

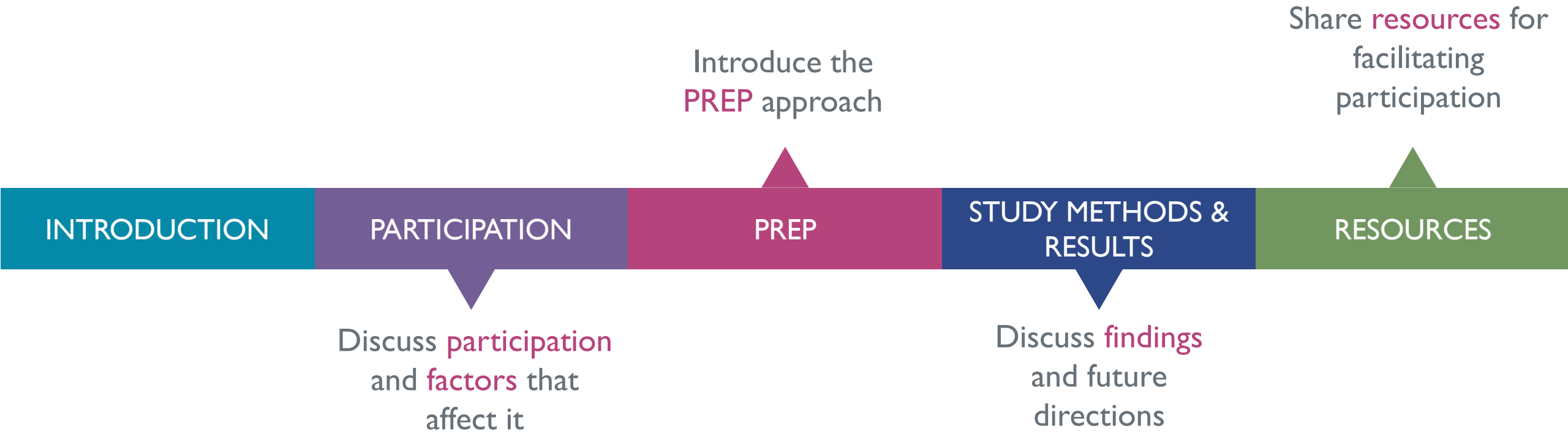


# Improving the participation of youth with disabilities in community-based occupations: The effectiveness of the PREP intervention

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Presented by Stephanie Tremblay

# Outline of the Presentation



# Participation

“Participation reflects the extent of **engagement** in the full range of activities that accomplish a larger goal” (Coster & Khetani, 2008)

- Participation of youth with disabilities is **restricted** compared to typically developing peers (Michelsen et al., 2009, Engle-Yeger et al., 2009, Imms et al., 2008)
- Discrepancies evident in **home, school** and **community** settings (Law et al., 2013, Coster et al., 2013, Bedell et al., 2013)



<https://digitalparticipationhci.files.wordpress.com/2016/07/dphci.png?w=700>

# Impact of the environment

- A scoping review found that all aspects of the environment – *physical, social, attitudinal, familial and institutional* – have an impact on children's participation (Anaby et al., 2013)

36% of parents of children with disabilities reported **no access to, or availability of,** programs and services, compared to only 3% of children without disabilities (Bedell et al., 2013).

## Participation-Focused Interventions

- Tailored interventions that involve education/coaching appear to enhance participation (Adair et al., 2015)



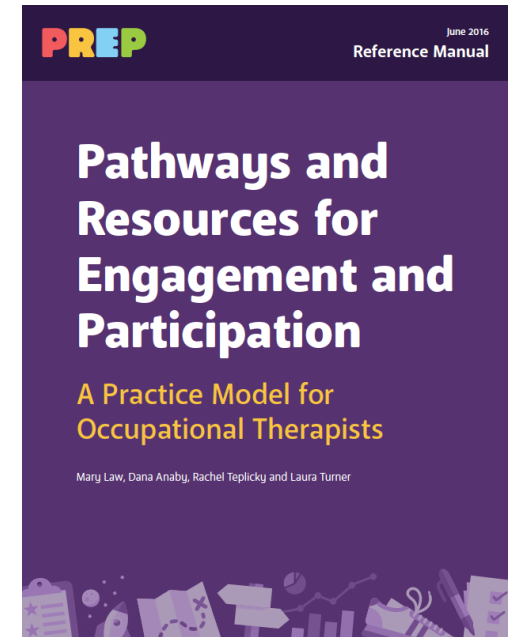
- 12-week **strengths-based**, environment-based approach
- Modifies a client's natural **environment** and/or the activity
- Therapist **collaborates** with the youth and family to identify and implement solution-based strategies to remove environmental barriers
- Therapist engages and **coaches** youth/parents and other service providers

