MODEL ASPERGER PROGRAM (MAP)AT IVYMOUNT SCHOOL, ROCKVILLE, MARYLAND

Impact of Child Centered Play Therapy (CCPT) on Students with High-Functioning Autism and their Instructional Staff:

MAP Report for 2016-17

Eve Müller, Ph.D. & Christy Donley, LCPC, RPT

July 2017

EXECUTIVE SUMMARY

Child-Centered Play Therapy (CCPT) was used by a MAP mental health provider to support four elementary and middle school-aged students with high functioning autism (HFA) in developing social and emotional awareness. Each week, following her sessions with students, she "debriefed" classroom staff in order to support generalization of CCPT outcomes.

This document summarizes findings from a 14 week intervention of the impact of using CCPT on these students, as well as on their classroom staff.

Key findings included the following:

- Students' self-esteem scores increased slightly, and autism symptoms decreased slightly, as measured by classroom teacher assessment. Alexithymia scores, measured by students themselves, were inconclusive.
- Over the course of the study, students' social and emotional awareness improved in both clinical and classroom settings.
- Positive student outcomes included improved perspective taking, ability to articulate bodily sensations/thoughts/feelings, and emotional self-regulation.
- Communication between students' mental health provider and their classroom staff resulted in deeper understanding of students' inner lives, and more nuanced approaches to student behaviors and how to support them.
- All staff involved in the CCPT study were extremely positive about the impact of CCPT on students, and stressed the importance of regular consultation between students' mental health providers and classroom staff.

Findings from this study suggest that CCPT, combined with regular debriefings with classroom instructors, offers a promising means of supporting students' social and emotional learning that complements more skills/behaviorally-based strategies.

PART 1: INTRODUCTION

Child-Centered Play Therapy (CCPT) was use by a MAP mental health provider to support elementary and middle school-aged students with high functioning autism spectrum disorders (HF-ASD) in developing social and emotional awareness. This document summarizes findings from a 14 week study of the perceived impact of using CCPT on four students who received weekly interventions during 2016 and 2017, as well as on their classroom staff.

PART 2: "CHILD CENTERED PLAY THERAPY" INTERVENTION

Play therapy is a form of counseling that provides a way for children to express their experiences and feelings through a natural process involving toys and play. Because children's experiences and knowledge are often communicated through play, play therapy is built on the assumption that play is a vehicle through which children can learn and heal. Child-Centered Play Therapy (CCPT) – also known as nondirective play therapy – is a form of play therapy that is based on the belief that children have the internal drive to achieve wellness, and stresses the importance of the play therapy process being child-driven as opposed to adult-driven.

A recent meta-analysis indicated that play therapy can be an effective tool for improving children's behaviors, social and emotional learning, and self-awareness (Bratton, Ray, Rhine & Jones, 2005; LeBlanc & Ritchie, 2001). A number of single-case studies further suggest that play therapy including CCPT, can have a positive impact on children with *autism spectrum disorders* (ASD) (Josefi & Ryan, 2004; Parker & O'Brien, 2011; Salter, Beamish & Davis, 2016). Limited research has been conducted with this population, however, and replication studies are necessary to establish CCPT as an evidence-based practice for students with HF-ASD.

Research also supports the concept of interdisciplinary dialogue and/or teaming. Findings from several recent studies indicate that communication between related service providers and classroom staff has a positive impact on student outcomes, including improved generalization of skills across contexts (e.g., Callahan, Henson, & Cowan, 2008; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010).

In response to both of these emerging bodies of literature, we decided to test the impact of CCPT on several MAP students, and the intervention took place over the course of 14 weeks from December 2016 through March 2017. Students received individual CCPT once per week for 45 minutes. Following most therapy sessions, Christy, the mental health provider, met with at least one member of the child's classroom team (i.e., teacher, assistant teacher, or dedicated aide) to discuss therapeutic content and make recommendations for how to generalize what was learned during CCPT sessions to the classroom context.

The research team asked three research questions. The first was a quantitative question:

- Do pre/post tests, as well as weekly goal attainment scaling (GAS), indicate a positive impact of CCPT on elementary- and middle-school students with HF-ASD?

The second and third questions were more qualitative:

- How do therapists and classroom staff perceive the impact of CCPT on the social and emotional learning of their students with HF-ASD?
- How do classroom staff perceive the impact of collaboration with their students' mental health provider on their <u>understanding</u> of student's social and emotional support needs,

and use of strategies to support students' social learning and emotion regulation in the classroom?

PART 3: METHODOLOGY

Study Participants. Participants were four students from the Multiple Learning Needs (MLN) Lower and Middle Schools and ranged from 7 through 11 years of age at the beginning of the study. All four were diagnosed with HF-ASD, and struggled with identifying and expressing their emotions in appropriate ways. Participating studentes were identified by Christy, their mental health provider (and the second author of this report), as being likely to benefit from CCPT.

