

ADAPTING PEERS® FOR PRESCHOOLERS FOR TELEHEALTH: EXAMINING A PARENT- MEDIATED SOCIAL SKILLS INTERVENTION FOR YOUNG AUTISTIC CHILDREN

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Presentation Outline

- Review of Literature
 - Social Impairments
 - Social Skills Interventions
 - Telehealth
- Current Study - Adaptation
 - Aims
 - Method
 - Preliminary Results
- Discussion
- Limitations and Future Directions
- Conclusion





REVIEW OF LITERATURE

Developmental Disabilities and Social Difficulties

- Rate of developmental disabilities has increased in the past decade (Zablontsky et al, 2017)
- Social competence difficulties: core deficit for autistic children and other developmental conditions (American Psychiatric Association, 2013)
- Decreased ability to make and maintain friendships (Bellini, Peters, Benner, & Hopf, 2007)
- Lack of initiating/maintaining social interactions, empathy, using and interpreting verbal/nonverbal communication, understanding others' thoughts, emotions (Baron-Cohen & Wheelwright, 2004; Frith, 2004)



SOCIAL DIFFICULTIES

Weaknesses in social skills are often evident in early development (Paul, 2003)

Difficulties in these areas often worsen and can have long term ramifications

By 4 to 6 years, social challenges apparent, without effective intervention, social difficulties can increase risk factors

Therefore, it is essential to intervene at a young age

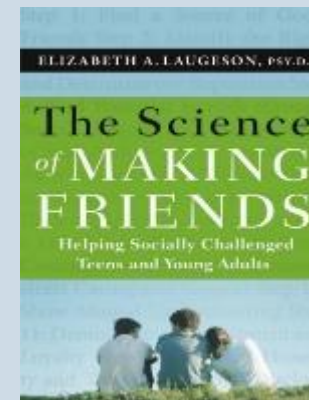
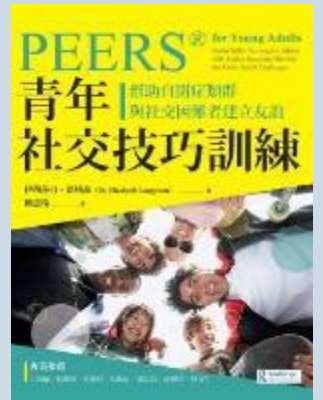
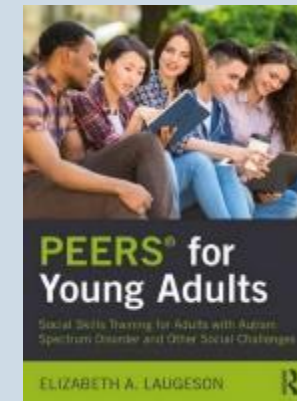
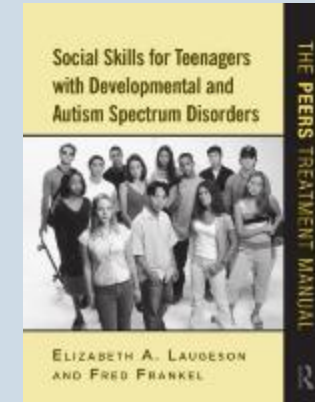
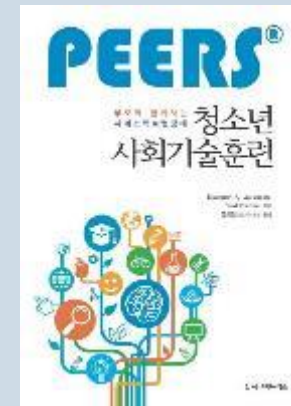
- Social communication often top treatment concerns (Watkins, Kuhn, Ledbetter-Cho, Gevarter, & O'Reilly, 2017)
- Gains minimal, not maintained beyond treatment (Bellini et al., 2007)
- Few manualized interventions focused on teaching and improving social skills for young children
- Program for the Education and Enrichment of Relational Skills (PEERS®; Laugeson & Frankel, 2009; 2010; 2012) shown to increase social skills for autistic individuals post-intervention
- Demonstrated a longstanding positive impact 1 to 5 years later (Mandelberg et al., 2014)

Social Skills Interventions



• PEERS® : Program for the Education and Enrichment of Relational Skills (Laugeson & Frankel, 2010)

- International program
 - Developed at UCLA in 2004 by Dr. Elizabeth Laugeson (UCLA PEERS Clinic Director)
 - Translated into over a dozen languages
 - Used worldwide
- Evidence-Based Social Skills Programs:
 - PEERS® for Preschoolers
 - PEERS® for Adolescents
 - PEERS® for Young Adults
- Research Programs:
 - PEERS® for Careers
 - PEERS® for Dating
 - PEERS® L-Dopa



SOCIAL SKILLS INTERVENTIONS



- Few interventions, explicitly target social skills in young children (DeRosier et al., 2011; Reichow & Volkmar, 2010; Tripathi et al., 2021; Wolstencroft et al., 2018)
- A review of social skills interventions found only two out of 48 studies included participants younger than 6 years (Kaat & Lecavalier, 2014).