## 5 M-Steps

1. **M**ake goals
2. **M**ap out a plan
3. **M**ake it happen
4. **M**easure the process and outcomes
5. **M**ove forward

The PREP intervention protocol is now available on the CanChild website:

<https://www.canchild.ca/en/shop/25-prep>



# Study's objective

To examine whether the PREP intervention, which aims to remove environmental barriers and provide education for parents and youth in the form of coaching, can effectively improve youth's participation in their community.

# PREP Intervention Study

- 28 youth (14 females) with physical disabilities aged 12 to 18 years (mean=14.6, SD=1.8)
- On average, youth had moderate physical disabilities (67.6 based on the ASK\*) and a range of functional issues (mean=6.7, SD=2.9)  
\*Activity Scale for Kids
- 3 activities/goals were set by each youth
- Interrupted Time Series Design (Anaby et al., 2014)
- Goal performance was measured twice a week using the COPM (32 data points/goal)
- Performance of 79 goals analyzed using Segmented Regression and HLM

# PREP Timeframe

Week 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

## Goal 1

*Joining Bocchia*



## Goal 2

*Participating in Yoga*



## Goal 3

*Volunteering in the Community*



### PREP Protocol Phases

- Baseline
- 4-week intervention per goal
- Environmental-focused intervention
- Follow-up

### COPM

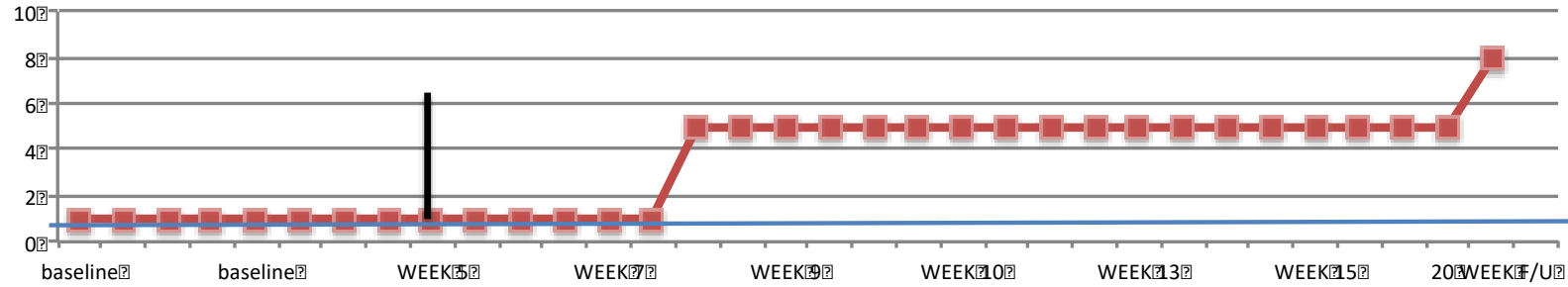
- Other Measures  
*As needed to help with goal-setting*



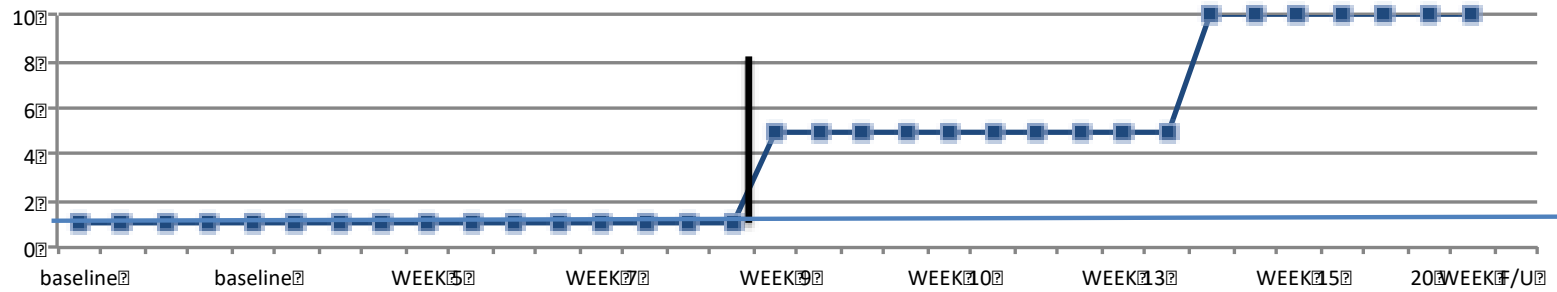
# Participation Intervention Study – Sample Goals

