

Daily Activity Participation Across Settings in Autistic Youth: Individual Variability and Temporal Stability

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Background

• Daily life participation is often linked to *functional independence* and *well-being*, which can be an important indicator of successful transition into adulthood for autistic youth.

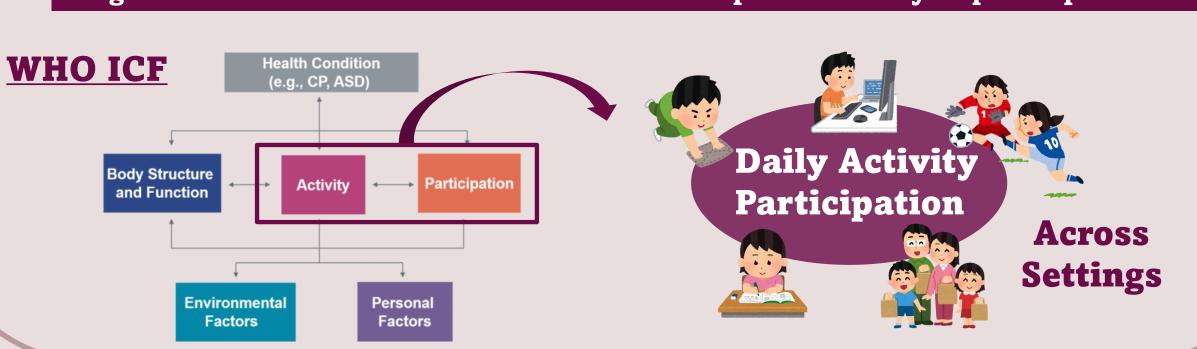
Little is known about individual differences of participation among autistic youth.

• Autistic youth was reported lower participation in certain activities or settings as compared to non-autistic peers.

Most prior evidence relied on *mean comparisons* between autistic vs. non-autistic individuals, without sufficiently addressing individual variability.

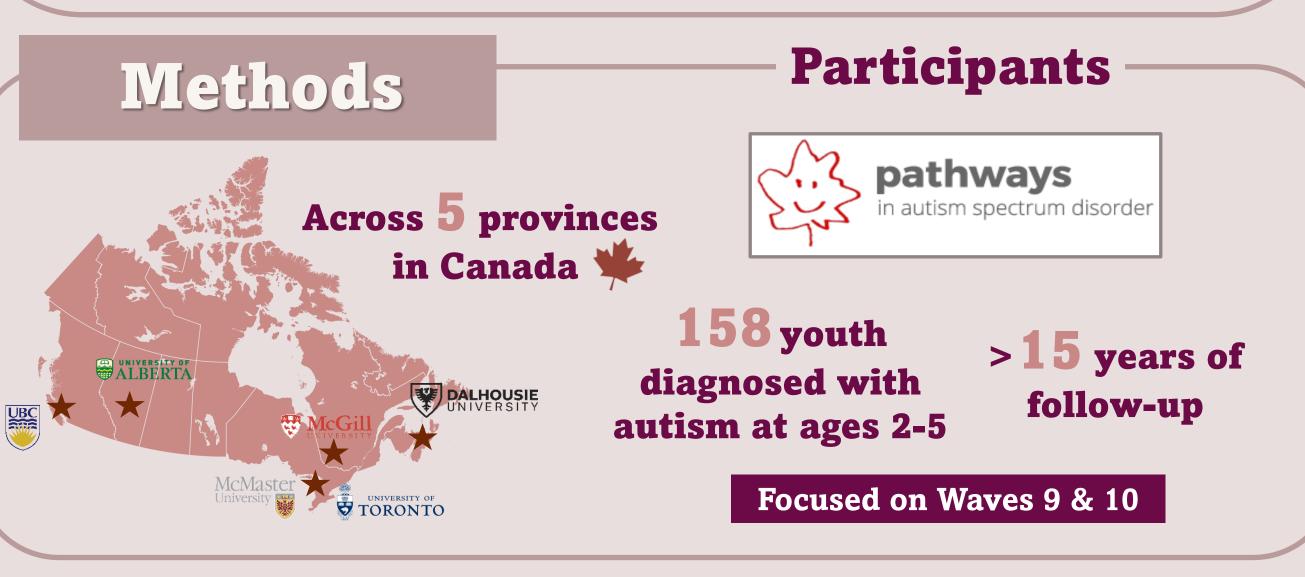
• Disparity between autistic and non-autistic people in activity participation tended to widen with age.

Longitudinal evidence is needed to elucidate temporal stability of participation.



Research Questions

- How many distinct profiles can be identified based on autistic youth's *participation frequency* across settings?
- Are *family SES* (household income & caregiver education), *environmental* supportiveness, youth's *cognitive ability*, and *core autism features* associated with profile membership?
- Do participants classified by these profiles differ in levels of adaptive functioning, challenging behaviour, and involvement during participation?
- Do participation patterns and profile membership *remain stable* across assessments at 11-14 (T1) and 14-16 years of age (T2)?