Shift from professional-driven model to more family-focused (Dixon et al., 2004; Thompson et al., 1997)

Bidirectional effect of ASD on the family system, impacts child (Karst & Van Hecke, 2012)

Caregiver and family outcomes involved in maintenance and generalization of child treatment gains (Karst & Van Hecke, 2012)

Intervening earlier may lead to enhanced short- and long-term outcomes

Generalization beyond social skills group might occur by including caregivers (DeRosier et al., 2011)

Caregiver confidence is hugely important.

Caregiver Involvement



TELEHEALTH

Over the past year and a half, access to effective social skills interventions diminished for families of young children as a result of COVID-19, when treatments largely moved to online delivery.

The importance of providing this service for families in need prompted the translation of P4P to a caregiver-focused social skills-telehealth group.

As children under 6 were greatly affected by school and intervention facility closures, caregivers were in search of other effective modalities to access effectual care.

Over the past decade, there have been a number of reviews examining technology and computer-assisted interventions to teach social skills

The majority of these interventions were for adolescents and young adults, with very few accessible to young children.

- The COVID-19 pandemic has challenged clinics to provide patient care in novel formats.
- Previous research suggests telehealth delivery of the PEERS[®] social skills intervention for adolescents results in equivalent outcomes to in-person groups (Miyake et al., 2017; Estabillo et al., 2020)
- Providing P4P instruction over telehealth directly to children 4-6 years is not clinically viable

TELEHEALTH (cont.)

Peers for Preschoolers (P4P)

Randomized controlled trial (RCT) indicated
benefits from P4P

Increases in social
skills

Reduction in ASD
symptoms and
problem behaviors



PEERS® for Preschoolers (P4P) was developed
for younger children (ages 4-6 years) and
has demonstrated initial positive outcomes
with a large effect size (Laugeson et al., 2016; Park et al.,
in press, Tripathi et al., 2021)

Therefore....

- This pilot study aims to investigate
 - Tolerability
 - Feasibility
 - Initial satisfaction
 - Preliminary treatment outcomes of the novel telehealth-caregiver focused version of P4P with the intention of improving social skills for young children with difficulty making and keeping friends and increasing caregiver confidence.





TELEHEALTH ADAPTATION OF P4P

Demographics

- Eleven caregivers, one grandparent, two group leaders (licensed clinical psychologist and postdoctoral fellow), and two behavioral coaches (i.e., research coordinators).
- Children 4-6 years ($M_{age}=5.06$; $SD=.701$) with social difficulties (81.8% ASD)
- 9 boys, 63.6% White; February projected $n=21$

Inclusion criteria

- Fluent in English
- Toilet trained
- Phrase speech (4-6 words)
- Access to electronic device

Exclusion criteria

- Active medical problem, severe mental health problems
- Physical aggression towards adults or children
- Medication change over treatment

PARTICIPANTS

TELEHEATH CAREGIVER- FOCUSED PROGRAM

16 sessions, 1.5 hours, 1 per week, only caregiver (telehealth)

GOAL: Teach fundamental play and social skills in caregiver-assisted social skills group

In-Person: Separate caregiver and child sessions (60 minutes), joint portion (30 minutes)

Caregivers practice coaching child

Overview of the Lesson

- Parent Lesson: Identifying playgroups
- Child Lesson: Meeting and greeting friends
- Parent social coaching using the 4 P's
- Homework assignments



TELEHEALTH PROGRAM

- All clinicians trained on P4P procedures and PEERS® Certified Providers
- A supervisory case conference occurred before each session
- Sessions were delivered via HIPPA-Compliant Zoom (secure regarding confidentiality and effective in treatment administration)
 - As evidenced in the PEERS® for adolescent and young adult groups
- Focused on Parent Coaching



TELEHEALTH FORMAT

- Homework review in two smaller groups
 - Larger group discussion when got to playdates
- Group didactic lesson – parent lesson
 - Topics include: finding appropriate playgroup, setting up playdate,
 - Added talking to other parent about diagnosis and child about diagnosis
- Child Lesson
- Review of HW for next week
- Time at end for questions
- Utilized chat function as well



HOMework REVIEW

- Parents recorded a brief interaction with their child (sent securely to group leaders) using skill(s) discussed the previous week



CAREGIVER DIDACTIC LESSON

- Caregivers provided didactic slides, one page summaries of skills covered, and coaching worksheets to track progress.
- Support and coaching for joining playgroups, setting up playdates, and practicing the skills across a variety of settings.



