parental involvement and cultural norms regarding play can influence both the arrangement and perception of playdates. Future studies should use broader assessment batteries to address these limitations.

CONCLUSION

This study adds evidence supporting P4P as effective in improving social functioning among autistic children from diverse families, with no differences in program response by parent employment status or race/ethnicity. Continued recruitment of diverse families and use of multi-method assessment batteries in P4P is necessary to inform inclusive and equitable early intervention practices.

Supplementary Materials

The Supplement is available with this article at https://doi.org/10.5765/jkacap.250042.

Availability of Data and Material

The datasets generated or analyzed during the study are not publicly available. The IRB has not approved external data sharing on the current study. Please contact the corresponding author for more information or questions about the dataset.

Conflicts of Interest

EAL receives royalties from Routledge for sales of the PEERS® treatment manuals, including the PEERS® for Preschoolers manual. All other authors have no relevant financial or nonfinancial interests to disclose. The authors did not receive support from any organization for the submitted work.

Author Contributions

Conceptualization: Julianna L Martinez, Christine T Moody, Elizabeth A Laugeson. Data curation: Christine T Moody, Nastassia J Hajal. Formal analysis: Nastassia J Hajal. Methodology: Julianna L Martinez, Nastassia J Hajal. Supervision: Elizabeth A Laugeson. Writing—original draft: Julianna L Martinez, Nastassia J Hajal, Kyra L Fisher, Elizabeth C Turner. Writing—review & editing: all authors.

ORCID iDs

Julianna L Martinez	https://orcid.org/0009-0008-7717-5657
Nastassia J Hajal	https://orcid.org/0000-0002-4404-5687
Kyra L Fisher	https://orcid.org/0009-0000-3029-6795
Elizabeth C Turner	https://orcid.org/0009-0005-5046-1141
Christine T Moody	https://orcid.org/0000-0002-7017-0713
Elizabeth A Laugeson	https://orcid.org/0000-0003-1601-176X

Funding Statement

None

Acknowledgments

The authors would like to acknowledge the UCLA PEERS® Clinic team, including the clinicians, staff members, and research assistants who supported the delivery of clinical groups. We are also grateful to the families who participated in these groups, whose involvement made this work possible.

