

# Bidirectional Effects of Parent Behaviours and Child Language Development Following Parent Language Training for Children with Autism



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# Purpose of Our Pilot Study



To explore the early natural language learning environments of families who have toddlers diagnosed with autism spectrum disorder (ASD).

Specifically:

(1) how much and what is the nature of the communicative interaction between toddlers with ASD and their parent(s)?

(2) to what degree does a parent education program (*Hanen More Than Words*) influence the nature and frequency of communicative interactions?

# Autism and Parent-Child Interaction

- **CHILDREN WITH ASD: LANGUAGE AND COMMUNICATION DELAYS (SILLER & SIGMAN, 2008; WETHERBY, 2006)**
- **KNOW LITTLE ABOUT NATURAL LANGUAGE LEARNING ENVIRONMENTS**
- **IMPACT OF PARENT TRAINING PROGRAMS WITH THIS POPULATION?**
- **CHARACTERISTICS OF PARENTS/CHILDREN THAT MAY RESPOND TO PARENT LANGUAGE TRAINING PROGRAMS?**

# Transactional Theory (Sameroff & Chandler, 1974)



Child  
Characteristics



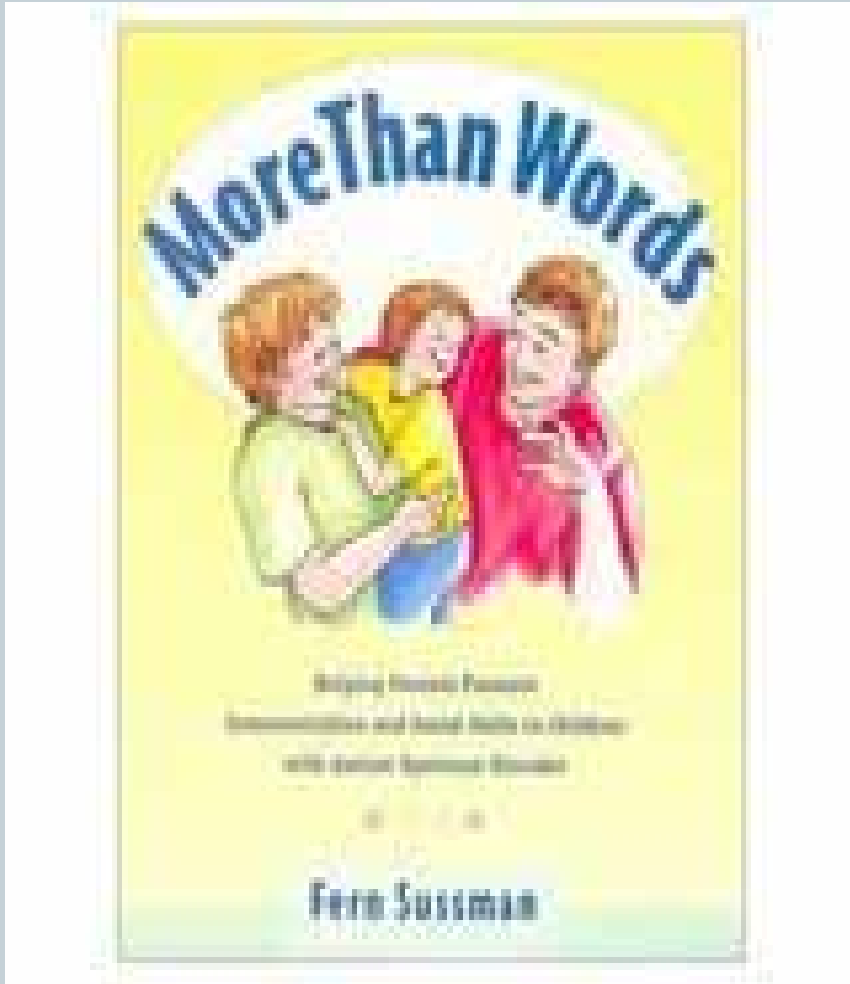
Parent  
characteristics



## Methods: Participants

- **Twelve toddlers diagnosed with ASD and their families**
  - Chronological age: 28-39m (m=33m)
  - Developmental age: 2-22m (m=9m)
  - Gender: 8 males; 4 females
- **Recruited from a local service provider**
- **Demographic information:**
  - Ethnicity: 7 Caucasian; 3 Asian; 2 African Canadian
  - ESL: n=3 (e.g. Urdu, Tagalog, Amheric)
  - Primary Caregivers mother n=11, father n=1
  - Age of Primary Caregiver: 21-42yrs (m=34.7yrs)
  - Sibling: n=11

# Methods: Intervention



- **Intervention:** Parent participation in the Hanen *More Than Words* (MTW) Parent-training program targeting early language development
- Eight 2.5hr sessions (weekly)
- Three 1.5hr home visits with the SLP