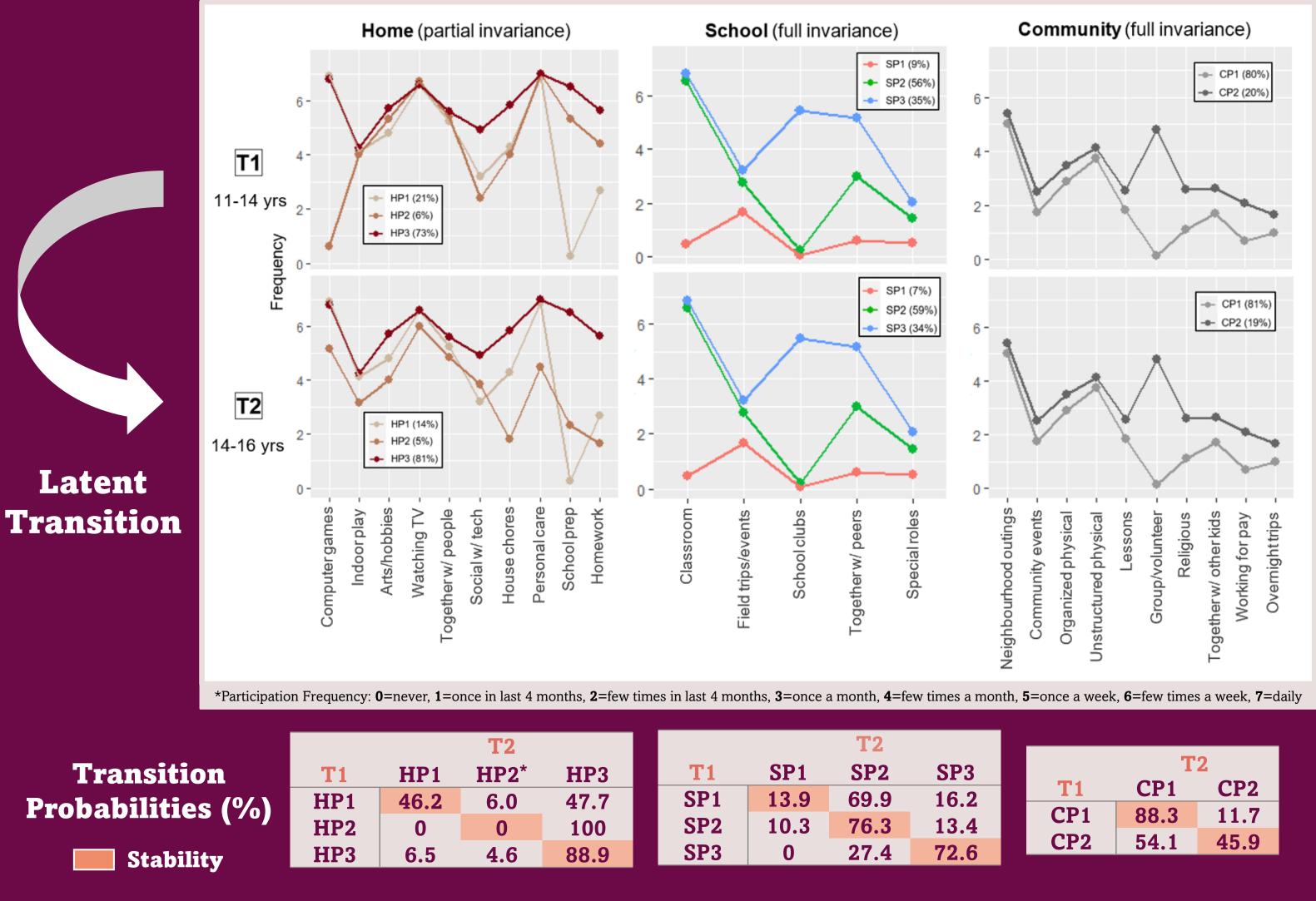


			Measures		
PEM-CY	HOME Participation	Pathways Study	Wave 8 (10-12 years)	Wave 9 (T1) (11-14 years)	Wave 10 (T2) (14-16 years)
Participation & Environment Measure Children & Youth	SCHOOL Participation	Participation		PEM-CY	PEM-CY
	COMMUNITY Participation	Adaptive Behaviour		VABS	
		Challenging Behaviour		CBCL	
 Frequency (main indicators): α=.5268 Involvement (correlate): α=.7687 Environmental supportiveness (covariate): α=.8085 		Core Autism Features	ADOS		
		Nonverbal IQ		WASI-II/Leiter-R	
		Family Background	(FBIQ)	FBIQ	(FBIQ)

Analysis Cross-Sectional Latent Transition Analysis (LTA) Latent Profile Analysis (LPA) Non-invariance **Three-Step Approaches** (account for *classification uncertainty*) **Covariates Concurrent Outcomes SCHOOL Participation** Adaptive Behaviour **Transitions** Primary Caregiver's Education (COM/DLS/SOC) Profile Internalizing/Externalizing Core Autism Features Nonverbal IQ Involvement during Participation

Key Findings

2 to 3 distinct participation profiles across settings were identified among 158 autistic youth.



