

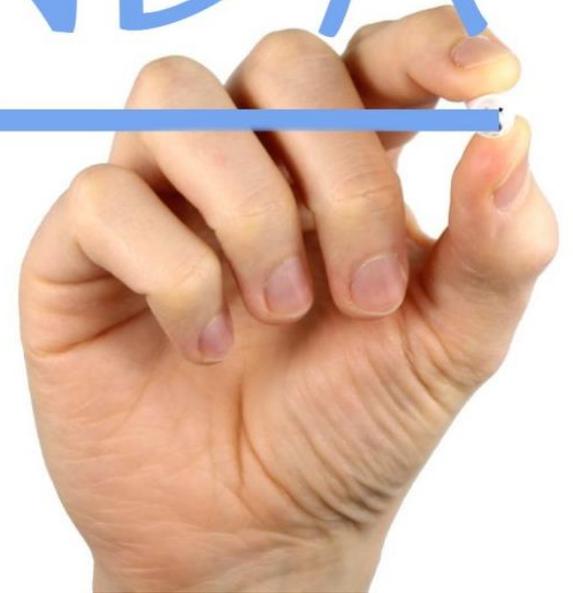
A photograph of a person in a blue shirt and dark pants holding the hand of a young child in a pink shirt and dark pants. They are walking on a paved surface. The image is overlaid with a semi-transparent blue filter.

# TEACHING GROSS MOTOR SKILLS TO YOUNG CHILDREN WITH DISABILITIES: A PARENT-IMPLEMENTED INTERVENTION

Presenter: Hsiu-Wen Yang & Michaelene Ostrosky

# AGENDA

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**Gaps and Research Questions**