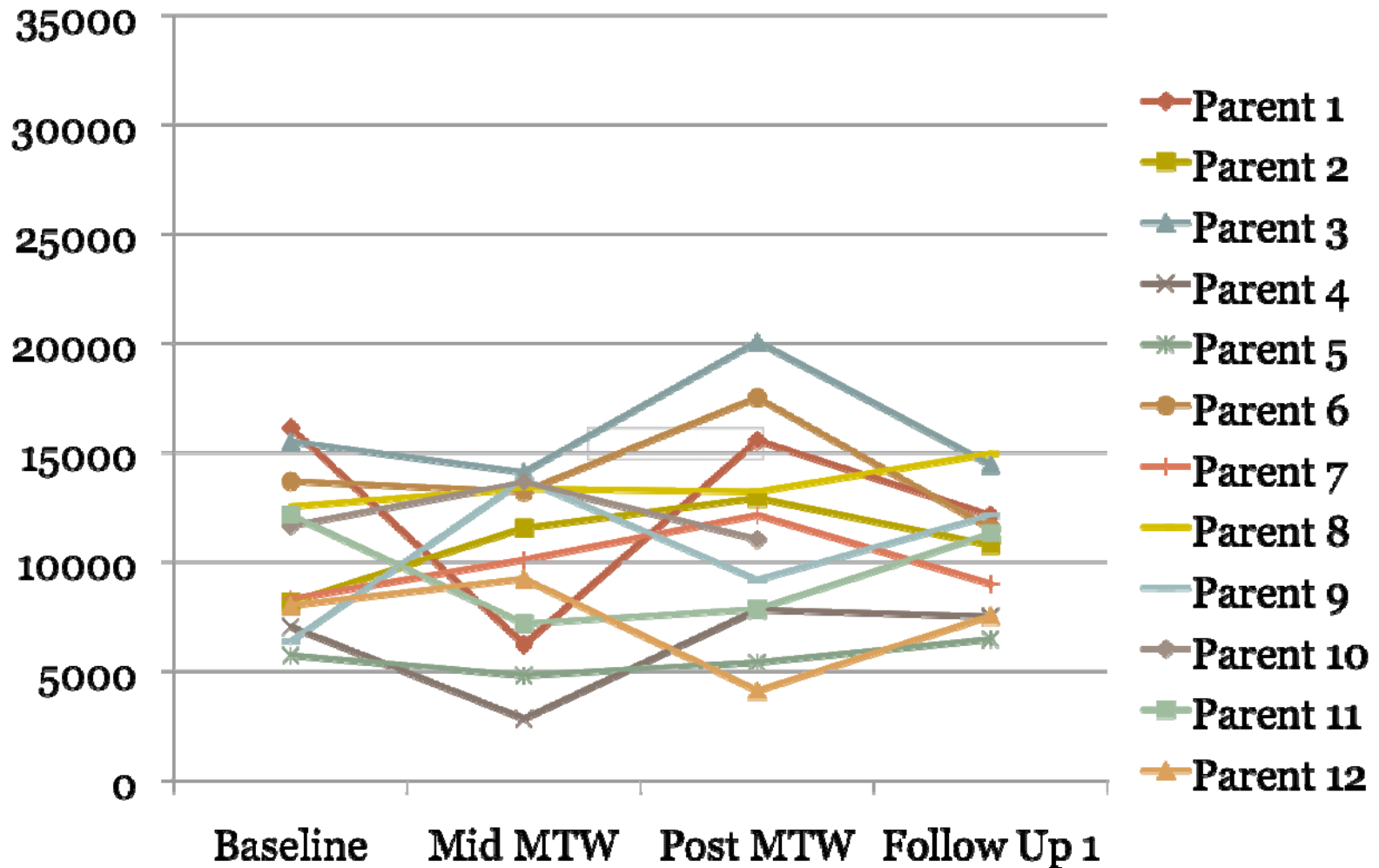
# Data Collection



## **Four Methods:**

- (1) Use of a Digital Language Processor (DLP) to obtain in home parent-child interactions (4-5 times points),
- (2) Child language development questionnaire (MCDI- Words and Gestures) (4-5 time points)
- (3) Parent-child interaction video (3 time points)
- (4) Parent self evaluations and clinician evaluation of parents' skills (Post MTW)

