

# 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.

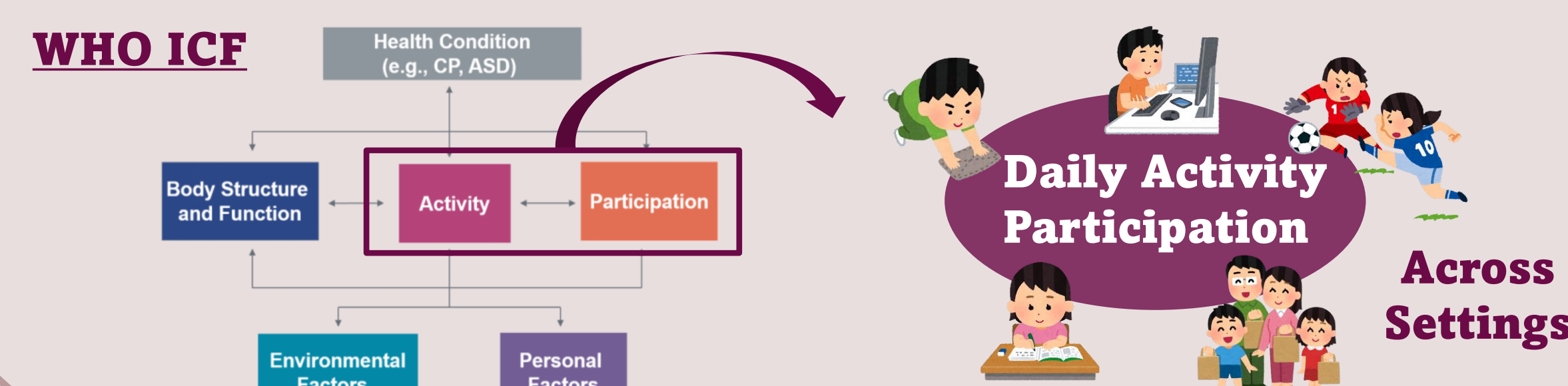
Little is known about *individual differences* of participation among autistic youth.

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)?

## Methods

## Participants



Across 5 provinces  
in Canada



158 youth  
diagnosed with  
autism at ages 2-5  
~15 years of  
follow-up

Focused on Waves 9 & 10

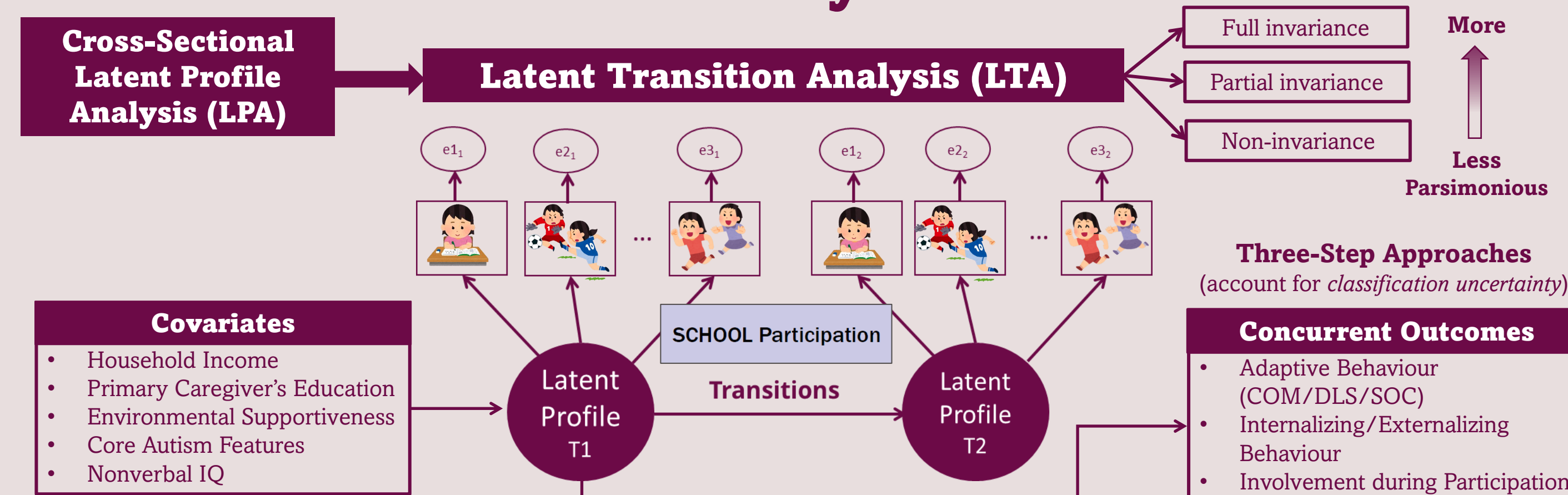
## Measures

PEM-CY	HOME Participation
Participation & Environment Measure Children & Youth	SCHOOL Participation
	COMMUNITY Participation

- Frequency (main indicators):  $\alpha = .52-.68$
- Involvement (correlate):  $\alpha = .76-.87$
- Environmental supportiveness (covariate):  $\alpha = .80-.85$