REFERENCES

1) **Silveira-Zaldivar T, Özerk G, Özerk K.** Developing social skills and social competence in children with autism. Int Electron J Elem Educ 2021;13:341-363.
2) **American Psychiatric Association.** Diagnostic and statistical manual of mental disorders. 5th ed. Arlington: American Psychiatric Publishing;2013.
3) **Calder L, Hill V, Pellicano E.** 'Sometimes I want to play by myself': understanding what friendship means to children with autism in mainstream primary schools. Autism 2013;17:296-316.
4) **Carter AS, Davis NO, Klin A, Volkmar FR.** Social development in autism. In: Volkmar FR, Paul R, Klin A, Cohen D, editors. Handbook of autism and pervasive developmental disorders. New York: John Wiley & Sons;2005. p.312-334.
5) **Locke J, Ishijima EH, Kasari C, London N.** Loneliness, friendship quality and the social networks of adolescents with high-functioning autism in an inclusive school setting. J Res Spec Educ Needs 2010;10:74-81.
6) **Karst JS, Van Hecke AV.** Parent and family impact of autism spectrum disorders: a review and proposed model for intervention evaluation. Clin Child Fam Psychol Rev 2012;15:247-277.
7) **Cheng WM, Smith TB, Butler M, Taylor TM, Clayton D.** Effects of parent-implemented interventions on outcomes of children with autism: a meta-analysis. J Autism Dev Disord 2023;53:4147-4163.
8) **Gunning C, Holloway J, Fee B, Breathnach Ó, Bergin CM, Greene I, et al.** A systematic review of generalization and maintenance outcomes of social skills intervention for preschool children with autism spectrum disorder. Rev J Autism Dev Disord 2019;6:172-199.
9) **Reichow B, Volkmar FR.** Social skills interventions for individuals with autism: evaluation for evidence-based practices within a best evidence synthesis framework. J Autism Dev Disord 2010;40:149-166.
10) **Schieve LA, Blumberg SJ, Rice C, Visser SN, Boyle C.** The relationship between autism and parenting stress. Pediatrics 2007;119 (Suppl 1):S114-S121.
11) **Matson ML, Mahan S, Matson JL.** Parent training: a review of methods for children with autism spectrum disorders. Res Autism Spectr Disord 2009;3:868-875.
12) **McMahon CM, Lerner MD, Britton N.** Group-based social skills interventions for adolescents with higher-functioning autism spectrum disorder: a review and looking to the future. Adolesc Health Med Ther 2013;2013:23-28.
13) **Laugeson EA, Frankel F.** Social skills for teenagers with developmental and autism spectrum disorders: the PEERS treatment manual. 1st ed. New York: Routledge;2010.
14) **Laugeson EA.** The PEERS curriculum for school-based professionals: social skills training for adolescents with autism spectrum disorder. 1st ed. New York: Routledge;2013.
15) **Laugeson EA.** PEERS® for young adults: social skills training for adults with autism spectrum disorder and other social challenges. 1st ed. New York: Routledge;2017.
16) **Laugeson E, Park M, Sanderson J.** PEERS® for preschoolers. 1st ed. New York: Routledge;2025.
17) **Park MN, Moulton EE, Laugeson EA.** Parent-assisted social skills training for children with autism spectrum disorder: PEERS for preschoolers. Focus Autism Other Dev Disabil 2023;38:80-89.
18) **Tripathi I, Estabillo JA, Moody CT, Laugeson EA.** Long-term treatment outcomes of PEERS® for preschoolers: a parent-mediated social skills training program for children with autism spectrum disorder. J Autism Dev Disord 2022;52:2610-2626.
19) **Tripathi I, Moody CT, Laugeson EA.** Parent perspectives on treatment: a mixed methods analysis of PEERS® for preschoolers. Autism 2024;28:390-402.
20) **Tuli S, Moody CT, Fisher KL, Aframian K, Chou JY, Laugeson EA.** Brief report: social responsiveness and parenting stress as predictors of social skills outcomes in autistic children following the PEERS® for preschoolers program. J Autism Dev Disord 2025 Feb 20 [Epub]. http://doi.org/10.1007/s10803-024-06714-7.
21) **Zheng S, Kim H, Salzman E, Ankenman K, Bent S.** Improving social knowledge and skills among adolescents with autism: systematic review and meta-analysis of UCLA PEERS® for adolescents. J Autism Dev Disord 2021;51:4488-4503.
22) **Gantman A, Kapp SK, Orenski K, Laugeson EA.** Social skills training for young adults with high-functioning autism spectrum disorders: a randomized controlled pilot study. J Autism Dev Disord 2012; 42:1094-1103.
23) **Rojas-Torres LP, Alonso-Esteban Y, Alcantud-Marín F.** Early intervention with parents of children with autism spectrum disorders: a review of programs. Children (Basel) 2020;7:294.
24) **Shalev RA, Lavine C, Di Martino A.** A systematic review of the role of parent characteristics in parent-mediated interventions for children with autism spectrum disorder. J Dev Phys Disabil 2020; 32:1-21.
25) **Mathew NE, Burton KLO, Schierbeek A, Črnčec R, Walter A, Eapen V.** Parenting preschoolers with autism: socioeconomic influences on wellbeing and sense of competence. World J Psychiatry 2019; 9:30-46.
26) **Pickard KE, Ingersoll BR.** Quality versus quantity: the role of socioeconomic status on parent-reported service knowledge, service use, unmet service needs, and barriers to service use. Autism 2016; 20:106-115.
27) **Burrell TL, Borrego Jr J.** Parents' involvement in ASD treatment: what is their role? Cogn Behav Pract 2012;19:423-432.
28) **Bradley RH, Corwyn RF.** Socioeconomic status and child development. Annu Rev Psychol 2002;53:371-399.
29) **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;11:894.
30) **Stahmer AC, Vejnoska S, Iadarola S, Straiton D, Segovia FR, Luelmo P, et al.** Caregiver voices: cross-cultural input on improving access to autism services. J Racial Ethn Health Disparities 2019;6: 752-773.
31) **Azad G, Holingue C, Pfeiffer D, Dillon E, Reetzke R, Kalb L, et al.** The influence of race on parental beliefs and concerns during an autism diagnosis: a mixed-method analysis. Autism 2022;26:1176-1187.
32) **Mandell DS, Wiggins LD, Carpenter LA, Daniels J, DiGuiseppi C, Durkin MS, et al.** Racial/ethnic disparities in the identification of children with autism spectrum disorders. Am J Public Health 2009; 99:493-498.
33) **Constantino JN, Gruber CP.** Social responsiveness scale, second edition (SRS-2). Torrance: Western Psychological Services;2012.
34) **Gresham FM, Elliott SN.** Social skills improvement system: rating scales manual. Bloomington: Pearson Assessments;2008.
35) **Frankel F, Mintz J.** Maternal reports of play dates of clinic referred and community children. J Child Fam Stud 2011;20:623-630.
36) **Abidin RR.** Parenting stress index, fourth edition - short form (PSI-4-SF). 4th ed. Lutz: Psychological Assessment Resources;2012.
37) **Davis NO, Carter AS.** Parenting stress in mothers and fathers of toddlers with autism spectrum disorders: associations with child characteristics. J Autism Dev Disord 2008;38:1278-1291.
38) **Hayes SA, Watson SL.** The impact of parenting stress: a meta-analysis of studies comparing the experience of parenting stress in parents of children with and without autism spectrum disorder. J Autism Dev Disord 2013;43:629-642.
39) **Haskett ME, Ahern LS, Ward CS, Allaire JC.** Factor structure and validity of the parenting stress index-short form. J Clin Child Adolesc Psychol 2006;35:302-312.