Lesson 2



Child Lesson: Meeting & Greeting Friends



Session 1: Listening
to and following
directions

Session 2: Meeting
and Greeting
Friends

Session 3: Sharing
and Giving a Turn

Session 4: Asking for
a Turn

Session 5: Keeping
Cool

Session 6: Being a
good sport

Session 7: Show
and Tell

Session 8: Don't Be
Bossy

Session 9: Asking a
Friend to Play

Session 10: Joining
a Game

Session 11: Asking
to Play Something
Different

Session 12: Asking &
Giving Help

Session 13: Stay in
your Own Space

Session 14: Using an
Inside Voice

Session 15: Review
1

Session 16: Review
2 and Graduation

P4P Session Schedule





PUPPET SHOW VIDEO

PUPPET SHOW

- Each week's lesson recorded for parents to review with children
- Could review/rewind with children

PEERS®
for
Preschoolers



Featuring:

Larry Lion &
Ellie Elephant

Puppet Show: Lesson 2B
Greeting Friends





PARENT COACHED PLAY VIDEO

4 P's for SOCIAL COACHING



1) **Priming**: preparing your child to practice newly learned skills immediately before a social opportunity.

2) **Prompting**: a gentle reminder for your child to use a particular skill in the moment.

3) **Praising**: complimenting your child when they use or attempt to use a particular skill.

4) **Providing Feedback using a praise sandwich**: Start with praise using buzzword, then give feedback, end with a general statement of praise.

SAYING "HI"

1. Look at your friend with your eyes (point to your eyes)
2. Smile with your mouth (point to your mouth and smile)
3. Wave with your hand (wave your hand)
4. Say "hi" using your friend's name



Child Lesson: Greeting Friends A

UCLA

1. Look at your friend with your eyes
 - (Point to your eyes)
2. Nicely say “okay” using names
3. Find something else to do
4. If you’re still feeling sad or angry or upset, take deep breaths to keep cool
 - (Take two slow deep breaths)



Child Lesson: Steps for Keeping Cool

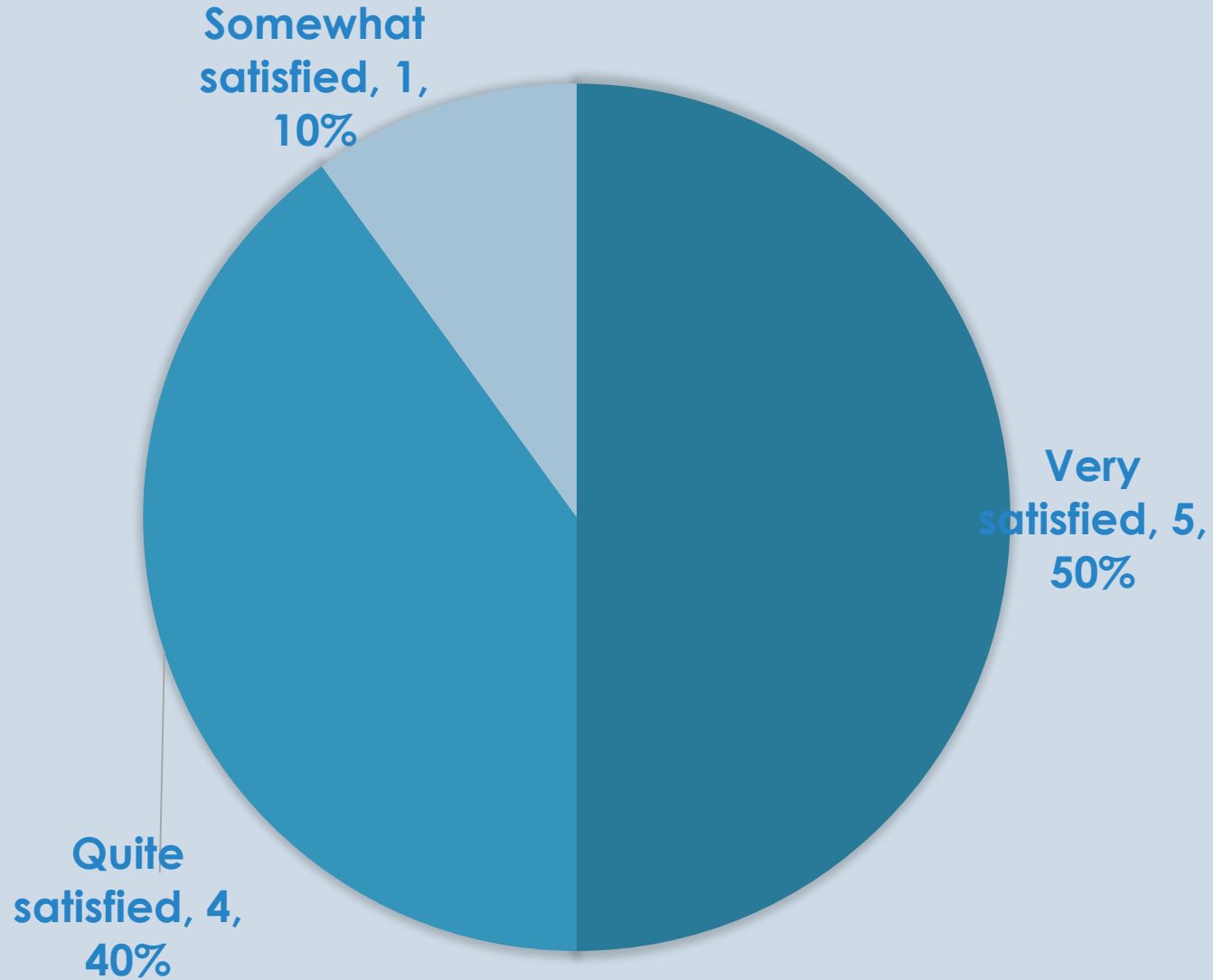
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Parent Coached Play Sheet