**Methods**



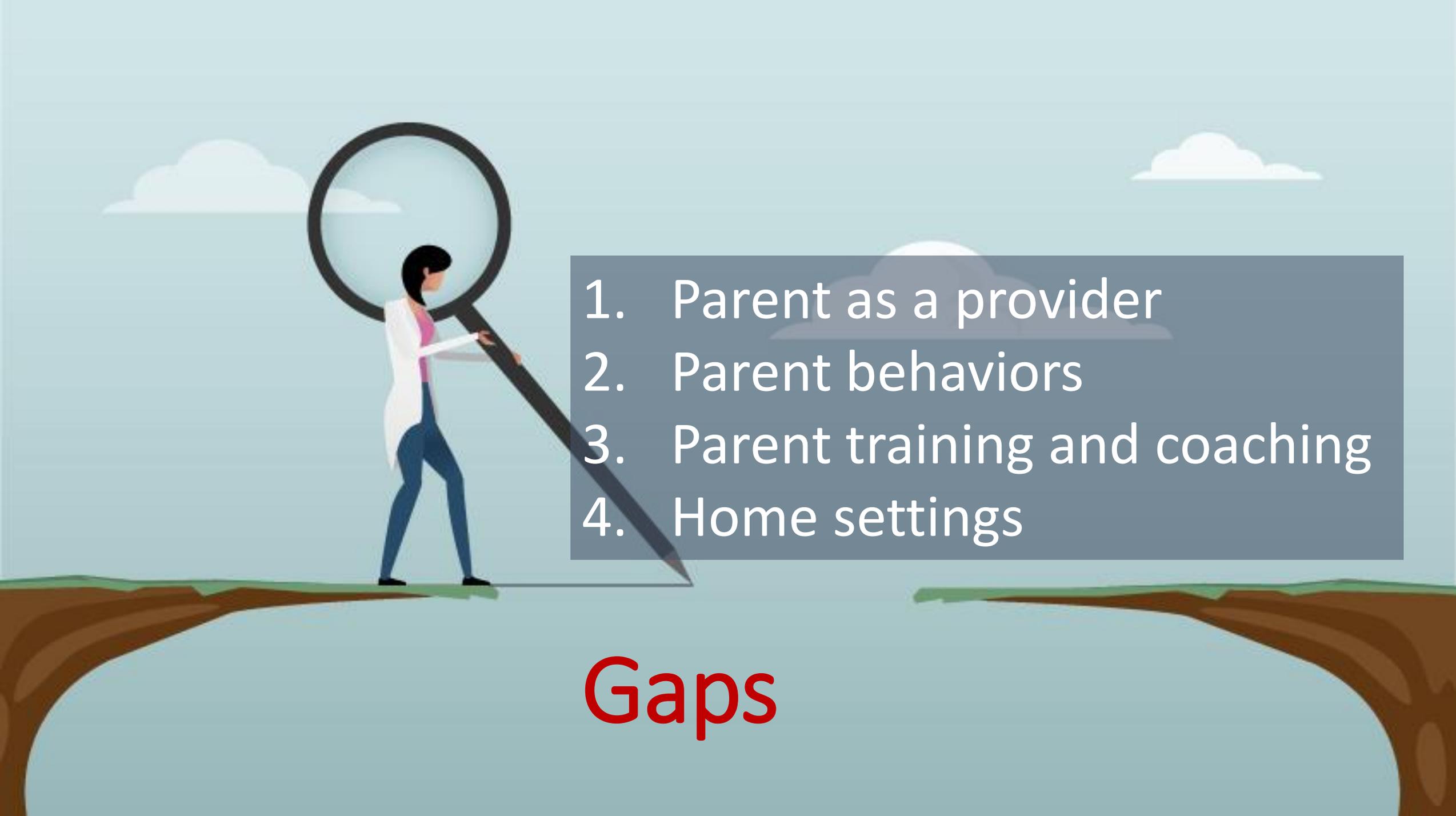
**Results**



**Discussion: Issues/Challenges**

A silhouette of a parent wearing a cap and a child sitting on the grass in a field at sunset. The parent is holding the child, and they are both looking towards the right. The background shows a field with a palm tree and hills under a warm, golden sky.

**Parents** can be the key agents in providing support for their children's development and learning.

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- An illustration of a person in a white lab coat and blue pants holding a large magnifying glass. The magnifying glass is positioned over a gap in the ground, which is filled with water. The background shows a light blue sky with a few white clouds. A dark grey semi-transparent box is overlaid on the right side of the image, containing a list of four items.
1. Parent as a provider
  2. Parent behaviors
  3. Parent training and coaching
  4. Home settings

**Gaps**



Prompting

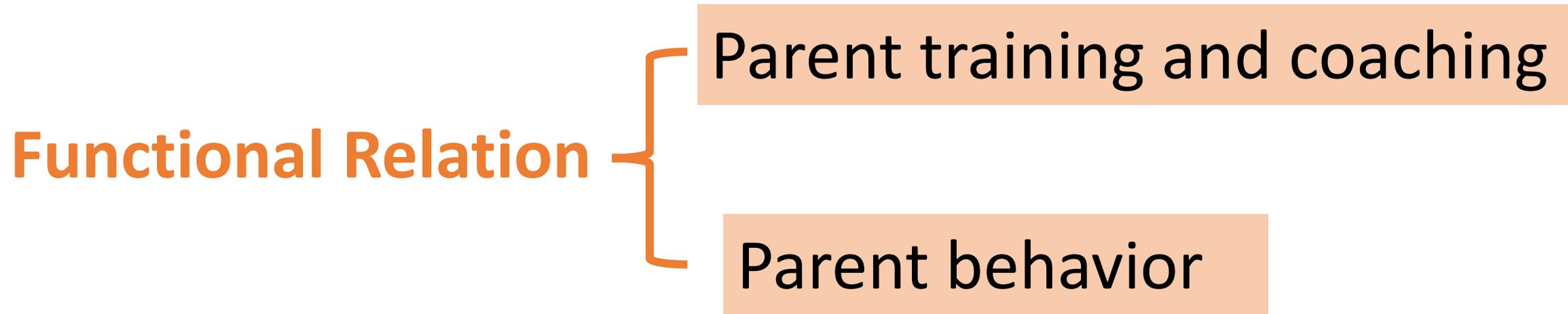
# Purposes

This **exploratory study**

(a) to **develop** a parent-implemented motor intervention

(a) to **exam the effects of a training and coaching program** on parents' implementation of prompting procedures and children's gross motor skills