Data Collection.

The following four types of data were collected:

- Battery of Baseline and End-of-Intervention Assessments: These included:
  - *Autism Social Skills Profile (ASSP)* which was completed by students' classroom support staff;
  - *Self Esteem Index (SEI)* which was completed by students; and
  - *Alexithymia Questionnaire for Children* which was completed by students.

- Psychometric Equivalence Tested Goal Attainment Scaling (PET-GAS): PET-GAS provides a measuring system for monitoring students' progress towards their goals. PET-GAS is ideal as an ideographic measurement approach when instructional outcomes, plans and starting baseline levels differ from student to student. Each PET-GAS template is tailored to reflect individual student goals, and a 5-point scale is used to measure progress over time. PET-GAS forms were developed by the program evaluator in conjunction with students' mental health provider and classroom instructors. Two goals were set for each of the four participating students, and PET-GAS forms for each goal were completed weekly by the student's mental health provider and one of his/her classroom instructors over a 13-14 week period.

- Case Notes:
  - The students' **mental health provider** completed case notes following each therapeutic session using a pre-established format intended to describe 1) therapeutic context (e.g., activities, materials used, therapeutic technique), and 2) student participation (e.g., how student played, what student said, level of student engagement, relational dynamics, and significant learning moments/turning points in therapy).
  - One of the student's **classroom instructors** completed a form after each weekly "debrief" with the student's mental health provider in order to document the impact of this information sharing. The form asked 1) what key information the student's mental health provider shared about the student, 2) whether and how this information helped the instructor think differently about the student, and 3) whether and how this information impacted the way the instructor and other members of the classroom team interacted with the student.

- End-of-Year Interviews: After the 14 week intervention came to an end, interviews were conducted with each of the students' classroom instructors. The interview protocol included both Likert-type and open-ended questions and addressed the following areas:
  - whether and how play therapy pull-out sessions generalized to the classroom;

- o whether and how the debrief meetings with the mental health provider affected the way instructors 1) understood the student, 2) interacted with the student, 3) supported the student through difficult moments; and
- o whether and how the debrief meetings affected instructors' relationships with students.

Data Analysis.

Data were analyzed in the following ways:

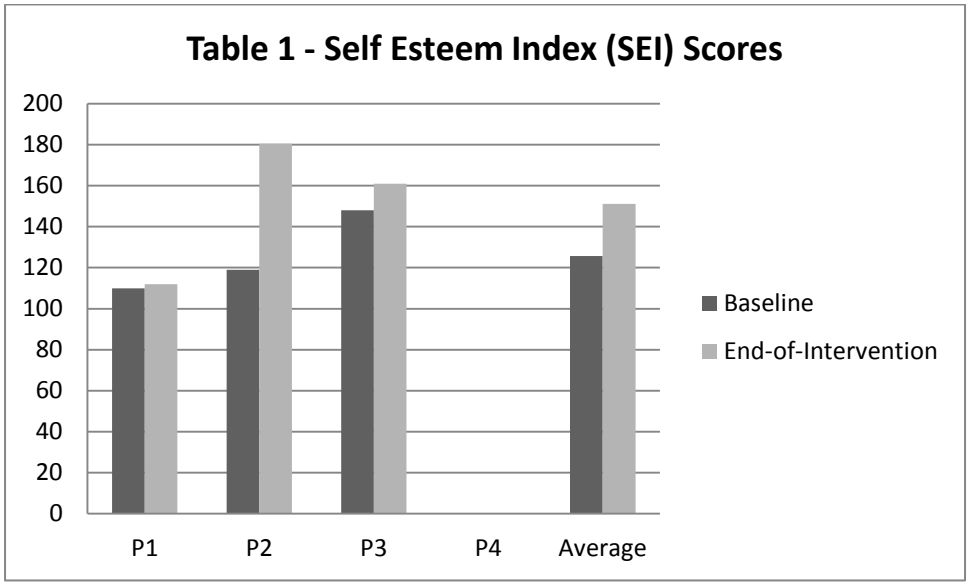
- Battery of Baseline and End-of-Intervention Assessments: Baseline and end-of-intervention assessments (i.e., ASSP, SEI, and Alexithymia Questionnaires) were compared and average change over time calculated using Excel.
- Psychometric Equivalence Tested Goal Attainment Scaling (PET-GAS): PET-GAS scores for each of the four students were tracked using line graphs, and changes over time were calculated using Excel.
- Case Notes: Case notes from therapy sessions and from debriefings with classroom staff were analyzed for common themes.
- End-of-Year Interviews: Scores were averaged across classroom staff for Likert-type questions, and transcripts from interviews with classroom staff were analyzed for common themes, and