- Coaching card used to provide support while using the 4 P's during social coaching

RESULTS

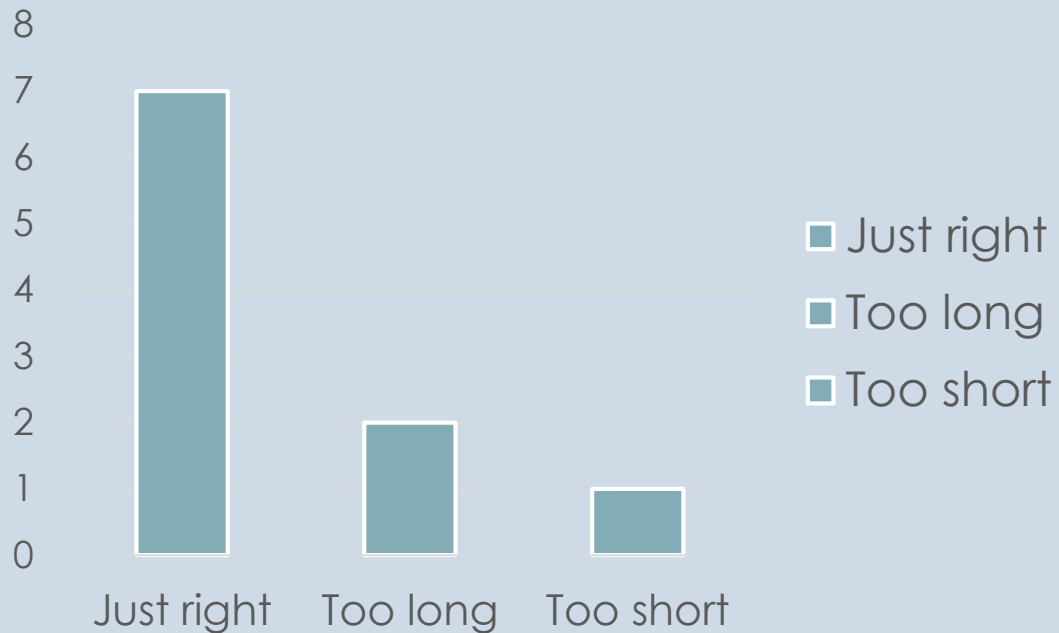




What was
your overall
level of
satisfaction
with the
PEERS® for
Preschoolers
program?