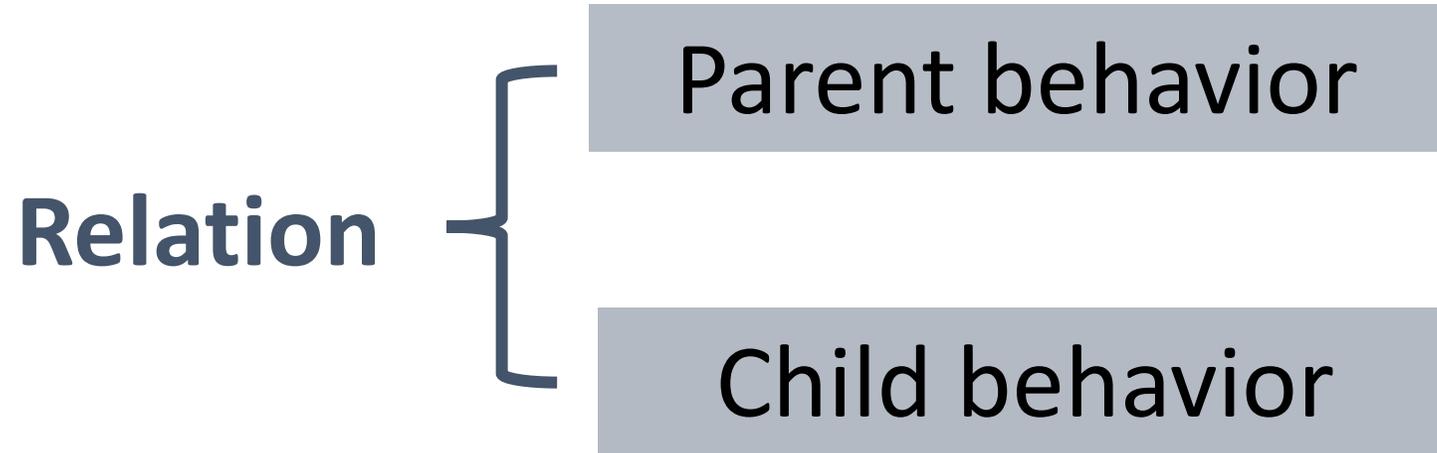
# Research Question 1



## *Observations*

Percentage of high-quality prompting procedure use  
Percentage of prompts per opportunity