# Adult Word Count

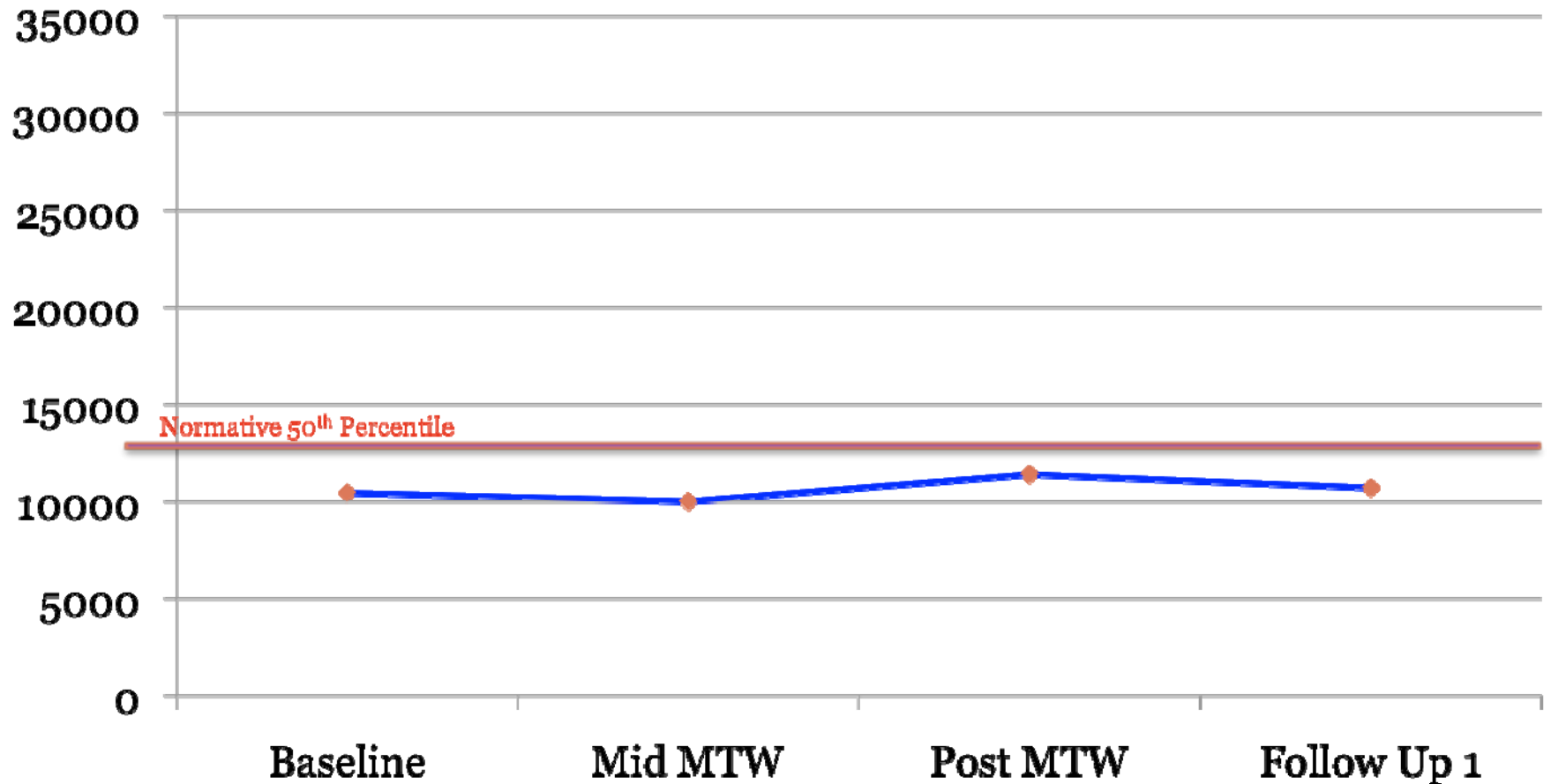




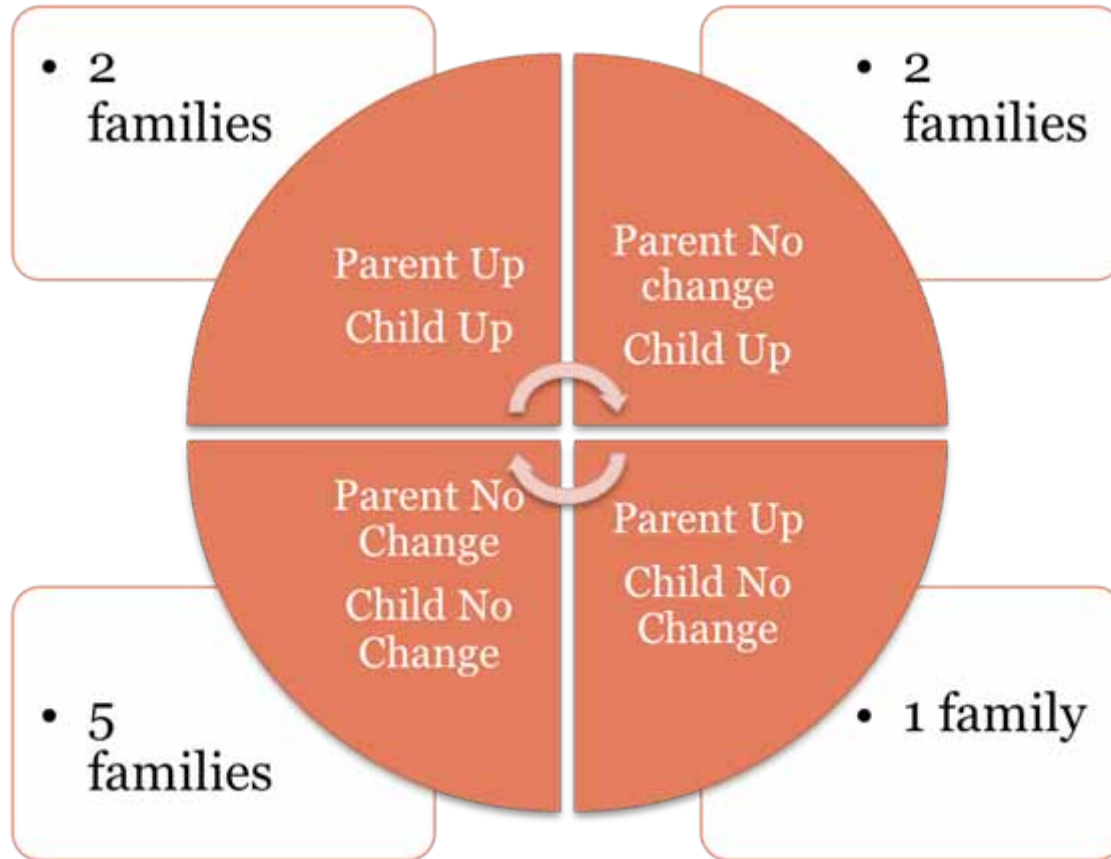