LENGTH OF PROGRAM AND SESSIONS

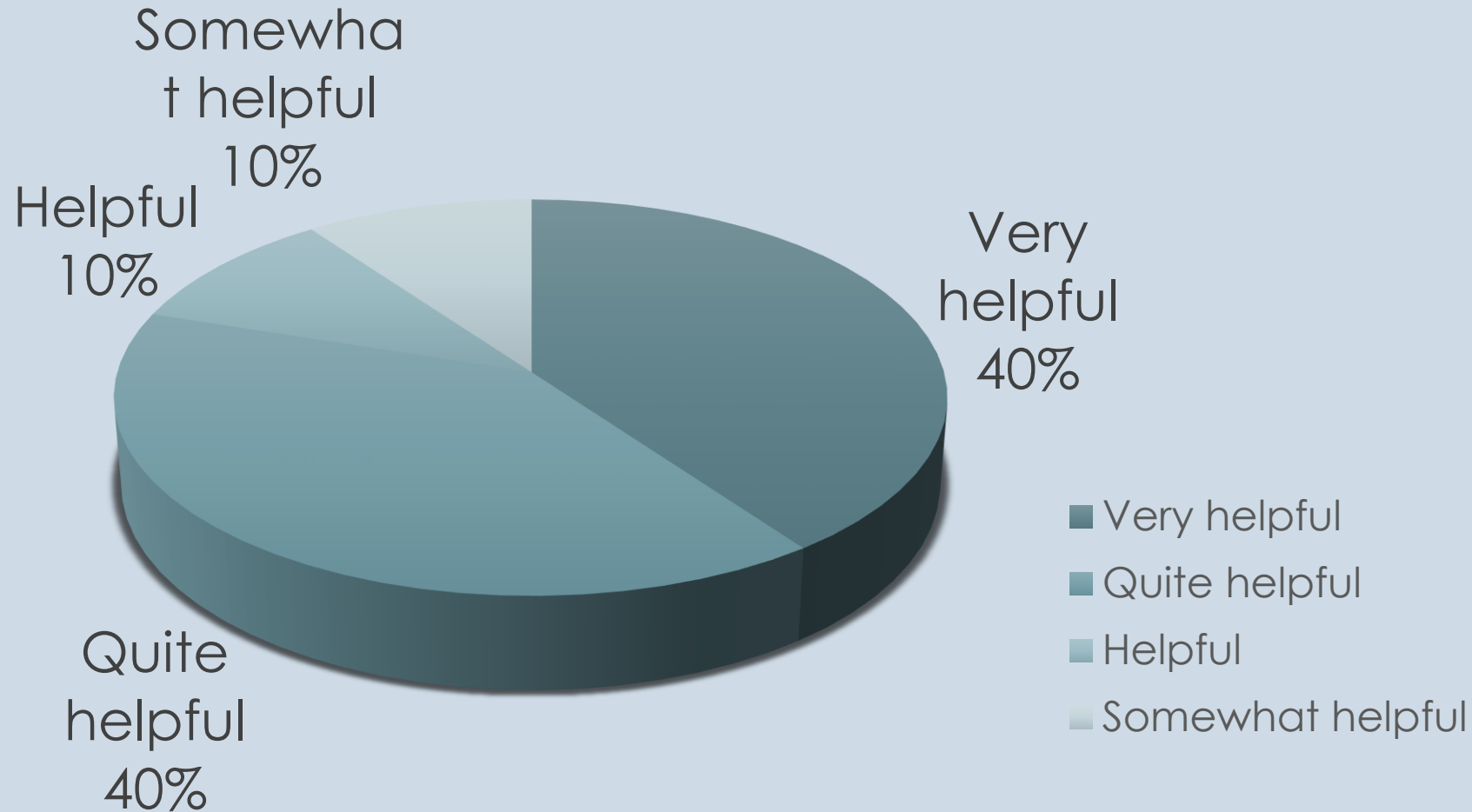
**DID YOU FEEL THAT THE LENGTH
OF EACH SESSION (90 MINUTES)
WAS ADEQUATE?**



**DID YOU FEEL THAT THE LENGTH
OF THE PROGRAM (16 WEEKS)
WAS ADEQUATE?**



HOW HELPFUL WAS IT TO HAVE A TELEHEALTH FORMAT FOR THE PEERS® for PRESCHOOLERS PROGRAM?