Participant	Goal 1	Goal 2	Goal 3
20002	Socialize with friends outside of home and school	Join a dance program/class	Play boccia in the community
20004	Take a yoga class with friends	Ride a regular bike	Play wheelchair basketball
20006	Go sailing	Socialize with friends	Take swimming lessons
20007	Socialize with friends outside of home/school	Attend a dance class	Attend a football game
20008	Join a community art class	Go shopping at shopping center	Take sewing classes

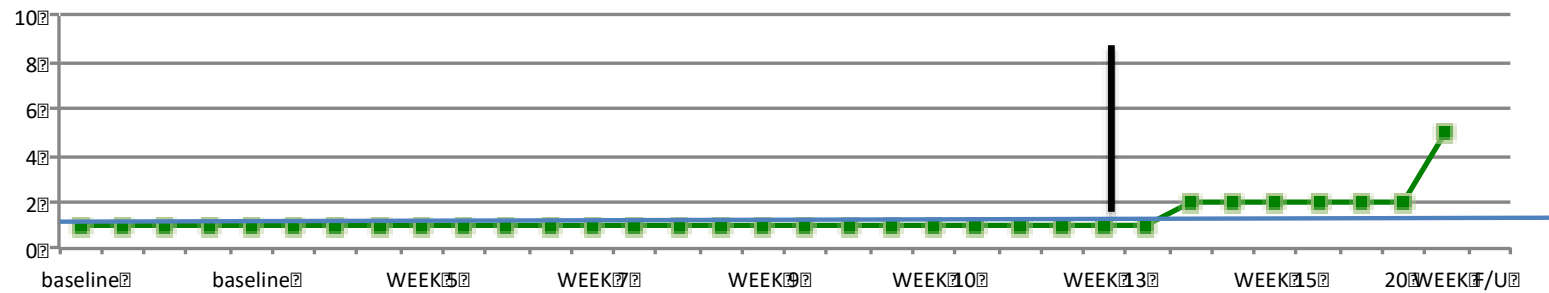
## GOAL 1: Socialize with Friends from School, outside school hours



