

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

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Introduction: While occupation is key to youth health, little is known about effective intervention strategies to improve participation in community activities for those with physical disabilities. Developed by CanChild, the PREP (Pathways and Resources for Engagement and Participation) approach aims to enhance participation by removing environmental barriers and coaching youth/parents.

Objectives: This study examined the effectiveness of the PREP intervention among youth with physical disabilities.

Methods: Twenty-eight youth (50% female) aged 12 to 19 years (mean=14.6, SD=1.8) with moderate physical disabilities participated in a 12-week PREP intervention. An Interrupted Time Series design with multiple baselines was employed, replicating the intervention effect across 3 chosen goals/occupations and across participants. An occupational therapist worked individually with youth/parents to identify and implement strategies to remove environmental barriers that impede participation in selected activities within each youth's local context. Goal performance was repeatedly measured using the Canadian Occupational Performance Measure (COPM) at baseline, intervention and follow-up (20-weeks). For each goal, a trajectory representing change in performance was analyzed using visual inspection. To estimate the overall effectiveness of the intervention across all 79 goals, segmented regression combined with mixed-effects modelling approach was used.

Results: A clinically and statistically significant improvement ($p < 0.001$) of more than 2 points on the COPM scale was observed across goals. Levels of performance were maintained during follow-up.

Conclusion: Participation in a diverse array of occupations can be improved by changing the environment only. Effective strategies for removing environmental barriers generated from this study can inform occupational therapy practice and empower families.