TELEHEALTH FORMAT SATISFACTION

SATISFACTION RESULTS

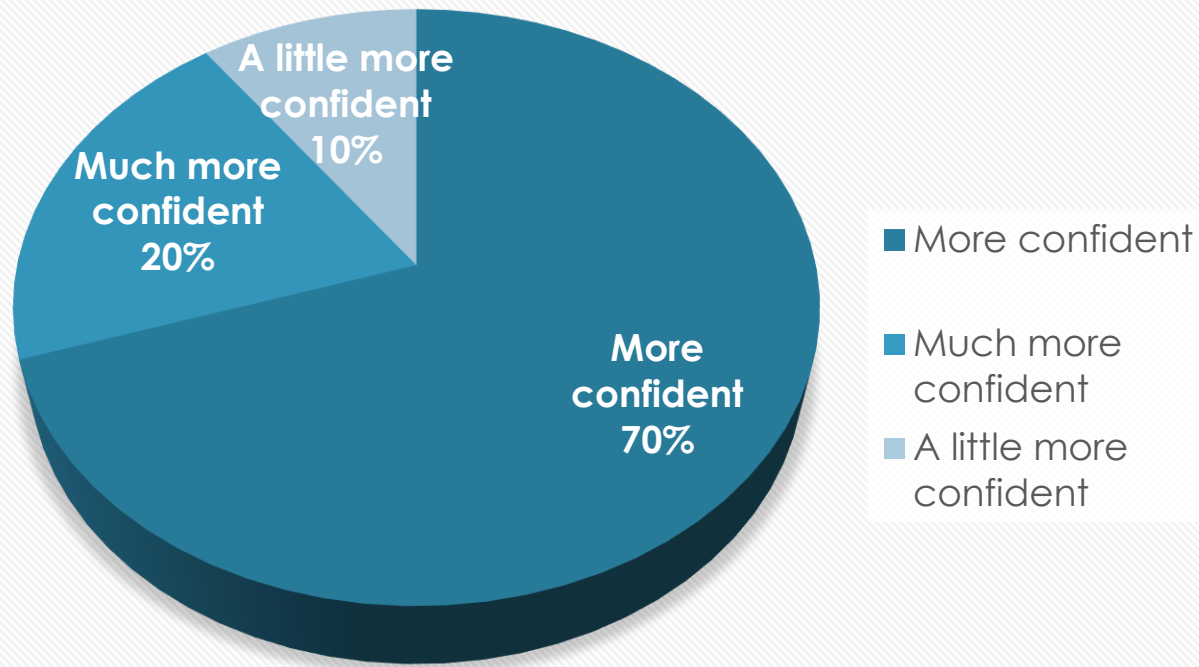
Parental stress decreased upon completion of P4P (PSI-4-SF)

On the QPQ there was a trend toward increase in invited playdates
 $t(7) = 1.19, p = .28, d = .29$

Correlation between invited playdates and total SRS-2 score post-P4P intervention ($r = .71, p = .05$)

Decrease in conflict scores during playdates

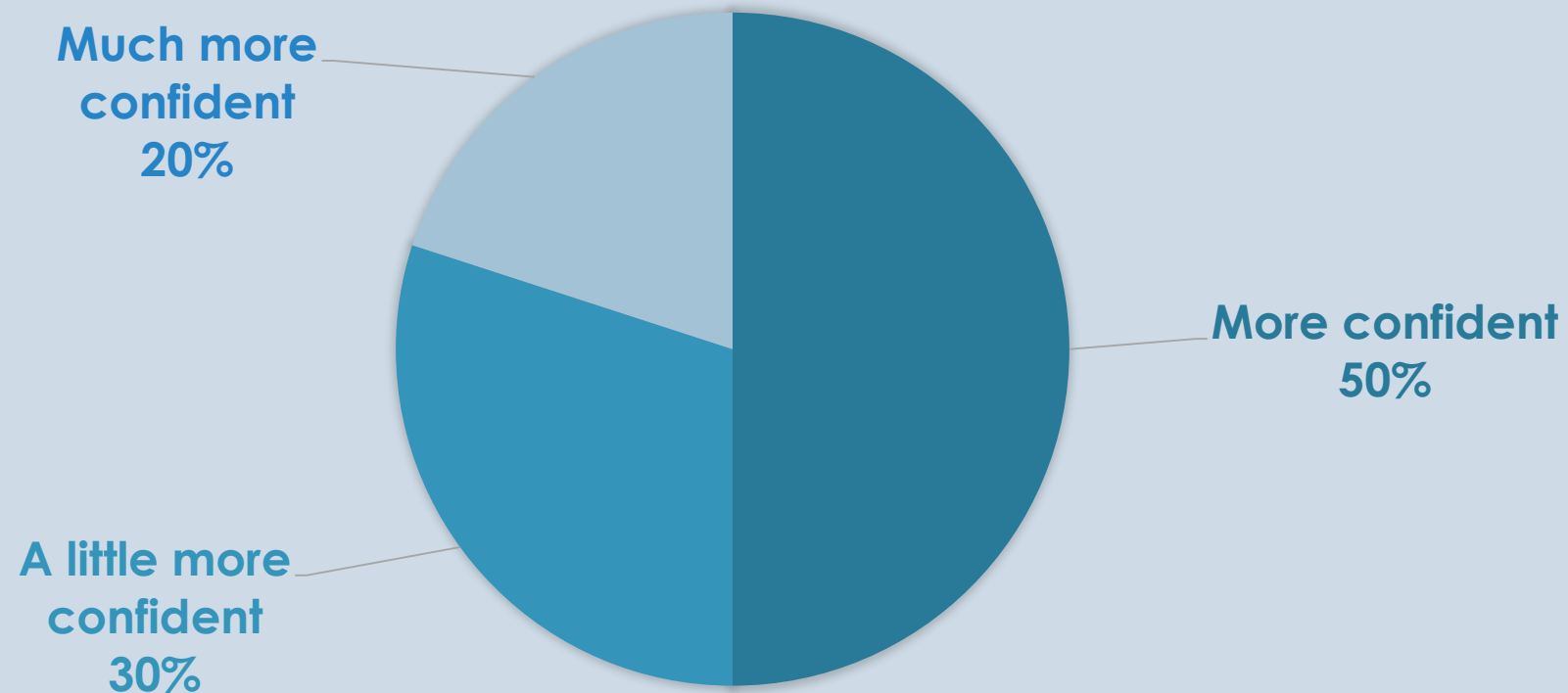
Change in confidence in parenting after completing the PEERS® for Preschoolers program?