PART 4: OUTCOMES

Assessment Scores

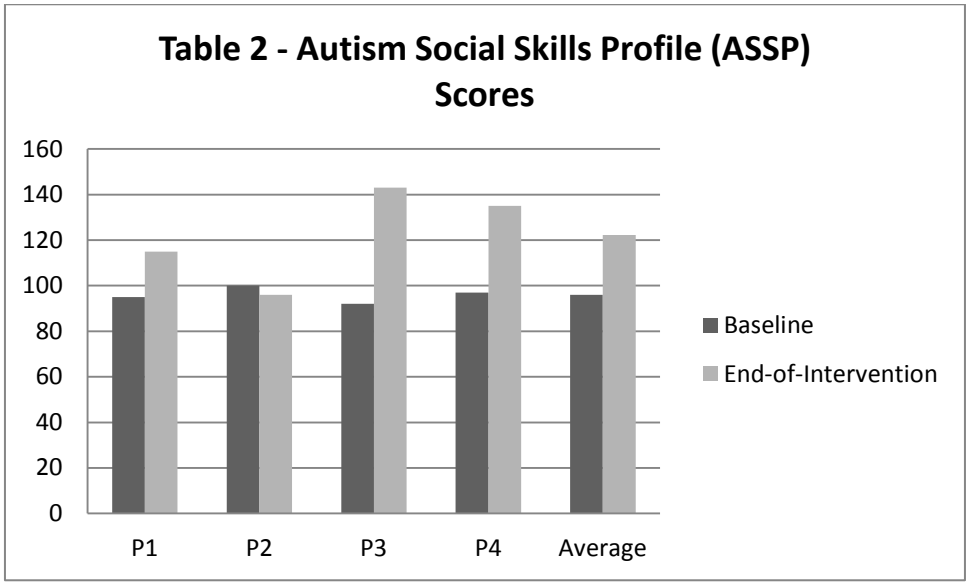
Self Esteem Index (SEI)

SEI data were available for three of the four students. Based on SEI scores, two demonstrated minimal growth, and one demonstrated moderate/significant growth over time (see Table 1). On average, students' scores increased 25.5 points out of a possible 200. Due to the small sample size, however, results should be interpreted with caution.



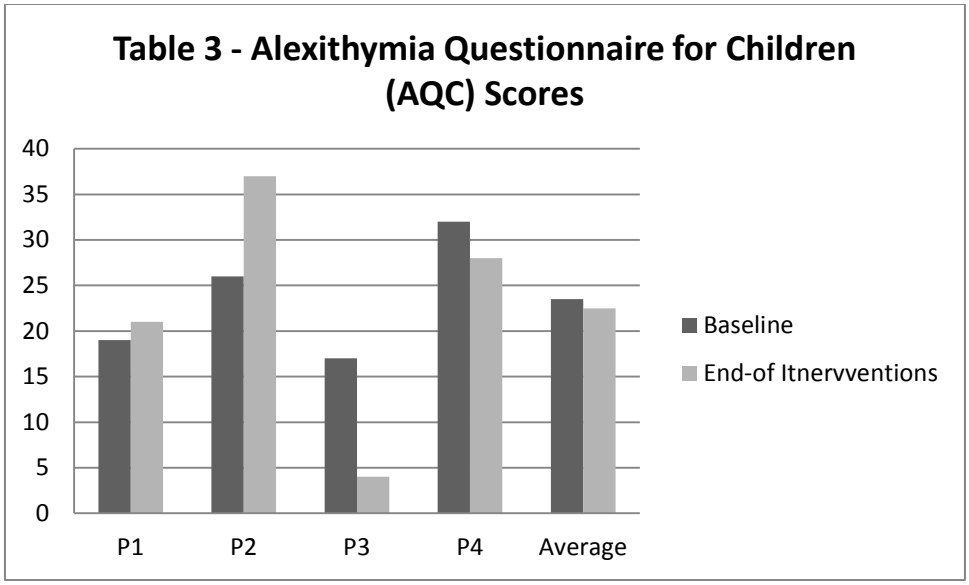
Autism Social Skills Profile (ASSP)

ASSP data were available for all four students. Based on ASSP scores, one demonstrated minimal/moderate growth, two demonstrated moderate/significant growth, and one regressed very slightly (see Table 2). On average, students' scores increased 26.25 points out of a possible 160. Due to the small sample size, however, results should be interpreted with caution.



Alexithymia Questionnaire for Children (AQC)

AQC data were available for all four students. One student demonstrated minimal growth, one demonstrated significant growth, one regressed a small amount, and one regressed significantly. On average, students' scores went down by one point out of a possible 40. The AQC was the sole measure completed by students themselves, as opposed to instructors, and may not have been reliable. In fact, as students' self-awareness grows, their self-evaluation using the AQC may actually decline. Again, results should be interpreted with caution due to the small sample size.