 $\sim 75\%$ of autistic youth stayed in the same profiles over about 1 year.

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For More details about this study:

Chen YJ, Duku E, Zaidman-Zait A, Szatmari P, Smith IM, Ungar WJ, Zwaigenbaum L, ..., Georgiades S (2023). Variable patterns of daily activity participation across settings in autistic youth: A latent profile transition analysis. *Autism* (Advance online publication in February). doi: 10.1177/13623613231154729

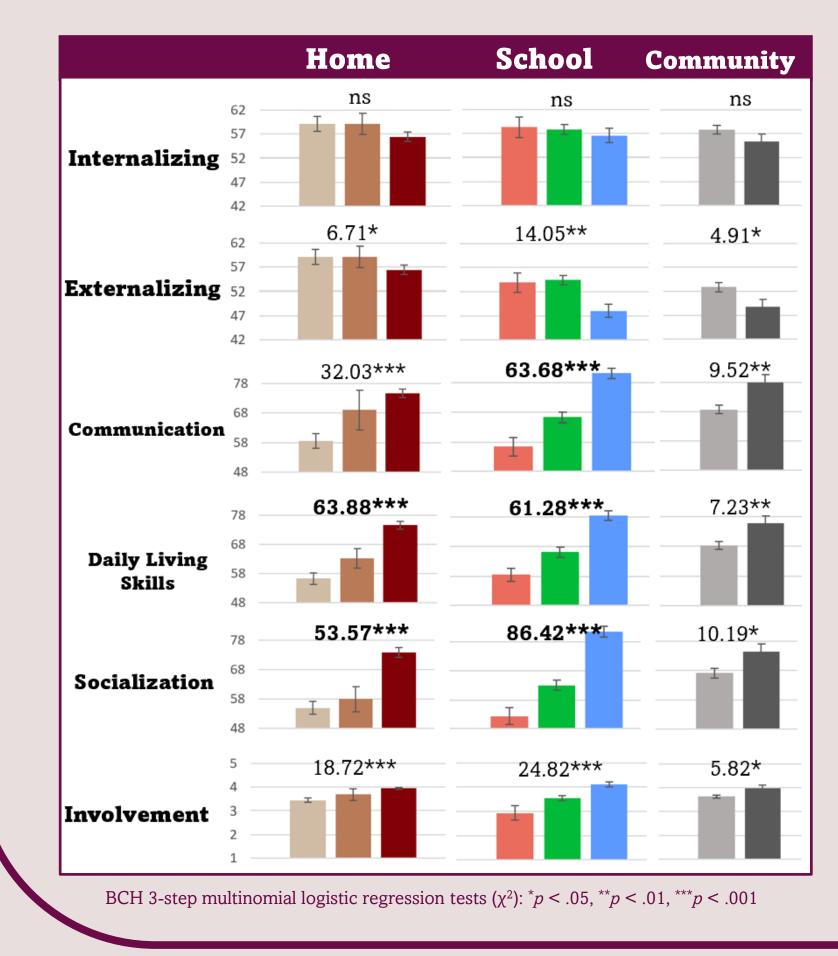
Environmental supportiveness

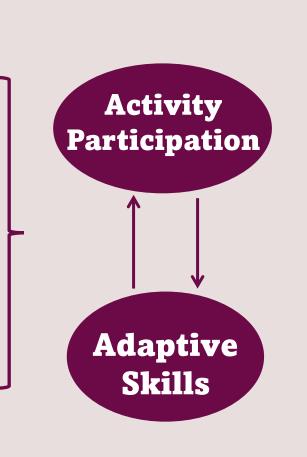
& NVIQ are robust predictors of participation profile membership.

Covariates	Multinomial Logistic Regression			
	Home	School	Community	
Household Income	3>1**	ns	ns	
Caregiver's Education	3>1*	2>1*, 3>1*	ns	
Environmental Support	2>1*, 3>1**	2>1*, 3>1***, 3>2**	2>1**	
NVIQ	3>1**	3>1**, 3>2***	2>1*	
ADOS-CSS	ns	2>3**	ns	

Significant effects (p < .05) in the adjusted model were bolded.

Autistic youth across participation profiles differed most in adaptive functioning.





Implications

Participations patterns were heterogeneous among autistic youth.

Participation imbalance was observed across settings.

Addressing **person-environment fit** may be particularly important.

Customized Supports

Participation patterns were subject to change for ~25% of autistic youth ("movers").

"Movers" tended to shift to **higher** participation *home/school* profiles, indicating resilience for \(\gamma\) participation.

~89% autistic youth stayed in the low community participation profile.

Support for Transition