

# The Effects of an Inclusive Playgroup on Social Interaction Between Children With and Without Disabilities

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## Background

- **Being present in an area of play can create a dynamic experience of exploration,** movement, and interaction with objects and peers. These are required to foster positive development across cognitive, social, and physical domains (1).
- **Children with disabilities may experience limitations** in mobility impacting their early exploration, socialization, and play (2).
- Playgroups that are inclusive of children with and without disabilities have been shown to further support positive developmental and behavioral outcomes (3).
- There is a **substantial gap in peer interaction and play behaviors between typically developing children and children with disabilities** (2).
- What remains unclear is how peer interaction and play behaviors change over time or change in response to an enriched inclusive playgroup setting.

## Purpose Statement

The purpose of the present study is to document the effect on an enriched environment intervention on social interactions between peers with and without disabilities.



Figure 1: Social interaction between four typically developing children and one child with a disability (sitting in middle) during an inclusive playgroup.



Figure 2: An example of a ride-on car used in the study for the intervention phase

## Methods

### Study Design

- Single-subject repeated measures study design
- 17 weeks (preliminary 10 weeks presented here)
- Weekly 30 minute inclusive playgroup
- **Baseline:** Weeks 1 - 6
- **Intervention:** Week 7 Enriched environment including the provision of a modified ride-on car (Figure 2) to each child with a disability

### Participants

- 12 total participants 1 to 4 years of age
- 5 participants with a disability
- 7 participants with out a disability

### Independent Variables

- Each child served as their own control
- Baseline vs. intervention social behaviors were compared

### Dependent Variables

- Social behaviors coded using momentary time sampling– 10 second observation/5 second record

### SOCIAL BEHAVIORS:

- 1) **Solitary Play:** key child further than 3 feet away from a peer or adult
- 2) **Parallel Play:** key child within 3 feet of a peer (typically developing child or child with a disability) or an adult
- 3) **PEER to key child Interaction:** peer directs a verbal and/or physical interaction to the key child
- 4) **KEY CHILD to peer Interaction:** key child directs a verbal and/or physical interaction to a peer

### Data Analysis

- Calculated % time child was observed in social behaviors

$$\%Time\ per\ play\ category = \frac{time\ observed\ in\ play\ behavior}{total\ time\ observed}$$

- Visual analysis for comparison of children with and without disabilities' play behaviors across time points

## Results

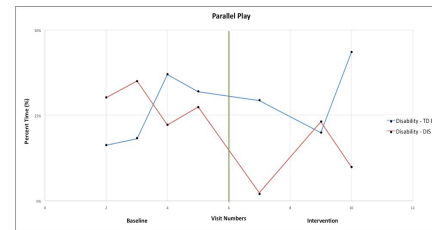


Figure 3: Percentage of time spent in parallel play over the entire 10 week study

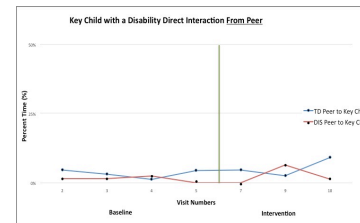


Figure 4: Percentage of time spent in direct interaction FROM a peer to the key child with a disability.

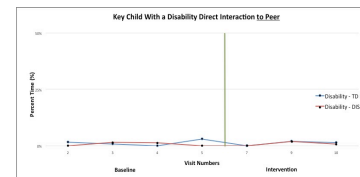


Figure 5: Percentage of time spent in direct interaction from the key child with a disability TO a peer.

## Conclusion

- Figure 3 suggests that over the length of the study children with disabilities were in parallel play with typically developing peers more often than with other children with disabilities.
- During the intervention phase, children with disabilities increased their time spent in parallel play with typically developing peers at about week 10 (Figure 3).
- There was no difference of direct interaction from a typically developing peer to a child with a disability throughout the study (Figure 4).

### Take Home

- Preliminary findings suggest an enriched playgroup may increase parallel play between children with and without disabilities.
- There are a remaining 7 weeks of data from the intervention period that is still under analysis.
- We hypothesize that the trend for increased parallel play for children with disabilities will continue, as well as an increase in peer interaction.
- An inclusive, enriched playgroup setting has potential to reduce the disparity and enhance social play experiences of all children.

### Study Limitations

- Interrater reliability may have been affected from the amount of coders used.
- Attendance for the participants varied each week.

## References

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