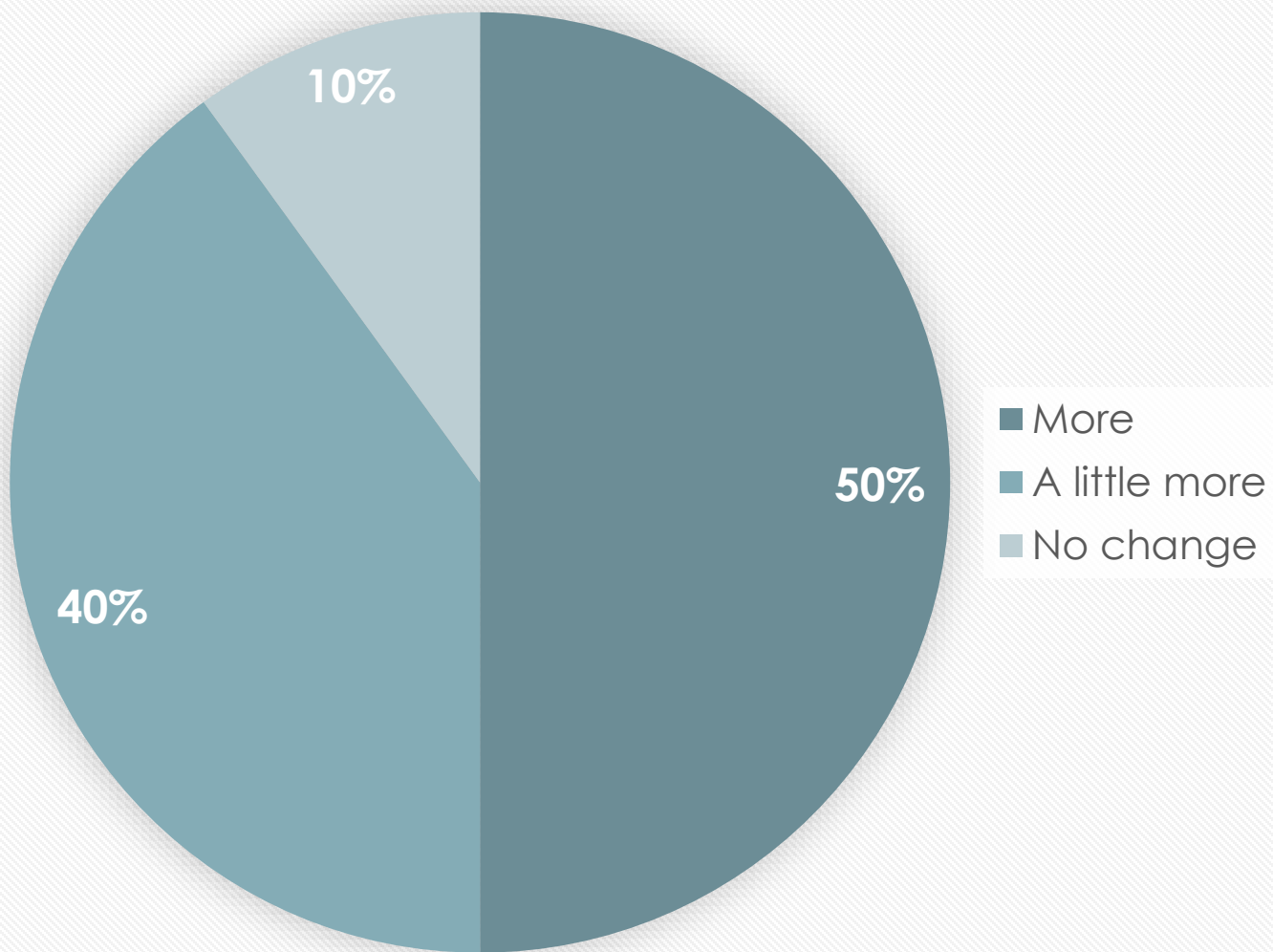
CONFIDENCE IN PARENTING

Significant correlation
between caregiver
confidence in ability to
social coach their child
and child's
improvement in social
skills ($r = .728$, $p = .017$)

**CONFIDENCE IN BEING ABLE TO NAVIGATE SOCIAL SITUATIONS
WITH OTHER PARENTS AFTER COMPLETING THE PEERS® FOR
PRESCHOOLERS PROGRAM?**