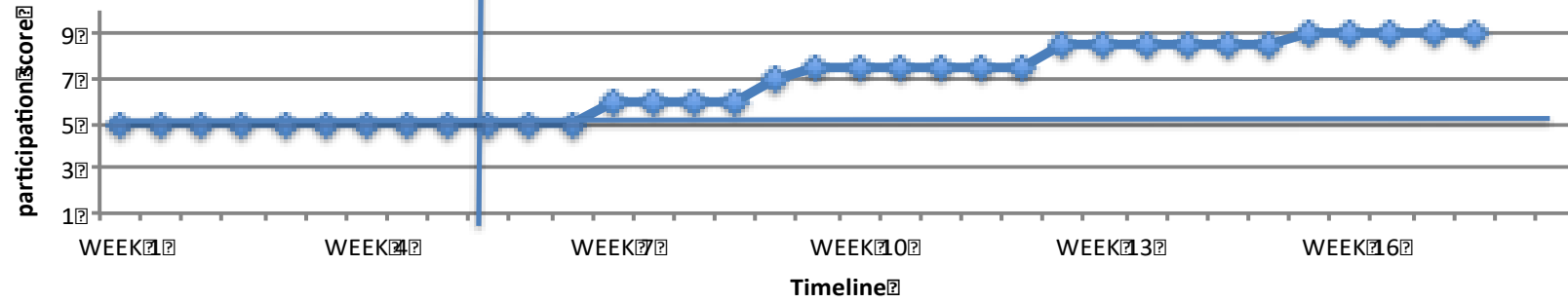
## GOAL 2: Attend a Dance Class



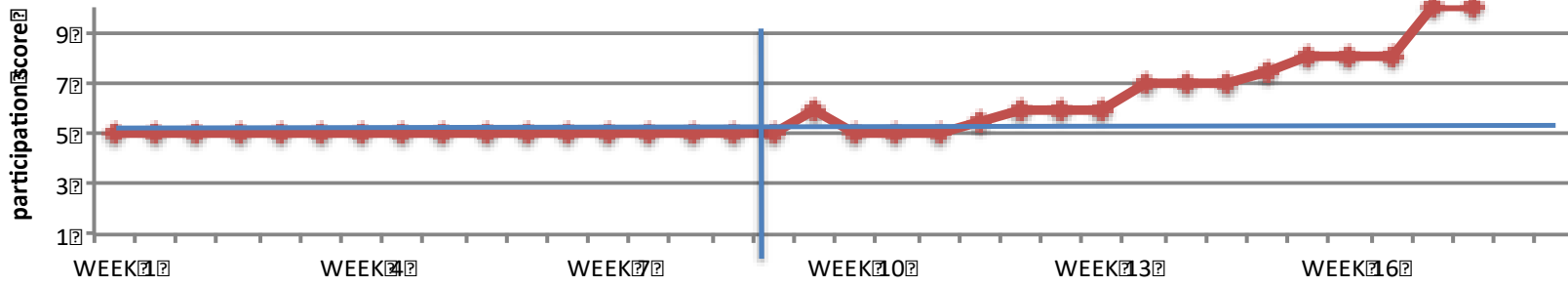
## GOAL 3: Attend football Game



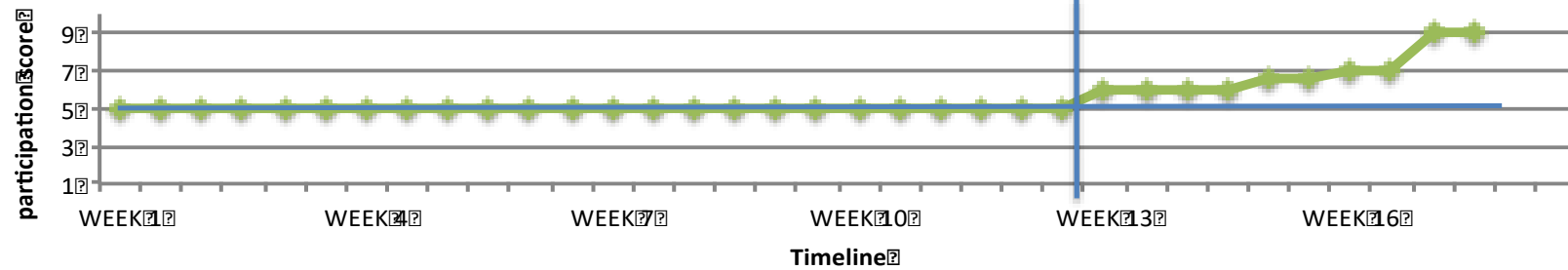
### Goal 1: Art Classes



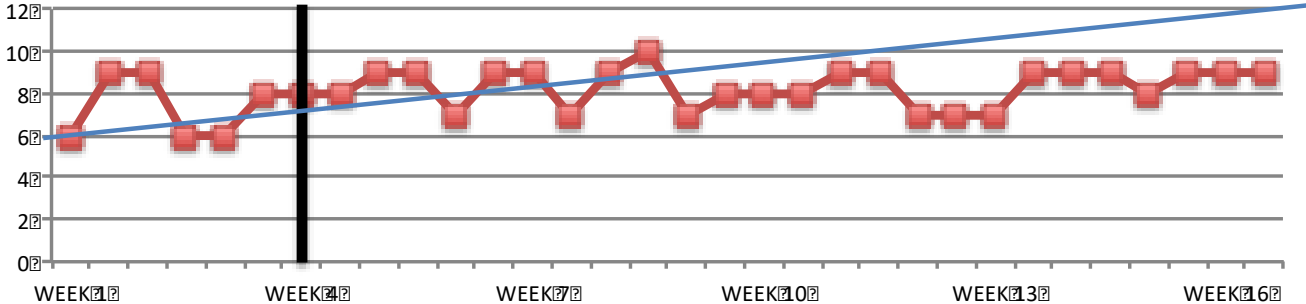