# Mean Adult Word Count



## Mean AWC



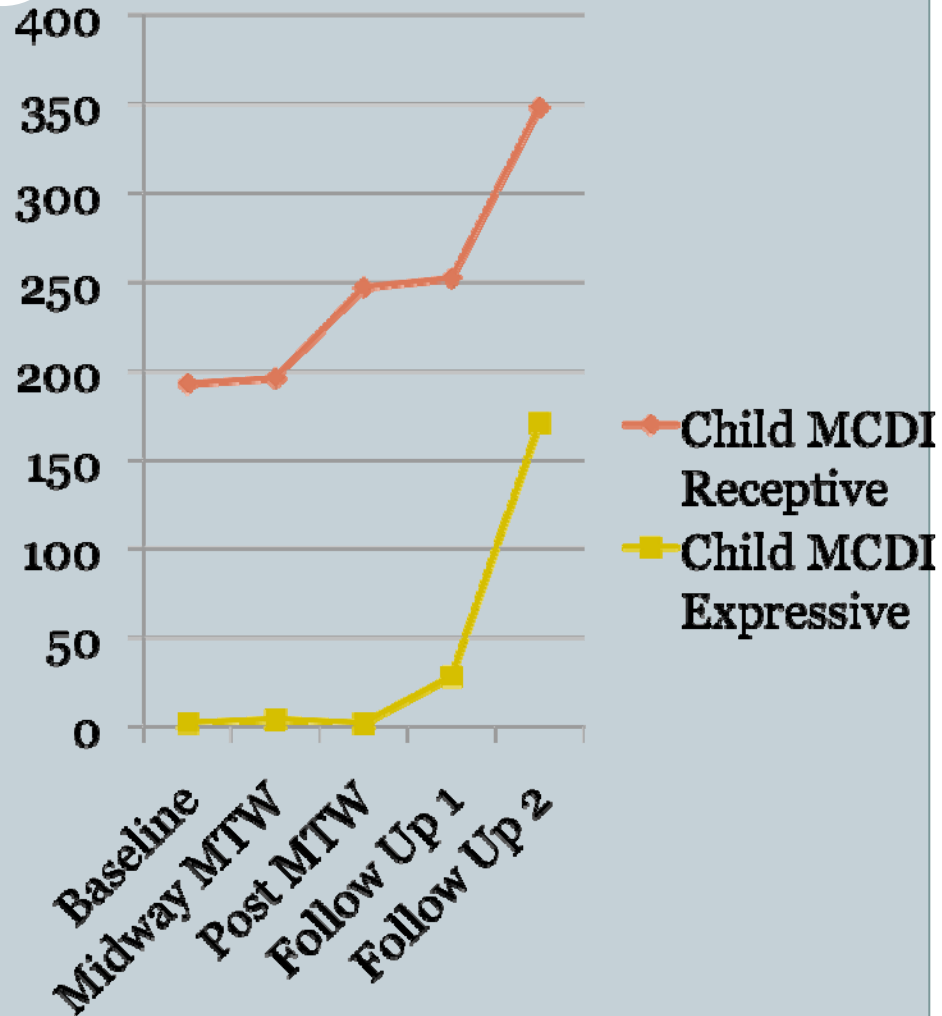
