

A.T. Still University

Still ScholarWorks

OT Student Capstones

Occupational Therapy Department

2020

Outcomes of Capstone Experience: Playing Together: Outcomes of an Online Telehealth Sensory-Motor Development Program for Parents with Children between the ages of 1.0-6.11 years

Sarah Cunningham
A. T. Still University

Follow this and additional works at: <https://scholarworks.atsu.edu/ot-capstones>



Part of the [Occupational Therapy Commons](#)

Recommended Citation

Cunningham, Sarah, "Outcomes of Capstone Experience: Playing Together: Outcomes of an Online Telehealth Sensory-Motor Development Program for Parents with Children between the ages of 1.0-6.11 years" (2020). *OT Student Capstones*. 32.

<https://scholarworks.atsu.edu/ot-capstones/32>

This Capstone is brought to you for free and open access by the Occupational Therapy Department at Still ScholarWorks. It has been accepted for inclusion in OT Student Capstones by an authorized administrator of Still ScholarWorks. For more information, please contact mohammadaslami@atsu.edu.

“Playing Together”: Outcomes of an Online Telehealth Sensory-Motor Development Program for Parents with Children between the ages of 1.0-6.11 years

Sarah Cunningham, OTS

Advisor: Dr. Rachel Diamant, PhD, OTR/L, BCP

Literature Review

- Toxic stress, ACEs, and insecure attachment can lead to physical, emotional, social, and behavioral disorders which impact the child throughout their lifespan. Trauma exposure effects child development, psychopathology, and functioning (Saunders & Adams, 2015).
- Due to the link between maternal behavior, childhood attachment and ACEs, the importance of involving the caregivers in the infant’s or young child’s developmental intervention program is vital (Champagne, 2011). Healthy secure attachment between parent and child produces a strong sense of self-identity, resiliency, and wellbeing (Champagne, 2011).
- Interventions focused on families can promote mental and emotional health in the child (Gronski et al., 2013). Family-centered practice entails coaching the family in addition to treating the young child, as well as collaborating with families and learning their culture, roles, routines, strengths and goals (Elenko, 2019).
- Wallisch, Little, Pope and Dunn (2019), found parents expressed that occupation-based coaching delivered via a web conference was more compatible with everyday life, they were able to have a more collaborative relationship with their therapist, and the parents felt more empowered. Creating a family-centered program that is delivered via telehealth can display developmental improvements over the length of the program (Figueiredo, 2019; Gibbs & Toth-Cohen, 2011; Wallisch et al., 2019).

Research Question and Hypothesis

RQ: Will family participation in an online telehealth developmental playgroup affect the development of sensory-motor, social-emotional, and play skills in children between the ages of 1.0-6.11 years with developmental delays?

H₁: Family participation in an online telehealth developmental playgroup will facilitate development of sensory-motor, social-emotional, and play skills in children between the ages of 1.0- 6.11 years with developmental delays.

Methods

- Mixed Methods, Single Subject research design
- Quantitative: *Canadian Occupational Performance Measure (COPM)* and *Short Child Occupational Profile (SCOPE)*
- Qualitative: Parent interviews, parent surveys, weekly journals, session documentation
- N=5
- Timeline:
 - Weeks 1-2: Recruitment and pre-assessments
 - Weeks 3-10: Individual hour-long sessions (five individual online sessions per participant) and weekly home program
 - Weeks 11-14: Post-assessments and data analysis

Participant:

- Inclusion Criteria:**
- Adult caregivers with children, 1.0 to 6.11 months of age who have developmental delays
 - Who have access to video conferencing capabilities

- Exclusion Criteria:**
- People who are not adult caregivers with children, 1.0 to 6.11 months of age who have developmental delays
 - Those who do not have access to video conferencing capabilities

Participant Demographics	
Age (years: months)	
Range	(2:0 - 4:11)
Mean	3:6
Median	3:6
Gender (%)	
Male	60%
Female	40%
Location (%)	
Suburban	80%
Rural	20%
Ethnicity (%)	
Caucasian	80%
Hispanic	20%