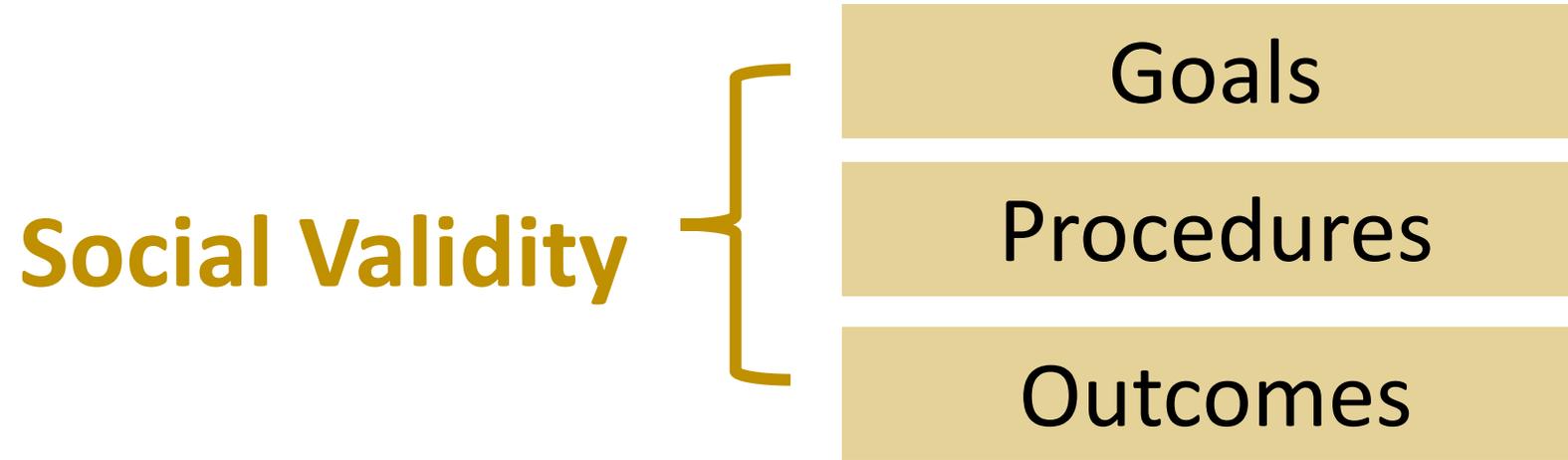
# Research Question 2



## ***Observations***

Percentage of motor components performed correctly

# Research Question 3



## ***Parent-reported measures***

Pre- and Post-intervention interviews  
Pre and Post-intervention questionnaires

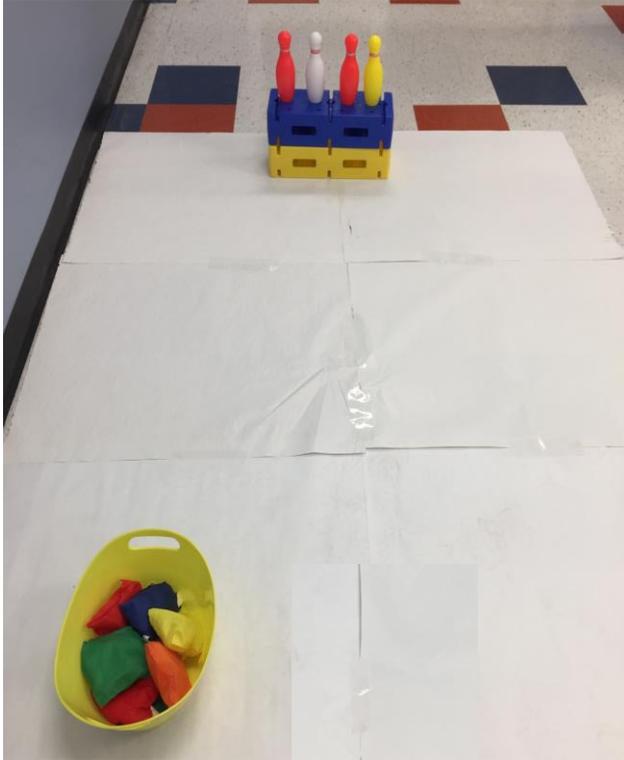
# Methods (Multiple Probe Design)

# Motor Activity

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Family	Annie and Jordan	Maxine and Phebe	Chris and Rob
<b>Chosen target motor skills</b>	Overhand throw	Overhand throw	Two-hand strike
<b>Motor activity #1</b>	Beanbag toss	Beanbag toss	T-ball strike
<b>Motor activity #2</b>	Target throw	Target throw	Balloon strike
<b>Motor activity #3</b>	Bucket throw	Bucket throw	Bowling pins strike