PET-GAS

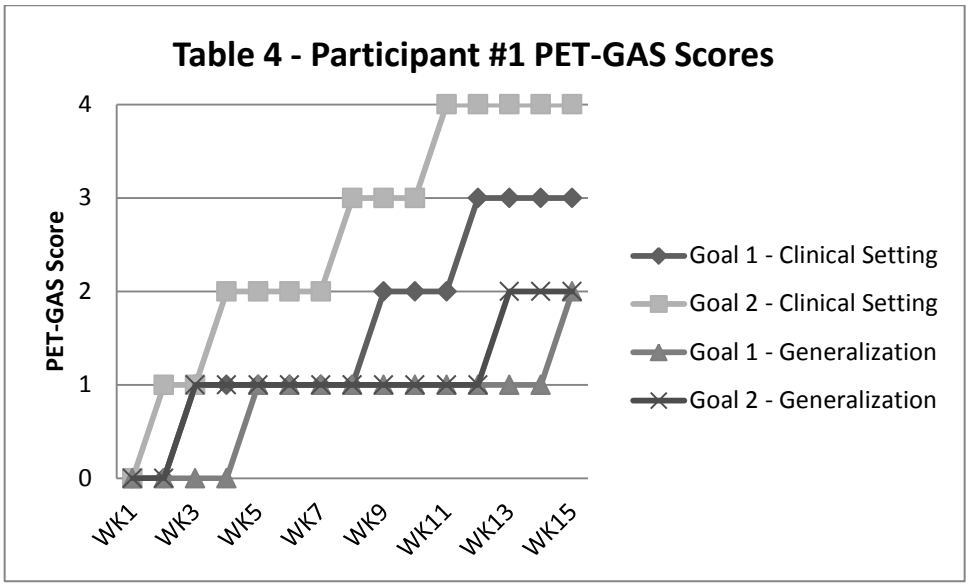
PET-GAS scores indicated meaningful growth for all four participants. Because of the ideographic nature of the goals (which were different for each participant), we have created one line graph for each student. The following key is for use when interpreting these graphs.

0 = much less than expected outcome
1 = somewhat less than expected outcome
2 = expected level of outcome
3 = somewhat more than expected outcome
4 = much more than expected outcome

Participant #1 worked towards the following goals:

- Goal 1 – *With visual and verbal prompting, using facial cues, body language and verbal cues, student will identify characters' actions and reactions to a behavior in 80% of opportunities.*
- Goal 2 – *With verbal and visual prompting, student will label his feelings using the Zones of Regulation in 80% of opportuniites.*

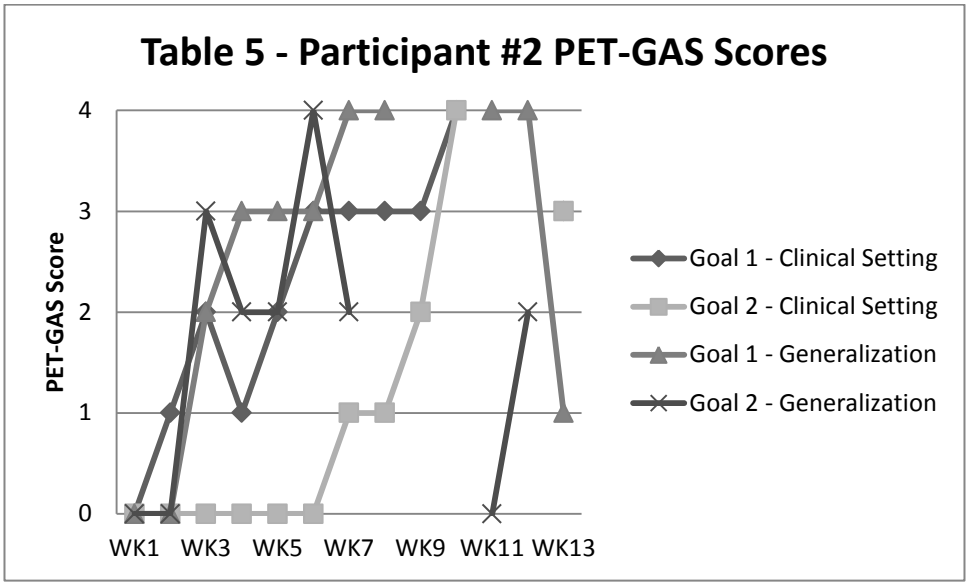
Based on examination of the line graph for Participant #1, it appears that he demonstrated consistent and meaningful growth for both goals in the clinical (1:1 therapy) and generalization (classroom) settings (see Table 4). For both goals, Participant #1 exceeded growth expectations in the clinical setting, and met expectations in the generalization setting.