RESULTS

Case 1- EM

- Female, 4 years 11 months
- Global Developmental Delays, Intermittent Ataxia – decreased attention, decreased hand strength, difficulty with fine motor skills
- COPM Clinically Significant Progress: brushing teeth, tracing first name, copying horizontal line, and total score
- SCOPE Clinically Significant Progress: sensory-motor
- Themes: moving location of activity to increase attention, break tasks into individual steps for success

Case 2- JF

- Male, 2 years 9 months
- MECP 2 Duplication syndrome – low muscle tone, decreased balance and motor planning, cognitive delays
- COPM Clinically Significant Progress: none
- SCOPE Clinically Significant Progress: sensory-motor, social-emotional, and coping strategies/adaptations
- Themes: repetitive parent education for increased carry-over, parent preparedness

Case 3- AB

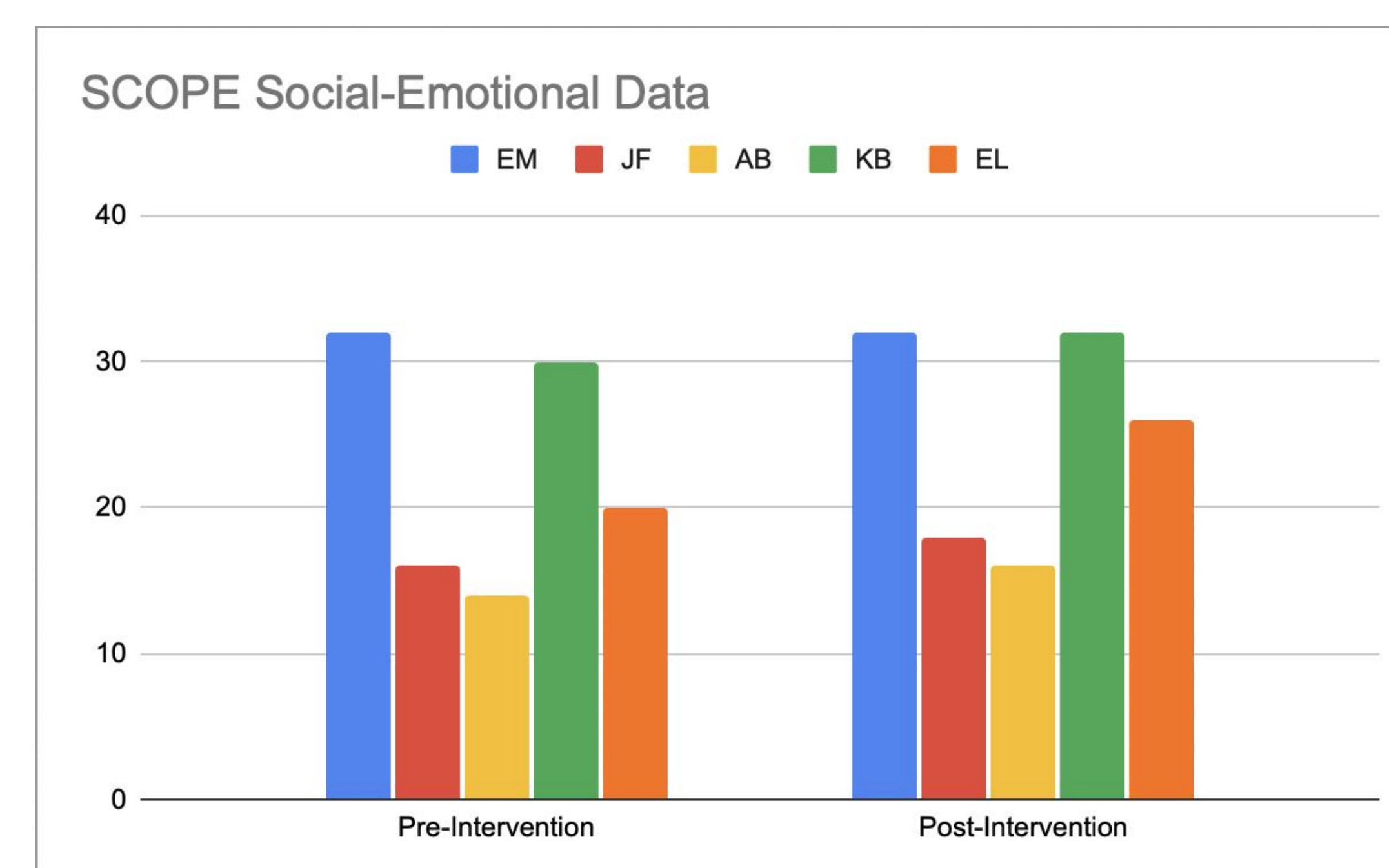
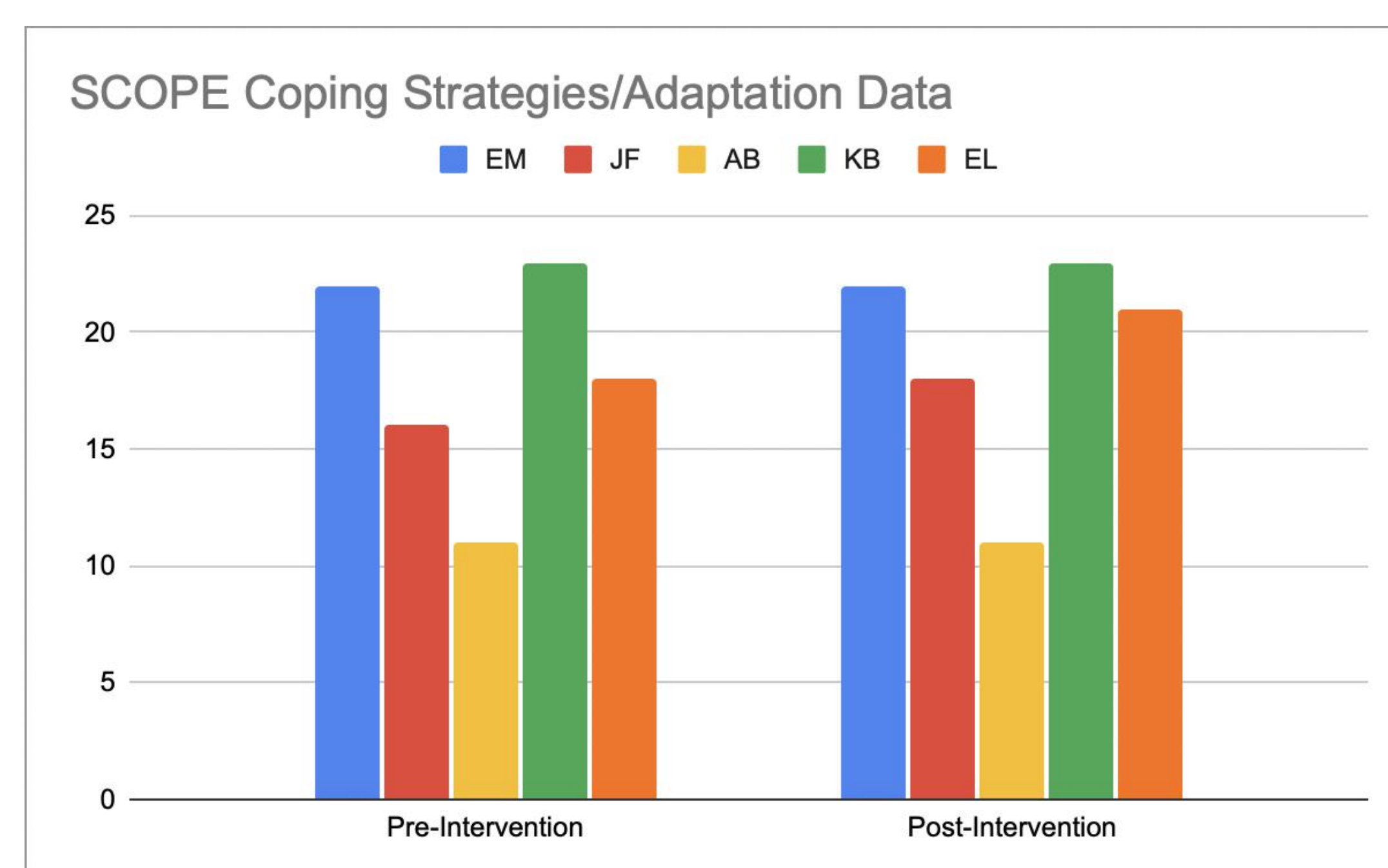
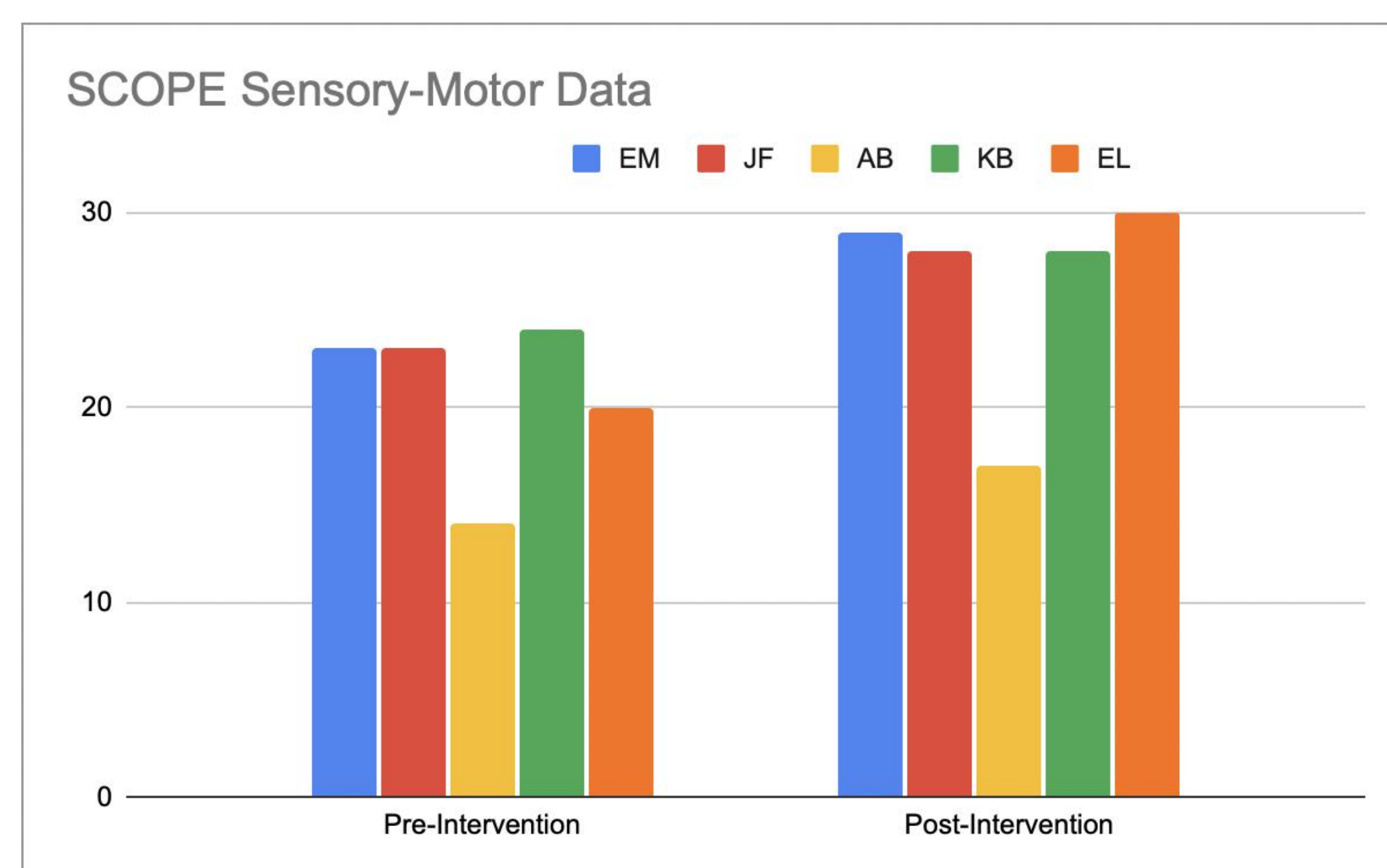
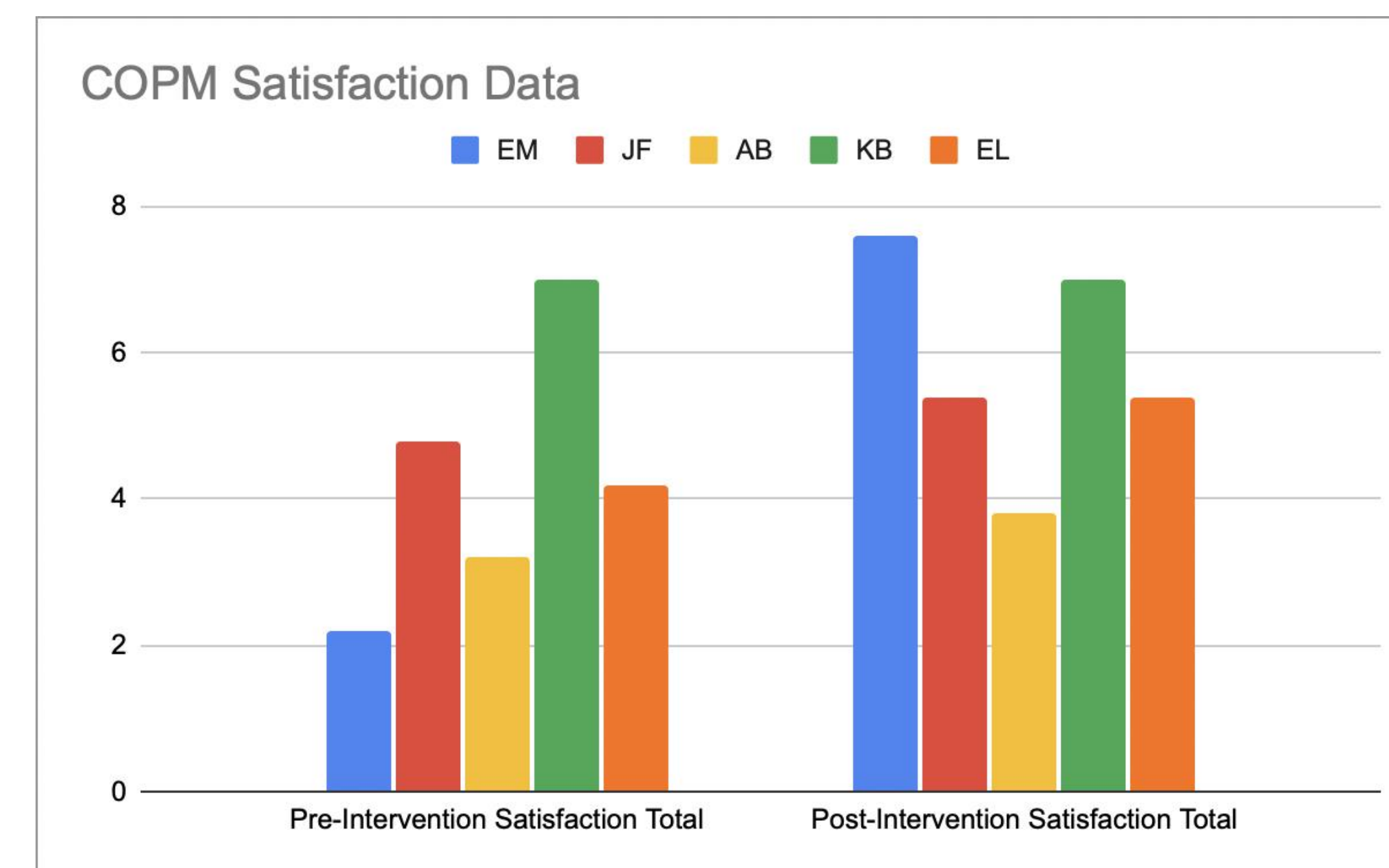
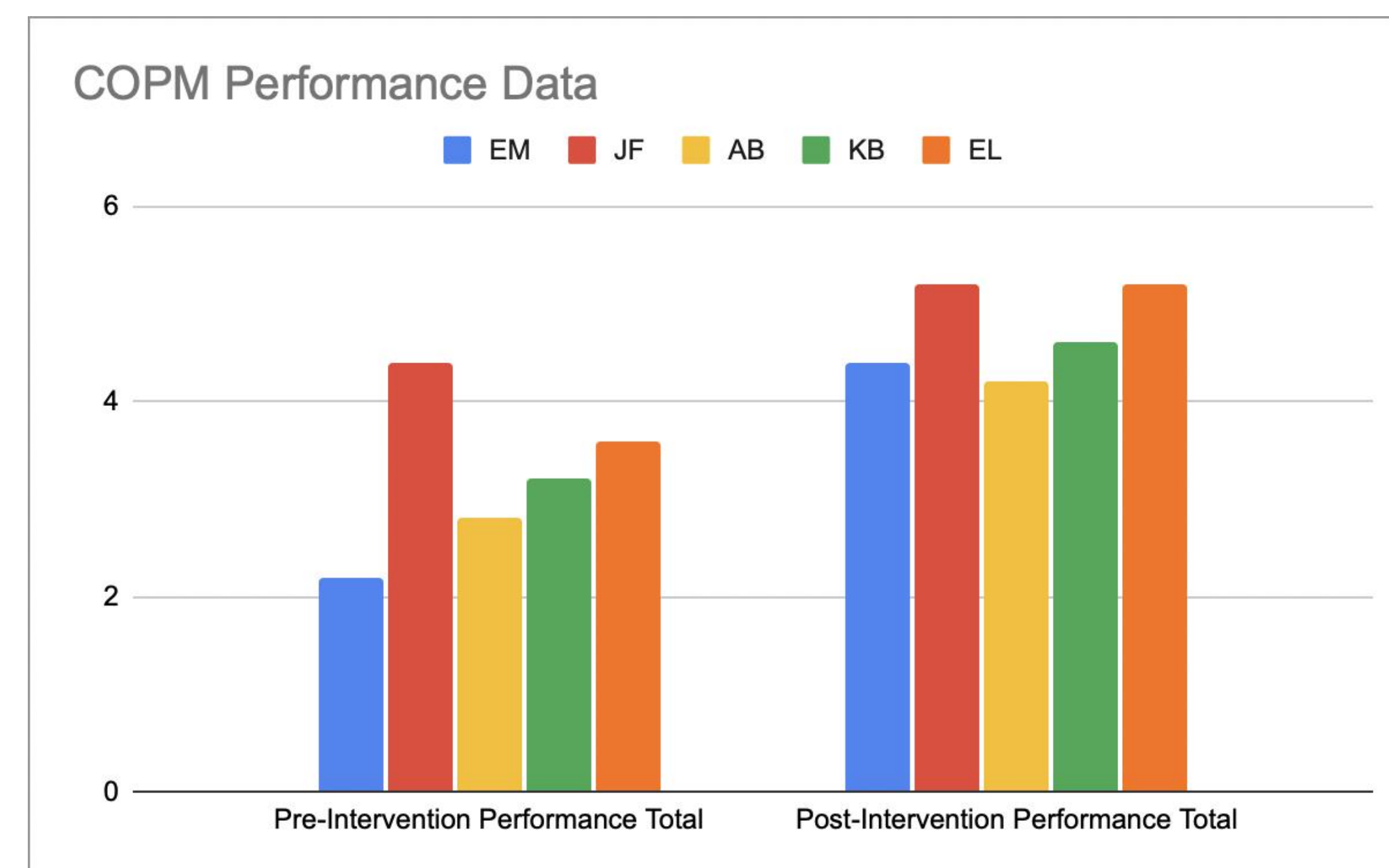
- Male, 2 years
- Cerebral Palsy – auditory avoider, tactile seeker, high tone, decreased AROM and PROM
- COPM Clinically Significant Progress: grasping toys and reaching
- SCOPE Clinically Significant Progress: sensory-motor and social-emotional
- Themes: endurance directly impacts session length, sensory stimulation to increase alertness