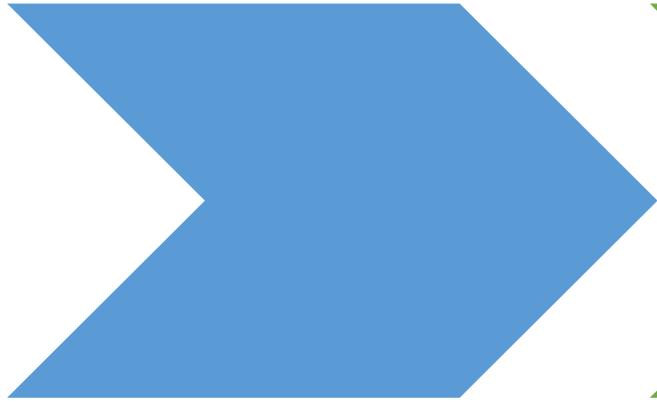
# Example of A Picture Card



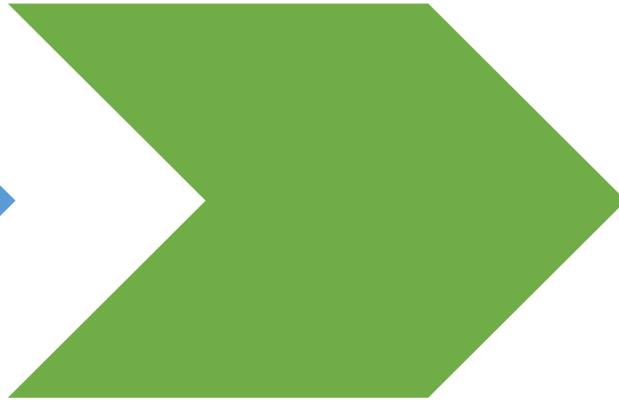
## Bean Bag Toss

- Ask the child to pick up a beanbag from the bucket
- Ask the child to throw the beanbag and knock over the pins using an overhand motion
- Gather the beanbags and repeat the activity