Participant #2 worked towards the following goals:

- Goal 1 – *When upset by a situation in the context of the therapy office, with verbal and visual prompting, student will identify how he is feeling in 80% of observable situations.*
- Goal 2 – *With visual and verbal prompting, student will identify one or more strategies that are helpful when experiencing an emotional trigger in 80% of opportunities.*

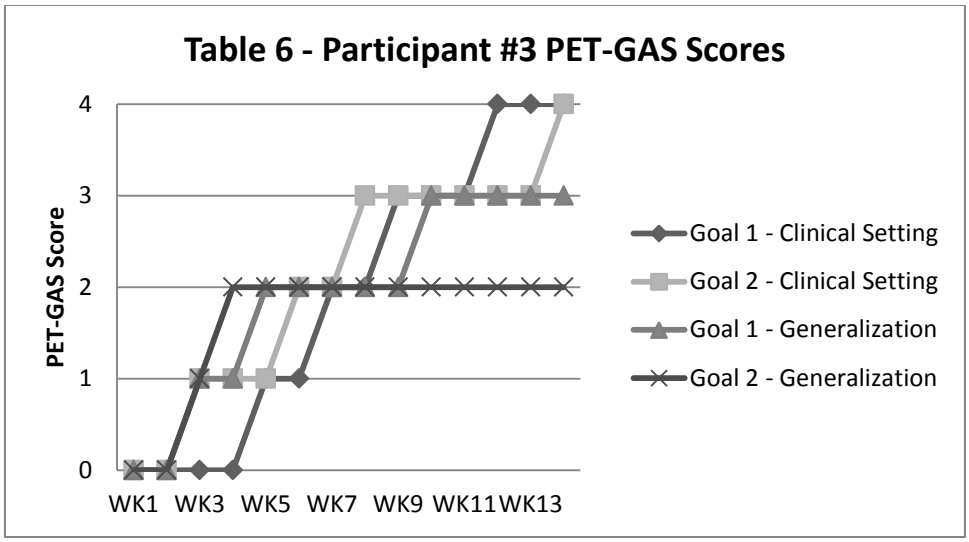
Based on examination of the line graph for Participant #2, it appears that he demonstrated consistent and meaningful growth for both goals in the clinical (1:1 therapy) setting, but not in the generalization (classroom) settings (see Table 5). For both goals, Participant #2 exceeded growth expectations in the clinical setting, but performed inconsistently in the generalization setting, with some regression at times.



Participant #3 worked toward the following goals:

- Goal 1 – *In a structured setting, and with visual and verbal prompting, student will identify one or more strategies that are helpful for managing excitement in target situations during 80% of opportunities.*
- Goal 2 – *In a structured therapy task, with verbal prompting and a visual menu of social cues, student will make a smart guess and/or answer questions about how the therapist or a pictured character is feeling in 80% of observed opportunities.*

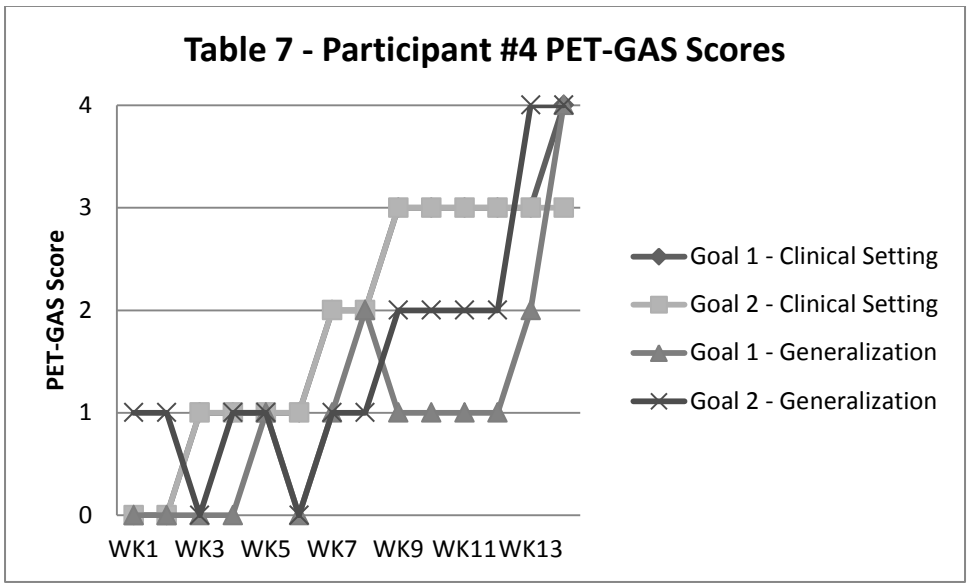
Based on examination of the line graph for Participant #3, it appears that she demonstrated consistent and meaningful growth for both goals in the clinical (1:1 therapy) setting, but only for one goal in the generalization (classroom) setting (see Table 6). For both goals, Participant #3 exceeded growth expectations in the clinical setting, exceeded expectations for one goal in the generalization setting, and met expectations for the second goal in the generalization setting.