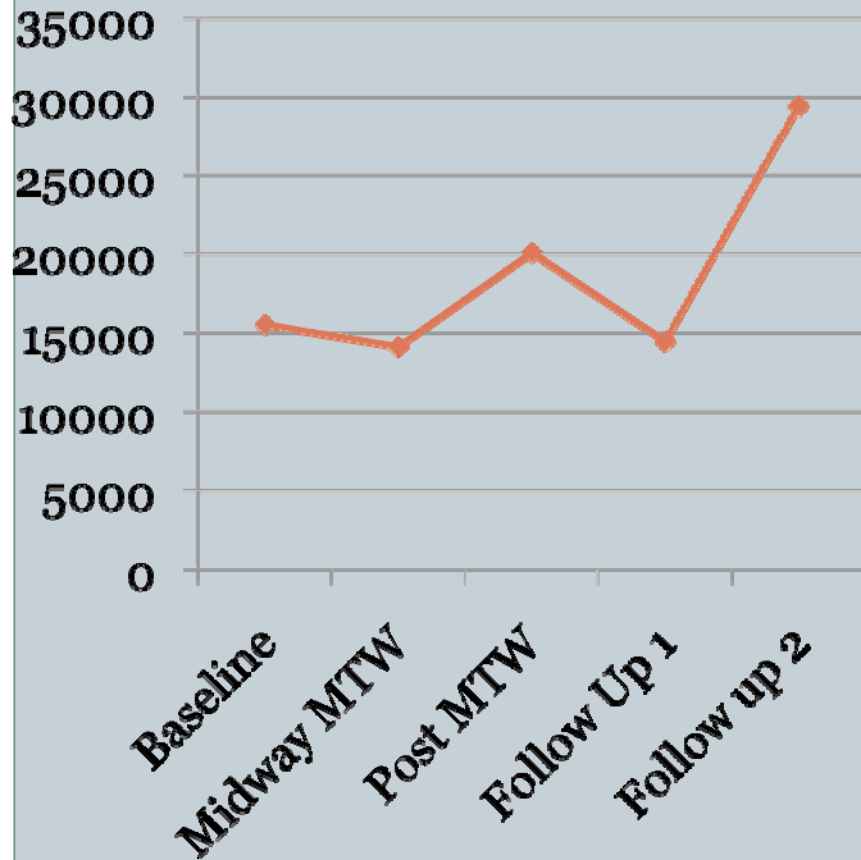
# Parent-Child Talk Profiles