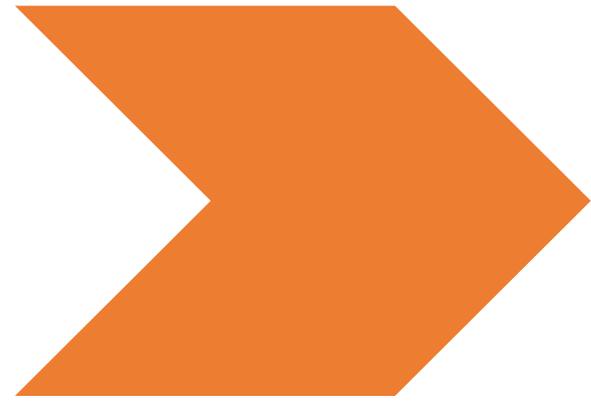
# Baseline



**Chose an  
activity**



**Set-up the  
game**



**Typical  
activity**

# Independent Variable (Intervention)

Parent Training



Parent Coaching

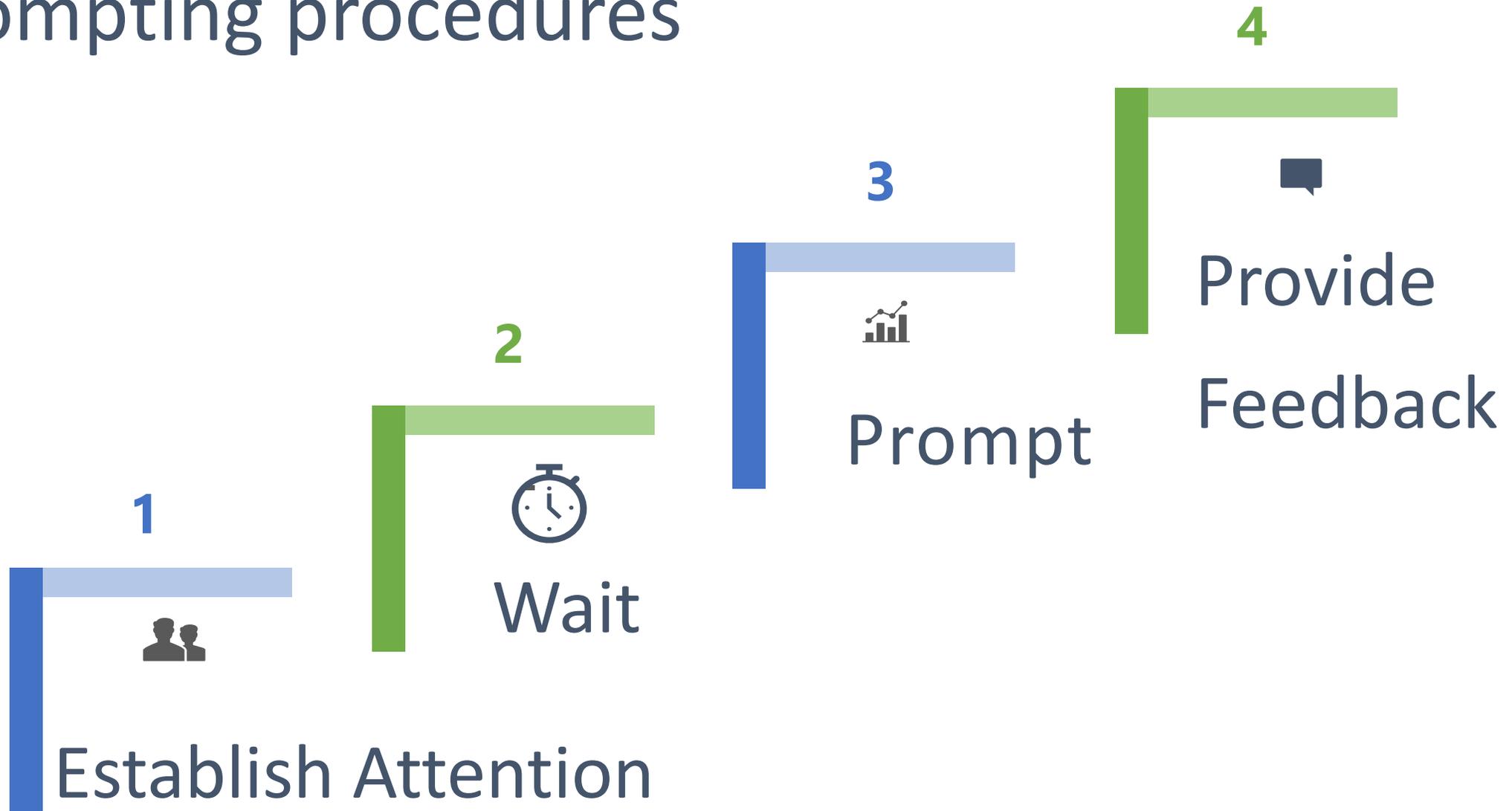
**Training 1**

The importance of motor development  
The different types of prompts

**Training 2**

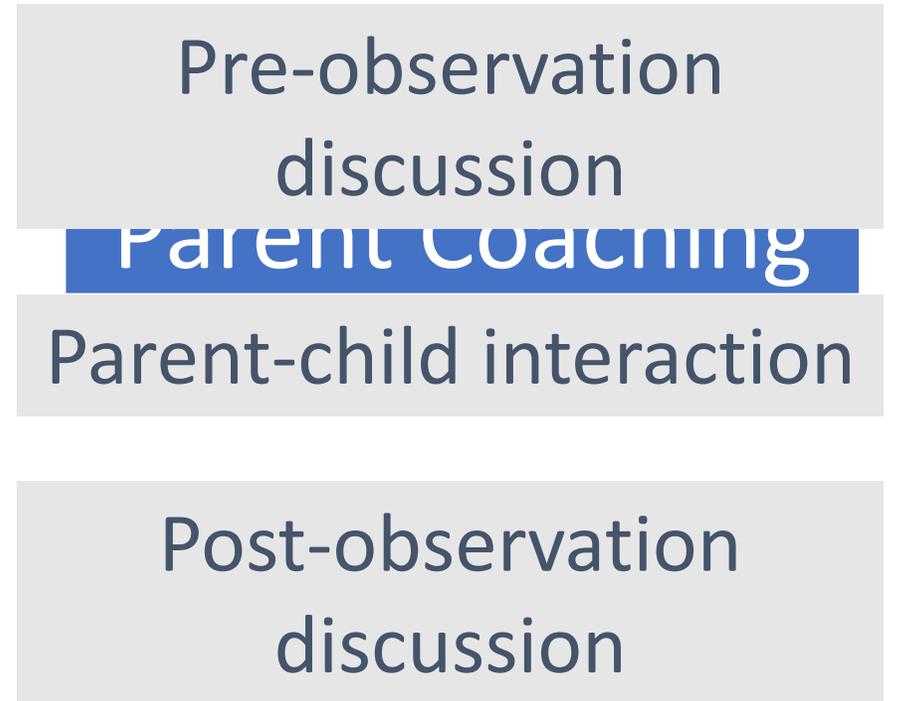
Individualized, based on each child's  
targeted motor activity and family goals

# Prompting procedures



# Independent Variable (Intervention)

Parent Training



# Procedural Fidelity and Interobserver Agreement



## Checklist



## Second observer

- 100% of the training sessions
- At least 30% of randomly selected coaching sessions

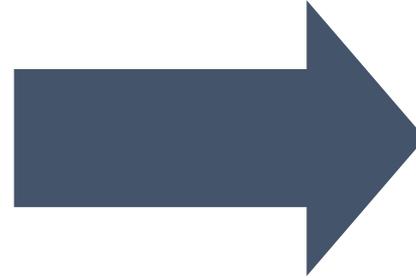


## Point-by-point agreement

The number of agreed upon items on the checklist/ total items X 100 = IOA %)

# Maintenance

Demonstrate mastery of the prompting procedures



Complete the activity as they typically do

Percentage of high-quality prompting procedure use at or above **80%** for **three** consecutive sessions

***Very confident*** (score 4 or 5) for **three** consecutive sessions

No coaching

# Dependent Variables: Parent Behavior

## Primary DV

The percentage of high-quality use of prompting procedures



The percentage of prompts per opportunity

# Dependent Variables



**Children's motor performance**  
**Percentage of motor components**  
**performed correctly**

# Motor components

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## Target motor skill

## Motor components

### Overhand throw

1. Hold the beanbag/ball in one hand
2. Stand in a balanced position and stand upright
3. Nonthrowing side faces the wall
4. Eyes focus on the throwing target
5. Bring the beanbag/ball behind the head
6. Transfer weight to the foot opposite to the throwing hand
7. Throw starts with hip and shoulder rotating toward the target
8. Release beanbag/ball not too early and not too late