Participant #4 worked toward the following goals:

- Goal 1 – *Given a hypothetical situation or scenario during a structured therapy session, with visual and verbal prompting, student with identify the perspective of someone he does not agree with or cannot relate to in 80% of observed opportunities.*
- Goal 2 – *Given a hypothetical situation in a structured therapy setting, and one visual and one verbal prompt, student will make a plan to handle disappointments in 80% of opportunities.*

Based on examination of the line graph for Participant #4, it appears that he demonstrated consistent and meaningful growth for both goals in the clinical (1:1 therapy) and generalization (classroom) settings (see Table 7). For both goals, Participant #4 exceeded growth expectations in the clinical setting, and exceeded expectations for one goal in the generalization setting. Although growth was less linear within the generalization setting, and Participant #4 demonstrated regression at some points throughout the study, by week 14, he had exceeded growth expectations in this context as well.



Case Notes

Based on the therapist's case notes for each session, a number of key student outcomes related to CCPT sessions were identified. These included the following:

- Using sand tray therapy to work through personal/relational issues at home and in the classroom
- Verbalizing stress levels
- Identifying bodily sensations
- Working on self-advocacy skills
- Working on perspective taking and theory of mind skills to better read peers' thoughts and feelings, and to more effectively communicate their own thoughts and feelings
- Identifying peers with whom they are comfortable
- Repairing relationships with classroom staff (e.g., identifying instructors' positive and neutral intentions)
- Working through difficult moments and using positive self-talk
- Changing behavior to give others "good thoughts"
- Developing new strategies for use in the classroom (e.g., moon visual, Hoberman sphere, Zones visual)

Note: We are not including a separate section on the analysis of classroom instructors' case notes because themes overlapped considerably with those reported in next section (see Interview Data).

Interview Data

Perceived Generalization of CCPT to Classroom Setting

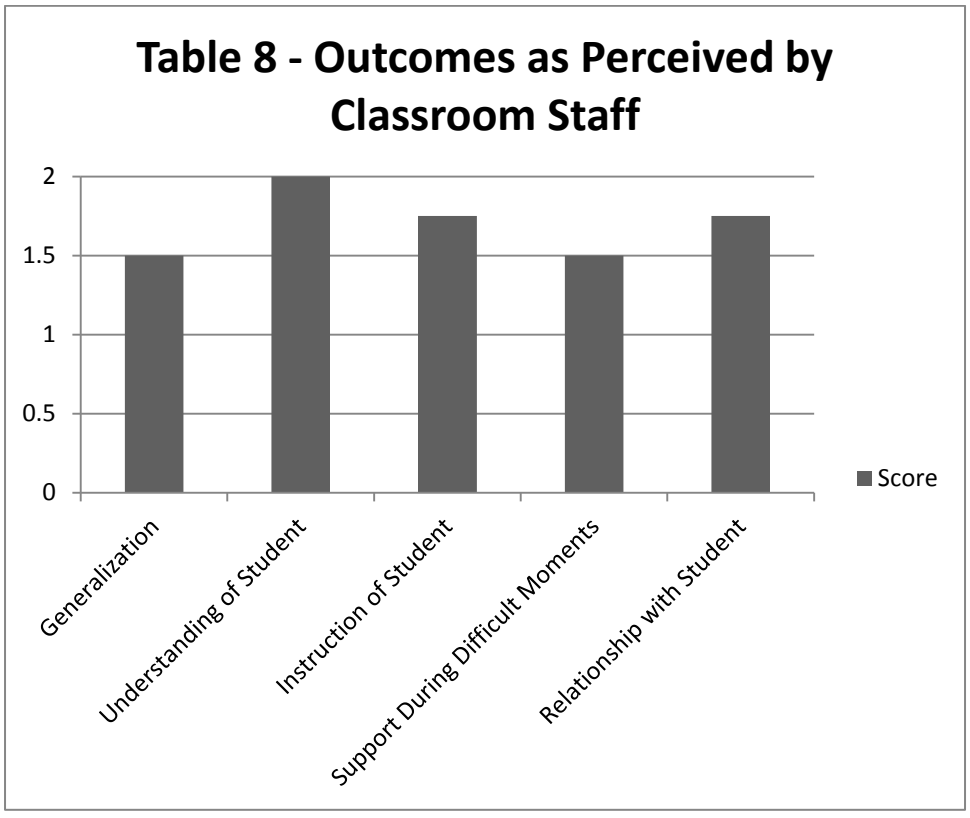
When asked whether the play therapy work done with the student during pull-out sessions had generalized to the classroom, classroom instructors' responses averaged 1.5 out of 2.0, or halfway between "somewhat" and "a lot" (see Table 8). All four provided ample evidence of generalization taking place. Typical comments included:

- *"[The student] really enjoyed her time with Christy. She was always really willing to talk about different strategies she can use in the classroom, and how she wanted to use them to impact her friendships and relationships in class. She was okay with Christy talking with me, and working with me to implement strategies in the classroom …. She uses almost all the strategies she practiced with Christy in the classroom now. For some, she can grab independently. For others she needs us to say, 'Do you need to use a strategy now?' and then she picks one she needs."*
- *"Having Christy break down interactions, that his perception is far off from the other person's intent, I think over time, he's been able to take a step back and not immediately get so upset or defensive."*
- *"[During play therapy] he was able to work through [issues] himself, and then come back and tell me … about it, and then generalize it to what was happening in the classroom."*
- *"Because of his sessions with Christy, he still has trouble in the moment, but if a teacher pulls him aside and says, 'This is actually what this person is thinking, this is how you can respond to get what you want,' he's like 'Okay, I get it,' and he's much more receptive to it."*

Perceived Impact of CCPT on Instructors' Understanding of Students

When asked whether debriefing with Christy following students' CCPT sessions impacted their understanding of the student, classroom instructors responded with 2.0 out of 2.0 or "a lot" (see Table 8). All four provided examples of this, and typical comments included the following:

- *"Christy worked really hard with her through a Tourette's workbook. We now realize she has beeps, tics, meows she has no control over …. The biggest change is we realize she can't control these tics so we don't punish her on her point sheet. Instead, we need to support her by giving her strategies to use in the classroom."*
- *"Having her help us understand where the breakdowns are in his interactions really opened my eyes …. Having Christy hear him, and gauge where he's at, and then explain it to me was really helpful."*
- *"From Christy, I was able to get the intent behind what he was saying …. I realized from talking with Christy that [student] has the skill to be able to see when he overreacts, is aware, and learned that this is how we can bring it to his attention in a way to avoid it happening again …. I didn't think he had any awareness of what he was doing and the thoughts he was giving other people, but given play therapy … I learned that he's much more aware of what he's doing and his friendships at school. He's not only aware of it, but cares about it as well."*
- *"Every time I talked with Christy, [the student's behavior] immediately made sense, and I would think, 'Oh, that's why he was probably doing this or avoiding that one thing.'"*



Perceived Impact of CCPT on Instructors' Interactions with Students

When asked whether debriefing with Christy following students' CCPT sessions impacted their interactions with students, classroom instructors' responses averaged 1.75 out of 2.0, or just less than "a lot" (see Table 8). All four provided examples of this, and typical comments included:

- *"One thing is that [the student] needs to touch other people, like on my arm. With anyo other student, I would ask them to give me a bit of space, but with her, because I know she couldn't help it when she grabbed my arm I didn't pay a lot of attention – just let her do it. So my understanding of her tics as part of her Tourette's affected my response to her."*
- *"Christy got him from catastrophic statements to saying what he really meant. Instead of ignoring [his] statements, I got him to process more, so [my behavior] changed in that way."*
- *"Once I knew that he was aware of how some of his tics and OCD were affecting his friendships, I know I changed the way I processed social problems with him. I realized I could start on a deeper level, and didn't have to start at square one – bringing him to attention: but could skip to processing."*
  "After talking with Christy, I realized how important it was to constantly point out to him and remind him that others were having thoughts that were different from his, explain what those thoughts were, and how I knew that. He would get stuck on not understanding why people were doing things. When I talked with Christy, I realized how frequently all teachers needed to be debriefing everyone's thoughts and feelings around him."

Strategies Perceived by Instructors as Most Helpful

When asked to identify one or two strategies shared by the Christy that classroom instructors found to be most helpful, they identified the following:

- Calming strategies (e.g., meditation, movement strategies, yoga, belly breathing, weighted blankets, mandalas)
- Acknowledging students' emotions/feelings and helping them "ride it out"
- Processing and talking
- Visuals (e.g., having student draw a situation and the proposed solution on paper)
- Making student aware that others thinking something totally different from what student thinking

Perceived Impact of CCPT on Supporting Students Through Difficult Moments

When asked whether debriefing with Christy following students' CCPT sessions impacted their ability to support students through difficult moments, classroom instructors' responses averaged 1.5 out of 2.0, or halfway between "somewhat" and "a lot" (see Table 8). Three provided examples of this:

- Helping student make a plan when she was calm that she could use when upset
- Helping student utilize calming strategies
- Helping student "break it down" (e.g., recognizing feeling/upset, understanding why upset, working to fix problem)
- Helping student verbally process social anxiety

Perceived Impact of CCPT on Instructors' Relationships with Students

When asked whether debriefing with Christy following students' CCPT sessions impacted their relationships with students, classroom instructors' responses averaged 1.75 out of 2.0, or just less than "a lot" (see Table 8). All four provided examples of this, and typical comments included:

- *"I think he came in kind of 'teachers are against me' …. We're so trained to not reinforce some of those negative, inappropriate behaviors, that taking a few moments to listen to him was a turning point. He'd be like, 'Oh, they do are. They do want to understand and hear what I have*

to say – not just ignore me.' As a result of that, my interactions with him were a lot more positive and we had a lot more rapport."