Unsure:  
2 families

# Profile 1: Parent Up, Child Up

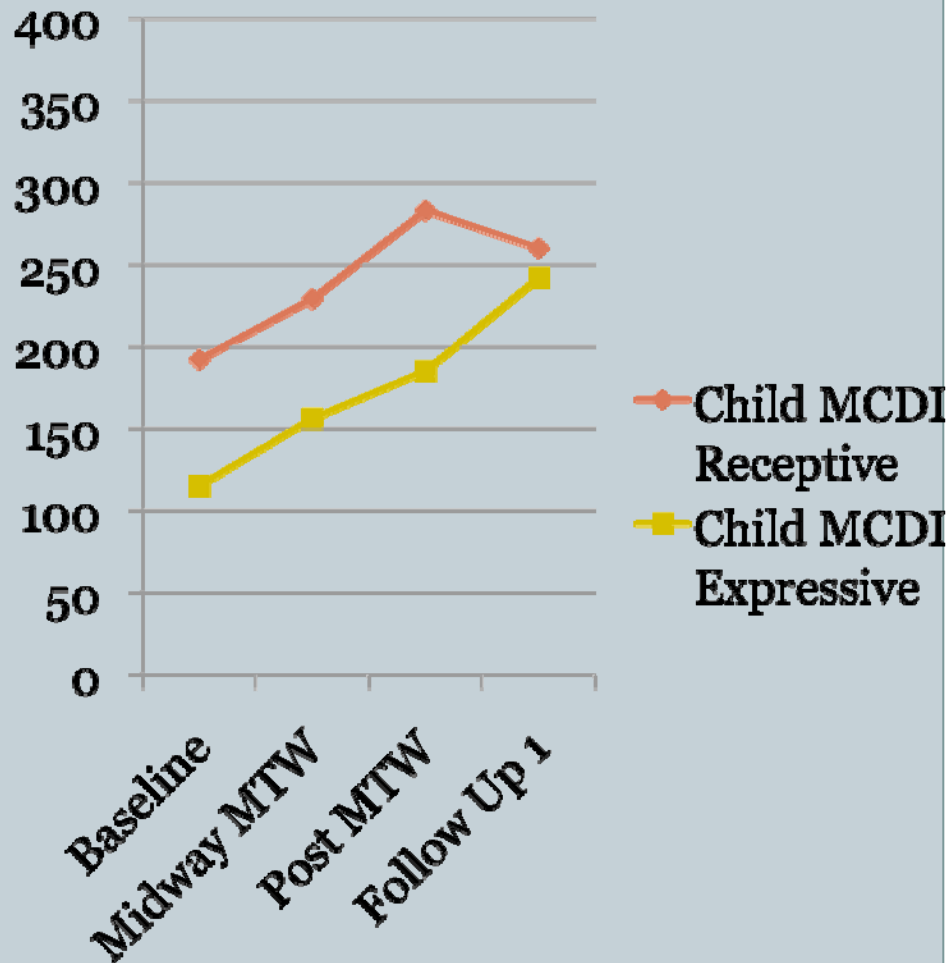
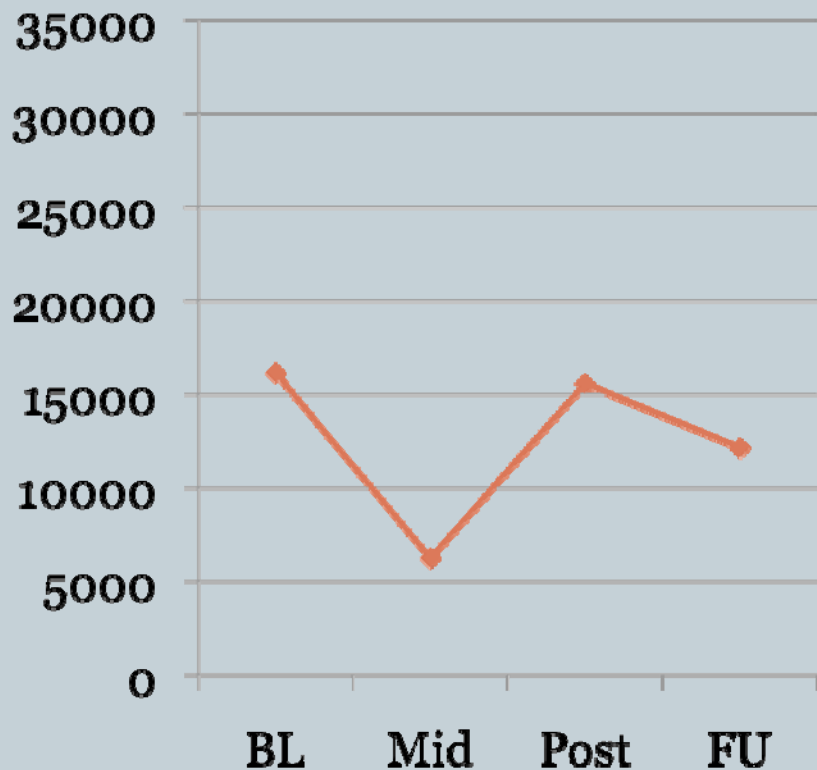
## Parent 1