### Goal 2: Shopping at Carrefour laval



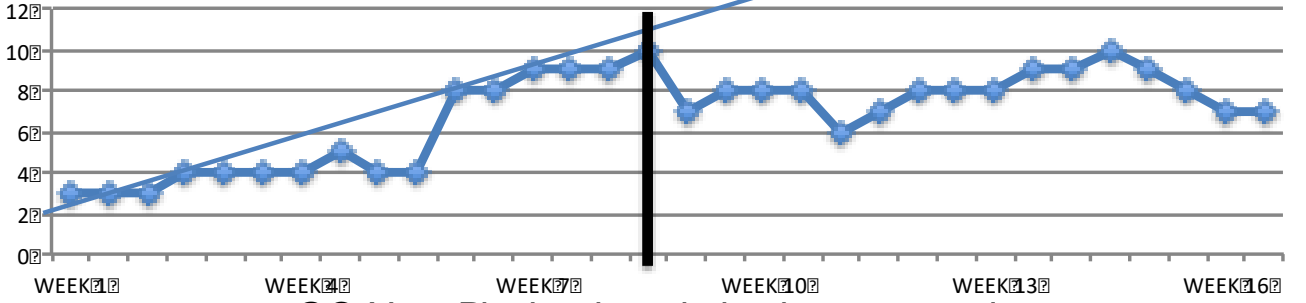
### Goal 3: Sewing Classes



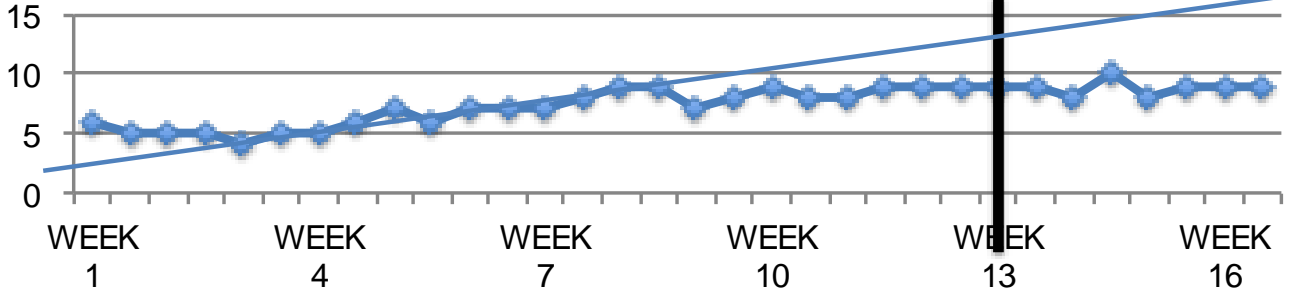
GOAL 1: Socializing with friends out of home/school



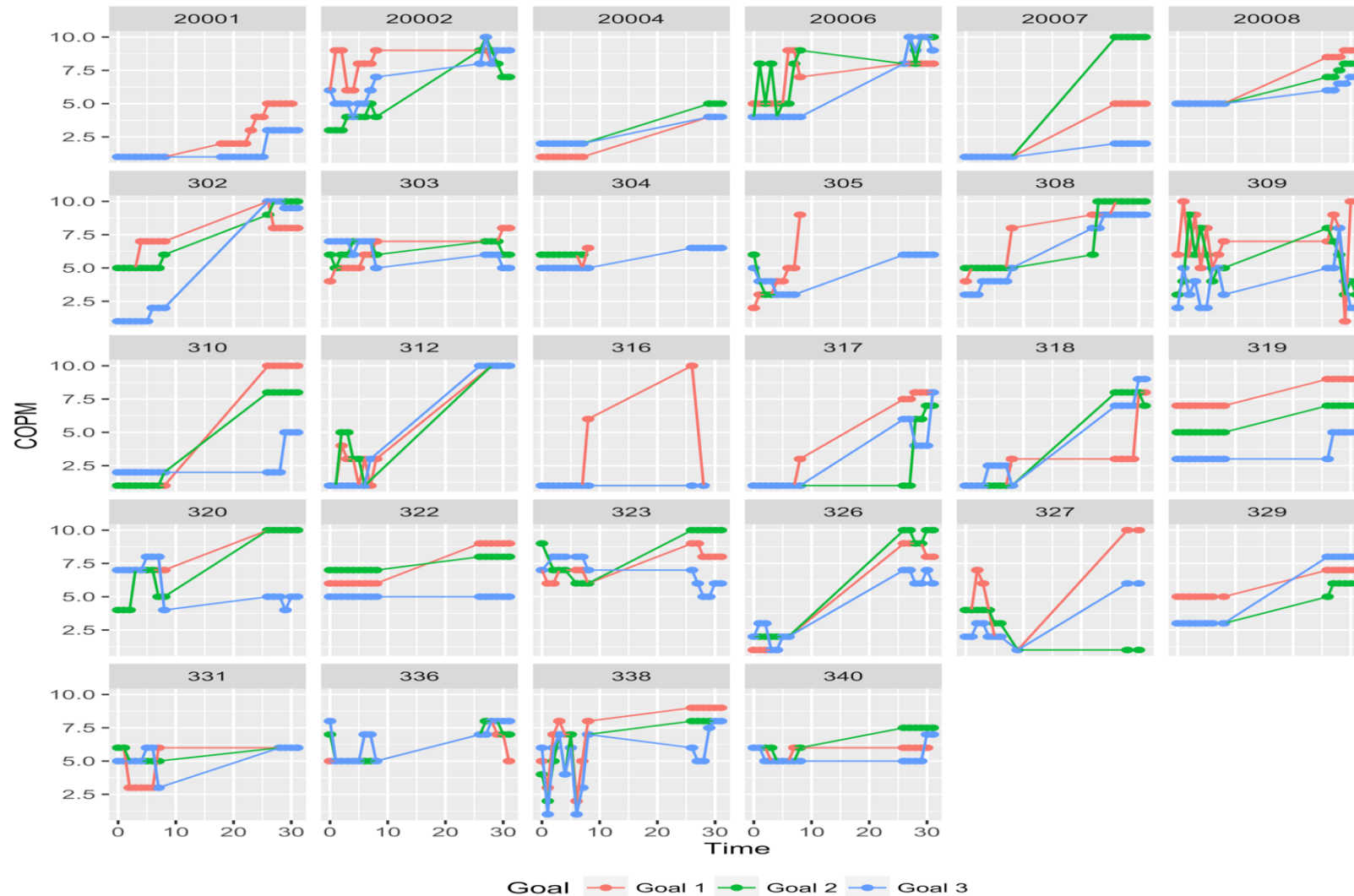
GOAL 2: Participating in a dance program/class