40) **Matthews RA, Booth SM, Taylor CF, Martin T.** A qualitative examination of the work–family interface: parents of children with autism spectrum disorder. J Vocat Behav 2011;79:625-639.
41) **Houser L, McCarthy M, Lawer L, Mandell D.** A challenging fit: employment, childcare, and therapeutic support in families of children with autism spectrum disorders. J Soc Serv Res 2014;40:681-698.
42) **Kam B, Mendoza H, Masuda A.** Mental health help-seeking experience and attitudes in Latina/o American, Asian American, Black American, and White American college students. Int J Adv Counselling 2019;41:492-508.
43) **Kim JE, Park SS, La A, Chang J, Zane N.** Counseling services for Asian, Latino/a, and White American students: initial severity, session attendance, and outcome. Cultur Divers Ethnic Minor Psychol 2016;22:299-310.
44) **Kline AC, Feeny NC, Zoellner LA.** Race and cultural factors in an RCT of prolonged exposure and sertraline for PTSD. Behav Res Ther 2020;132:103690.
45) **Öztürk M, Küçük Alemdar D.** The care burden of mothers of children with disability: association between family quality of life and fatigue. J Pediatr Nurs 2023;73:e418-e425.
46) **Flippin M, Crais ER.** The need for more effective father involvement in early autism intervention: a systematic review and recommendations. J Early Interv 2011;33:24-50.
47) **Lundahl BW, Tollefson D, Risser H, Lovejoy MC.** A meta-analysis of father involvement in parent training. Res Soc Work Pract 2008;18:97-106.
48) **Vilaseca R, Rivero M, Bersabé RM, Cantero MJ, Navarro-Pardo E, Valls-Vidal C, et al.** Demographic and parental factors associated with developmental outcomes in children with intellectual disabilities. Front Psychol 2019;10:872.
49) **Durkin MS, Maenner MJ, Baio J, Christensen D, Daniels J, Fitzgerald R, et al.** Autism spectrum disorder among US children (2002-2010): socioeconomic, racial, and ethnic disparities. Am J Public Health 2017;107:1818-1826.