# Profile 2: Parent No Change, Child Up

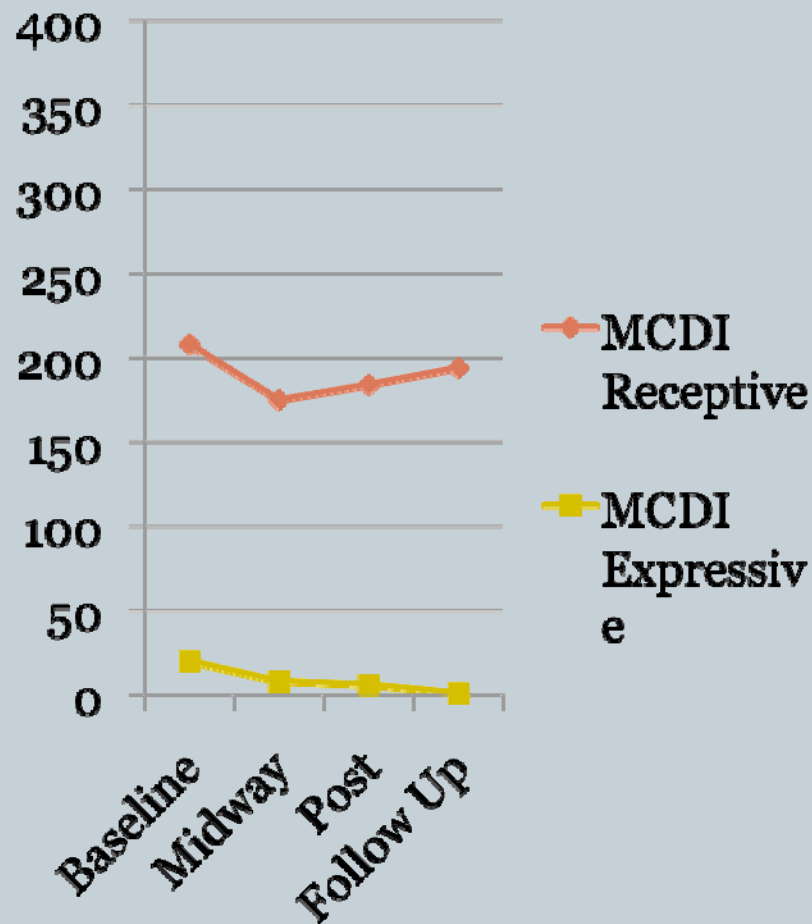
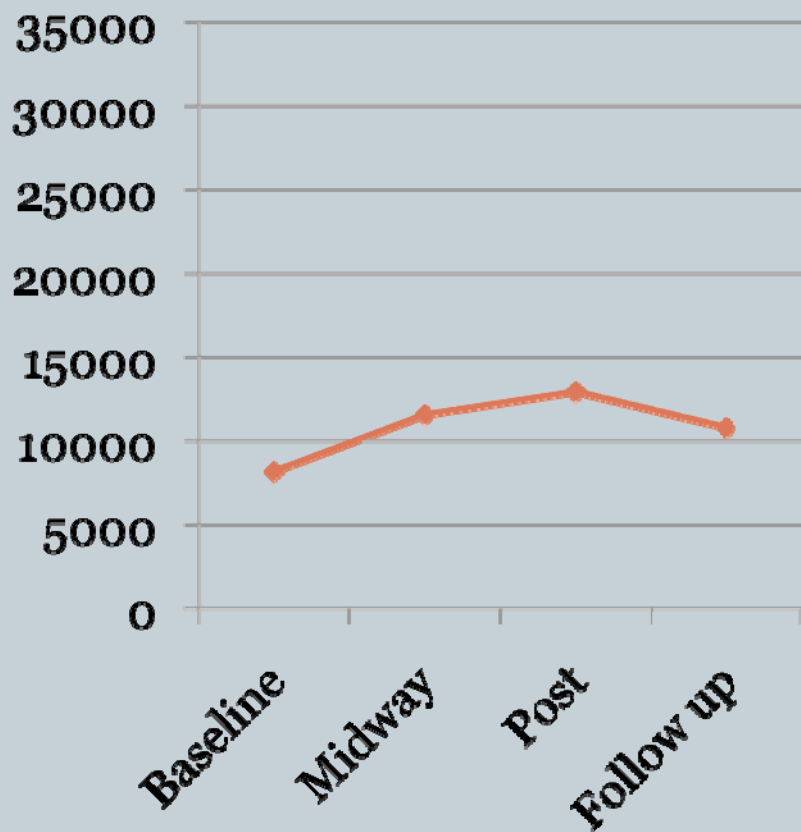