- *"We always had a pretty solid relationship, but being a part of the CCPT thing, and having Christy pull me into some sessions, really upped our relationship skills, communication skills and trust and understanding."*
- *"In the beginning, we didn't understand each other a lot. Through the work he did with Christy, and my debriefs with her, I was able to learn the most effective ways to communicate with him. In other words, to explain my thinking behind why I asked him and other students to do things. It helped me understand his actions, and him to understand mine, and it helped build trust with him."*
- *"When [the student] saw that we understood what she needed, and were able to work with her to make plans with her when she was calm, she was really excited to tlak with us about making a plan when she was calm that she could use when upset."*

PART 5: SUMMARY

In summary, both qualitative and quantitative data suggest that weekly CCPT, combined with debriefings of classroom instructors by the students' mental health provider, resulted in positive social and emotional learning outcomes for students, as well as improved knowledge and skill on the part of classroom instructors regarding how to support students' social and emotional learning.

Self-esteem (SEI) and social skills (ASSP) scores trended higher over the 14 week period (although the sample was too small to be considered conclusive). However, the alexithymia questionnaire (AQC), which was the only form of data gathered directly from students, was inconclusive – with two students' scores indicating growth, and two students' scores indicating regression. This is likely explained by the fact that students were not reliable assessors of their own skill levels, and may actually have given themselves lower scores over time because of greater self-awareness of the challenges they face in this area.

PET-GAS scales, which measured goal attainment on two goals per student indicated that students considerably exceeded expected mastery levels for all eight goals within the *clinical* setting (i.e., when working directly with Christy), considerably exceeded expected mastery levels for three goals within the classroom setting, and met expected mastery goals for the remaining five goals within the classroom setting.

Qualitative data from interviews and case notes further point to the fact that CCPT resulted in positive outcomes for students and classroom instructors. Outcomes for students included improved perspective taking, ability to articulate bodily sensations/thoughts/feelings, and generalization of skills to the classroom context.

In terms of positive outcomes for classroom staff, the following were noted by all four: improved understanding of students, improved interactions with students, improved ability to support students through difficult moments, improved relationships with students, and knowledge of multiple strategies that were helpful when working with students. Significantly, all five staff included in this study were extremely positive about the CCPT intervention, and felt it contributed significantly to desired outcomes for participating students.

All of these findings suggest that CCPT, combined with regular debriefings with classroom instructors, offers a promising means of supporting students' social and emotional learning that complements more skills/behaviorally-based strategies.

ACKNOWLEDGEMENTS

The authors wishes to thank all members of the classroom teams who participated in this study, including, Marisa Canan-Zucker, Symone Folson, Christine Lowery, and Analisa Meyers, without whom this study would not have been possible. We are also grateful to the students who participated in this study for their hard work and commitment to understanding and expressing their emotions in socially appropriate ways.

REFERENCES

Bratton, S., Ray, D., Rhine, T., & Jones, L. (2005). The efficacy of play therapy with children: A meta-analytic review of treatment outcomes. *Professional Psychology: Research and Practice, 36*(4), 376-390.

Callahan, K., Henson, R. K., & Cowan, A. K. (2008). Social validation of evidence-based practices in autism by parents, teachers, and administrators. *Journal of Autism and Developmental Disorders*, *38*(4), 678-692.

Friend, M., Cook, L., Hurley-Chamberlain, D., & Shamberger, C. (2010). Co-teaching: An illustration of the complexity of collaboration in special education. *Journal of Educational and Psychological Consultation*, *20*(1), 9-27.

Josefi, O., & Ryan, V. (2004). Non-directive play therapy for young children with autism: A case study. *Clinical Child Psychology and Psychiatry, 9*, 533-551.

LeBlanc, M., & Ritchie, M. (2001). A meta-analysis of play therapy outcomes. *Counseling Psychology Quarterly, 14*, 149-163.

Salter, K., Beamish, W., & Davies, M. (2016). The effects of child-centered play therapy (CCPT) on the social and emotional growth of young Australian children with autism. *International Journal of Play Therapy, 25*(2), 78-90.