# Social Validity

## Summaries



**Pre- and post-intervention  
questionnaires**



**Pre- and post-  
intervention interviews**

# Results

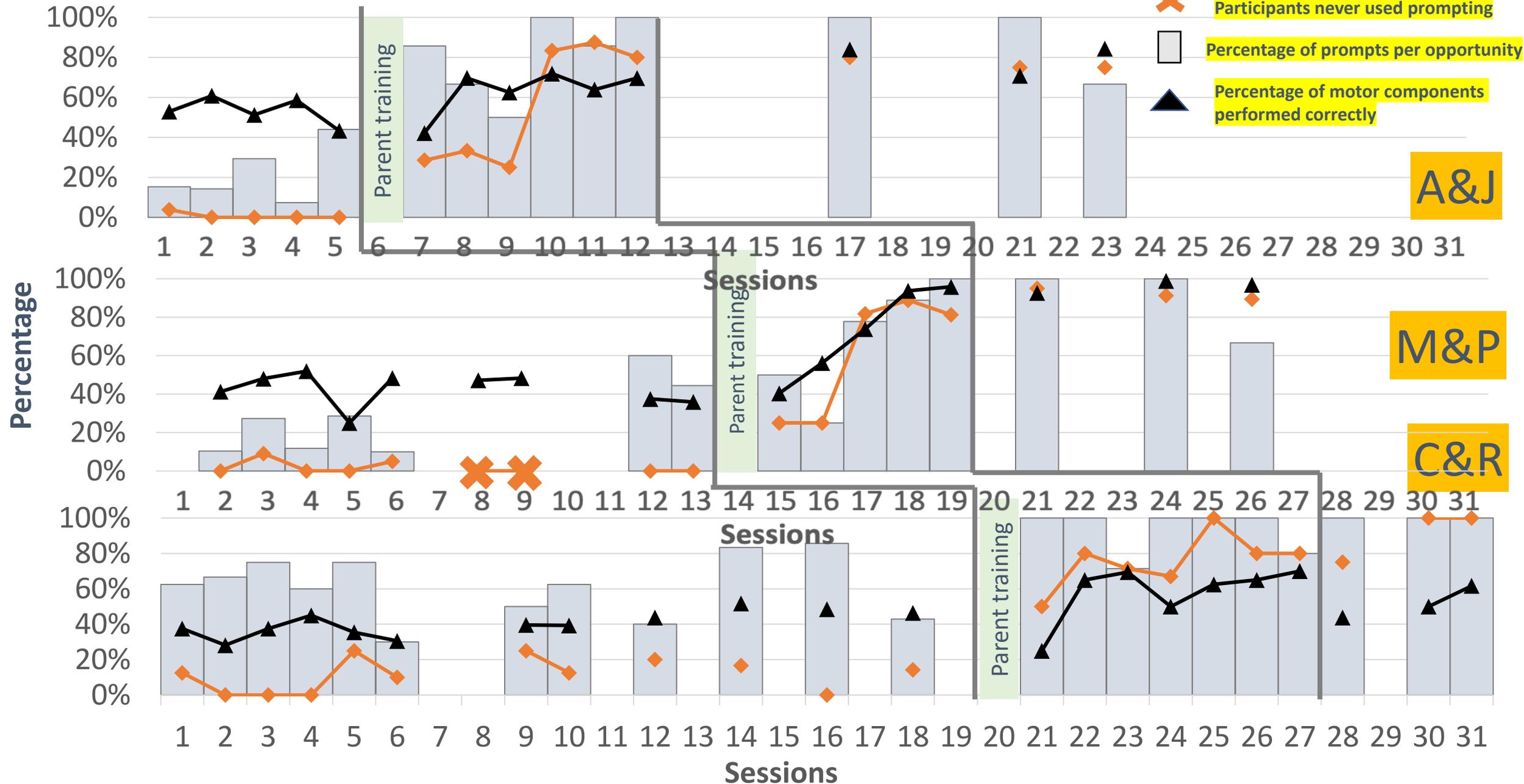
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# Baseline

# Coaching

# Maintenance

- ◆ Percentage of high-quality prompting procedure use
- ✕ Participants never used prompting
- Percentage of prompts per opportunity
- ▲ Percentage of motor components performed correctly



A&J

M&P

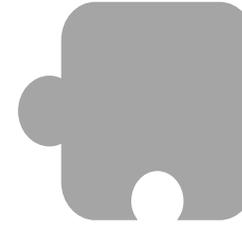
C&R

Sessions

# Issues and Challenges

# Child Characteristics

Greater challenges in motor performance



Maintenance

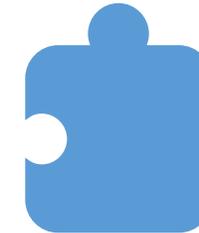
More than a month

# Coding System

Sensitive



IOA



Simplify  
Periodic training

# Acknowledgements



July

Questions