## Parent 2



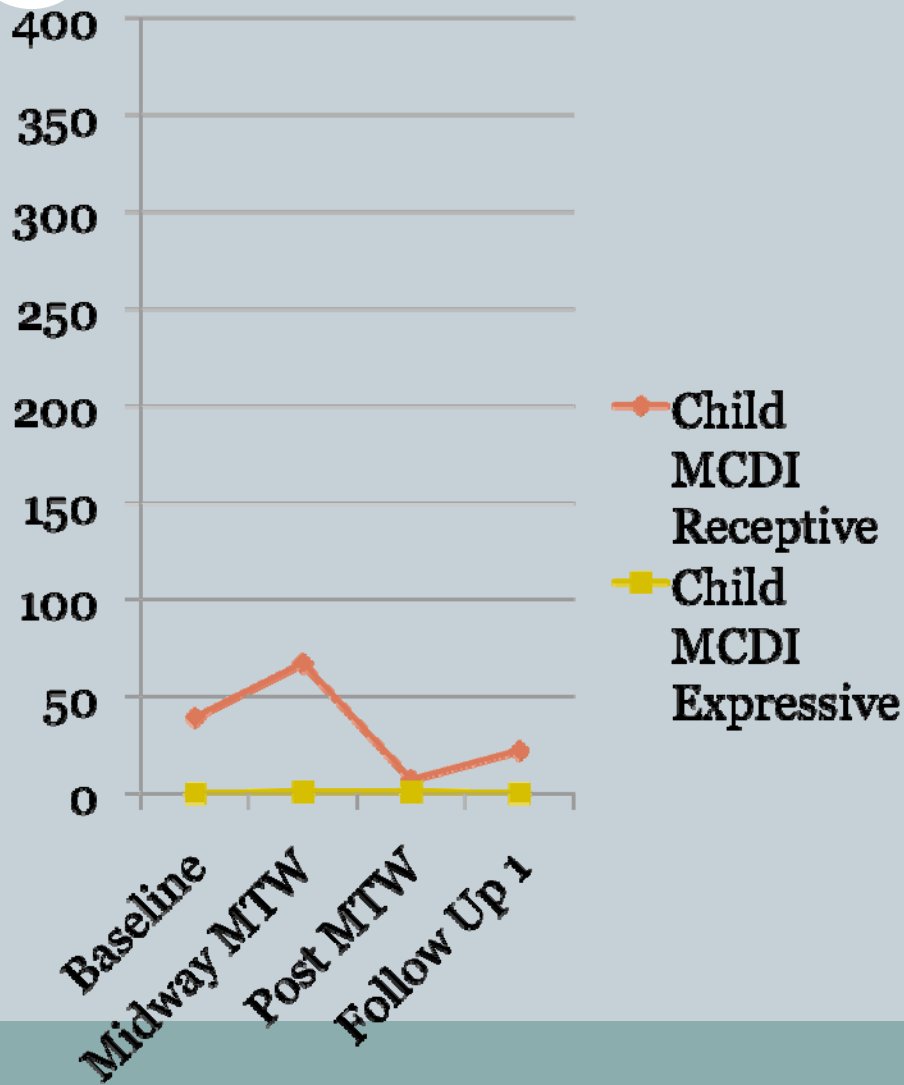
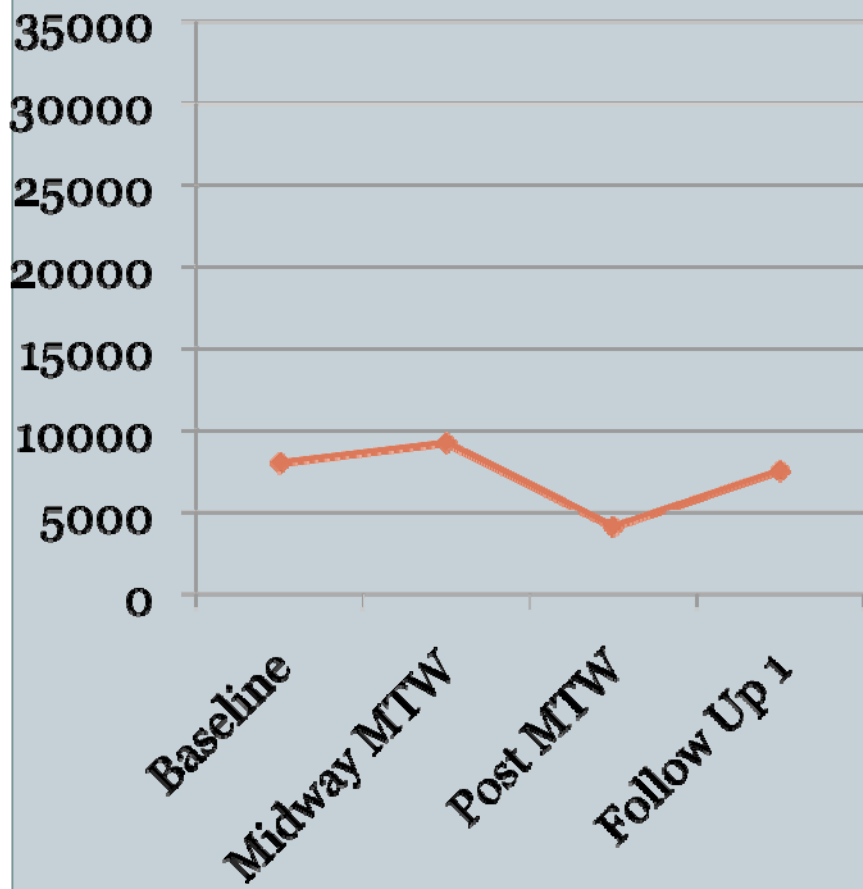
# Profile 3: Parent Up, Child No Change

## Parent



# Profile 4: Parent No Change, Child No Change

## Parent 4



# Challenges and Questions

## Findings

- Limited maintenance of parent talk gains
- Stability of patterns within families
- Large variability between families

## Limitations

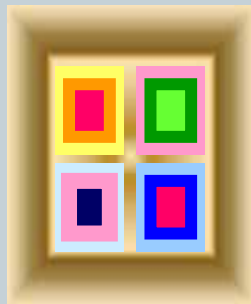
- Small sample
  - Spring and fall groups
- Natural setting and variability
  - Examine parent experience
- Nonverbal communication
  - Video data

# Feedback Welcome!

## Thank you to the Families!

## Contact Information

- Acknowledgements:



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