GOAL 3: Playing bocchia in t he community



# Overall intervention effect (79 goals)



# PREP Intervention Study - Results

- A positive and statistically significant treatment effect ( $B=2.08$ ,  $p<0.0001$ ) was observed across goals ( $n=79$ )
- An average improvement of more than 2 points on the COPM performance scale was observed (clinically significant change)
- Improvements in COPM scores were maintained at 20-week follow-up
- The PREP was positively perceived by both occupational therapists ( $n=12$ ) and parents ( $n=12$ )

Anaby et al., 2017; Anaby et al., 2018

# What's happening now?

- Testing the PREP among **young** children
- Testing the **additional benefits** of the PREP approach
- Finalizing an **online Learning Module** of the PREP intervention
- Developing **workshops** for clinicians, parents and managers to increase the uptake of the PREP in the clinical setting

# Take-home messages

- Interventions targeting the **environment** are effective in increasing youth participation and can **empower** youth/families
- Findings support **emerging therapeutic approaches** that emphasize changing the environment and/or the task, rather than merely focusing on changing the child
- Results increase **therapeutic options** in occupational therapy



# Participation Resources

The screenshot shows the CanChild website's 'Participation Knowledge Hub' page. At the top, the CanChild logo is on the left, and search and menu icons are on the right. Below the header, a breadcrumb trail reads 'CanChild Home Page > Research In Practice > Participation'. The main heading is 'Participation Knowledge Hub'. A central banner features the text 'Participation: See What We Can Do!' next to three images: a group of diverse children smiling, a child in a wheelchair on a path, and two children at a table with colorful materials. Below the banner, the section 'What is participation?' is followed by a paragraph defining participation according to the World Health Organization. On the right side, there are three light blue buttons: 'Support Us', 'CanChild's 2015 Annual Report', and 'Stay In Touch'. At the bottom right, a 'Share This Page' section includes social media icons for Facebook (with 44 shares), Twitter, and Google+.

CanChild

CanChild Home Page > Research In Practice > Participation

## Participation Knowledge Hub

**Participation:**  
See What We Can Do!

### What is participation?

Participation is defined by the World Health Organization as "involvement in life situations".<sup>1</sup> At home, school and in their communities, children and youth take part in a wide range of activities, such as playing games and team sports, doing arts and crafts, joining a youth group, or going to the movies with friends. Participation in everyday activities plays a key role in child and youth development.<sup>2,3</sup>

Support Us

CanChild's 2015 Annual Report

Stay In Touch

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# Acknowledgments

- Youth and families!
- Occupational therapists
- CIHR
- REPAR
- FRQ-S
- OFCP
- CRIR MAB-Mackay du CIUSSS du Centre-Ouest-de-l'Île-de-Montréal

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## Contact Us

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Thank You!

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