Case 4-KB

- Female, 3 years 6 months
- SMA Type 1 – decreased strength, decreased endurance
- COPM Clinically Significant Progress: play endurance, fine-motor endurance (color ¼ of a page without fatigue)
- SCOPE Clinically Significant Progress: sensory-motor and social-emotional
- Themes: too much family involvement can decrease productivity, intrinsic motivation

Case 5-EL

- Male, 4 years 5 months
- Autism, Charcot Marie Tooth – sensory seeker, decreased attention, decreased communication, decreased strength, decreased balance
- COPM Clinically Significant Progress: brushing teeth and donning/doffing socks
- SCOPE Clinically Significant Progress: sensory-motor, social-emotional, and coping strategies/adaptations
- Themes: sensory stimulation to increase attention, modeling can be more effective than verbal instructions



Conclusion

- Caregivers that participated in the “Playing Together” program enjoyed having a collaborative relationship with the program leader.
- Caregivers reported that they saw developmental growth in their children through the collaborative parent education model.
- Caregivers wanted the coaching and education from the therapist but wanted the focus of the session to be on building skills through play.
- While all participants in the Playing Together study were provided with a home exercise plan, only two out of five caregivers consistently participated in their home program plan, three out of five caregivers did participate in their home exercise plan intermittently throughout the course of the program.

Positive Outcomes:

- At least minimal progress was observed for all participants in the study.
- All caregivers reported that they enjoyed the one-on-one attention they received from therapists and how fun every session was.
- Caregivers reported that they enjoyed having parent education built into the play activities with their child and they expressed the belief that both the caregiver and child grew the most through this approach.
- Caregivers preferred and appreciated having the session plan emailed to them ahead of time, so they had ample time to gather materials and prepare for sessions.

Challenges:

- Challenges of the Playing Together program included not being able to provide physical assistance to parents with children who had more complex needs, current levels of parental understanding on appropriate child development, and parent preparedness.

Implications for Clinical Practice

- The Playing Together program found that OT services delivered over a telehealth platform can be effective and reach a population that is unable to be seen in person for various reasons.
- If telehealth services continued to be covered by insurance following the public health crisis of the COVID-19 pandemic, services would be accessible to more at-risk communities such as low-income and rural communities. Which would have long reaching positive health impacts.

Recommendations

- Recruiting more participants from diverse populations in order to be able to analyze how different socio-economic groups and diagnoses respond to telehealth.
- An assessment tool that includes more in-depth analysis of gross and fine-motor skills observation components or ADL and IADL participation such as the Peabody Developmental Motor Scales – Second Edition or Bruininks-Oseretsky Test of motor Proficiency, Second Edition (BOT), or The Roll Evaluation of Activities of Life (REAL).
- The short time frame of five weeks for the Playing Together program was not ideal, it would be recommended that the Playing Together program be about two months in length to ensure more data analysis.
- The inclusion of a parent logbook of activities could be another added component for data analysis of the efficacy for the Playing Together program. This logbook could track behaviors, performance skills, and participation in the home exercise program.

References

See Handout