**CHILD'S CHANGE IN SOCIAL BEHAVIOR
AFTER COMPLETING THE PEERS® for
PRESCHOOLER PROGRAM?**



**CHILD
CHANGE
IN SOCIAL
BEHAVIOR**

Measure	PRE SCORE (mean, SD)	POST SCORE (mean, SD)
SRS-2- total	<i>M</i> = 71.25, <i>SD</i> = 12.63	<i>M</i> = 68.50, <i>SD</i> = 7.62
Social Awareness	<i>M</i> = 64.00, <i>SD</i> = 12.41	<i>M</i> = 63.38, <i>SD</i> = 10.01
Social Communication	<i>M</i> = 69.88, <i>SD</i> = 9.57	<i>M</i> = 68.38 <i>SD</i> = 6.46
Social Motivation	<i>M</i> = 70.63, <i>SD</i> = 18.52	<i>M</i> = 15.88, <i>SD</i> = 9.66
Social Cognition	<i>M</i> = 62.88, <i>SD</i> = 7.86	<i>M</i> = 64.25, <i>SD</i> = 9.85
RRB	<i>M</i> = 72.00, <i>SD</i> = 15.40	<i>M</i> = 65.88, <i>SD</i> = 10.47
PSI-4-SF (total)	<i>M</i> = 90.00, <i>SD</i> = 17.03	<i>M</i> = 85.00, <i>SD</i> = 18.17
QPQ		
Conflict	<i>M</i> = 10.63, <i>SD</i> = 2.77	<i>M</i> = 9.75, <i>SD</i> = 2.05
Invited Playdates	<i>M</i> = ,63 <i>SD</i> = .92	<i>M</i> = 1.00, <i>SD</i> = .93
Hosted playdates	<i>M</i> = 1.00, <i>SD</i> = 1.41	<i>M</i> = .50, <i>SD</i> = .76

PRE- P4- INTERVENTION SCORES AND POST - P4P INTERVENTION SCORES

QUALITATIVE DATA

- “Now that we have these tools, it feels like we are finally having a successful playdate.. so this was a huge success for my child and the family.”
- “He did great following directions.”
- “Before he would cry or get every emotional if she said no, but that doesn’t happen now. We notice that he sighs and says “Okay” instead.”
- “I feel like the process of this whole class has been an organic process and I don’t know exactly what he is improving on specifically, but I can tell he is improving.”
- “Your and Dr. Reina’s feedback is what I’ll miss the most about these sessions!”
- “ I really enjoyed watching the puppet shows with my child.”
- “The zoom format allowed me to attend.”
- “It was very helpful to hear from other parents.”
- “Reviewing the videos and getting coaching on my own parenting was so helpful!
- “I’ve been praising my team members (at work) since PEERS and I think it makes for a happier team.”
- “I loved the support and education provided by the UCLA PEERS program and really appreciate everybody's efforts to help us learn this stuff even during the pandemic. The zoom sessions have been very convenient to attend. ”



DISCUSSION

Discussion

- **Efficacious, feasible to administer over zoom in a caregiver focused format**
- **Able to reach more families and providers, online and virtual resources would allow training on the P4P intervention through videos and other virtual means**
- **Greater dissemination efforts to expand P4P intervention access to a larger number of families**
- **Generalizability a strength**
- **Possible that intervening at this early age, particularly with caregiver involvement, may facilitate family, peer, and other relationships that encourage child engage in learning opportunities**

LIMITATIONS

- Small, group sizes
- An RCT that employs a more rigorous study design
- More diverse samples (e.g., race, socioeconomic status (SES), location, gender)
- Reliance on caregiver-report measures (Whittingham et al., 2009)
- Observational data could add to robustness of findings



A blue folder with a white label and a light blue tab. The folder is set against a background with a repeating pattern of light blue leaves and circles. The label is a white rectangle with a thin black border, and the tab is a light blue rectangle at the top center.

FUTURE DIRECTIONS

FUTURE DIRECTIONS

- Significant step in social skills intervention research for young children with social difficulties
- Securing P4P as an evidence-based intervention
- More holistic view examining well-being, ensuring individuals in the autistic community feel respected and included
- Goal of PEERS® not to decrease autistic symptomatology, but to teach ecologically valid skills may be beneficial in navigating the social world for any individual who struggles to make and keep friends





CONCLUSION

- Aimed to innovatively create and examine a caregiver-focused telehealth version of P4P
- Preliminary results support the telehealth translation, especially improving parental confidence
- Future work will enable greater understanding for efficacy of the telehealth version and comparison to in-person P4P implementation

CONCLUSIONS





THANK YOU!
QUESTIONS?



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