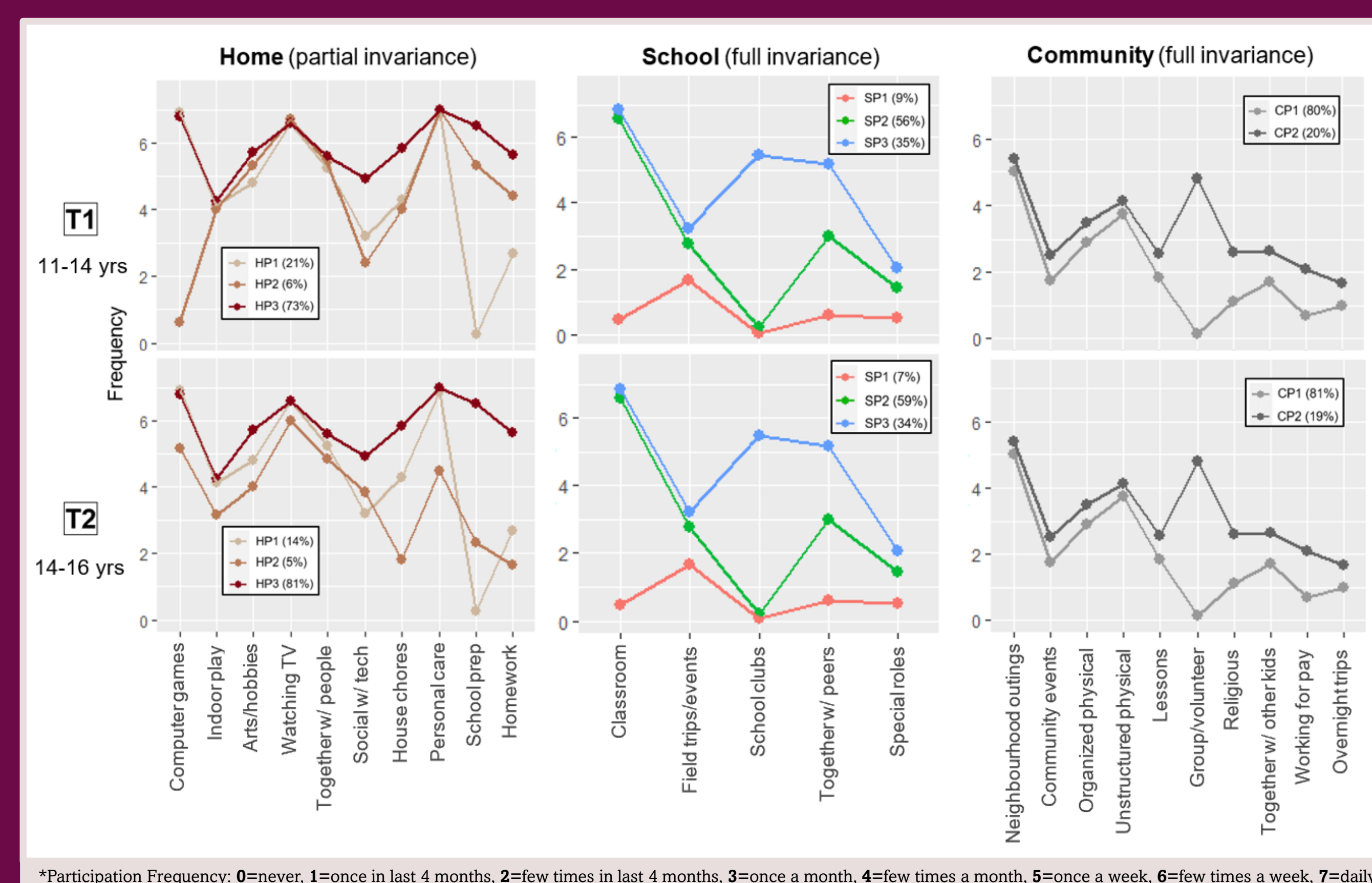
Pathways Study	Wave 8 (10-12 years)	Wave 9 (T1) (11-14 years)	Wave 10 (T2) (14-16 years)
Participation	--	PEM-CY	PEM-CY
Adaptive Behaviour	--	VABS	--
Challenging Behaviour	--	CBCL	--
Core Autism Features	ADOS	--	--
Nonverbal IQ	--	WASI-II/Leiter-R	--
Family Background	(FBIQ)	FBIQ	(FBIQ)

## Analysis



## Key Findings

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



\*Participation Frequency: 0=never, 1=once in last 4 months, 2=few times in last 4 months, 3=once a month, 4=few times a month, 5=once a week, 6=few times a week, 7=daily

Transition Probabilities (%)	T1	T2	T2	T2
	HP1	HP2*	HP3	
HP1	46.2	6.0	47.7	
HP2	0	0	100	
HP3	6.5	4.6	88.9	
	SP1	SP2	SP3	
SP1	13.9	69.9	16.2	
SP2	10.3	76.3	13.4	
SP3	0	27.4	72.6	
	CP1	CP2		
CP1	88.3	11.7		
CP2	54.1	45.9		

~75% of autistic youth stayed in the same profiles over about 1 year.

## 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 ↑ participation.

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

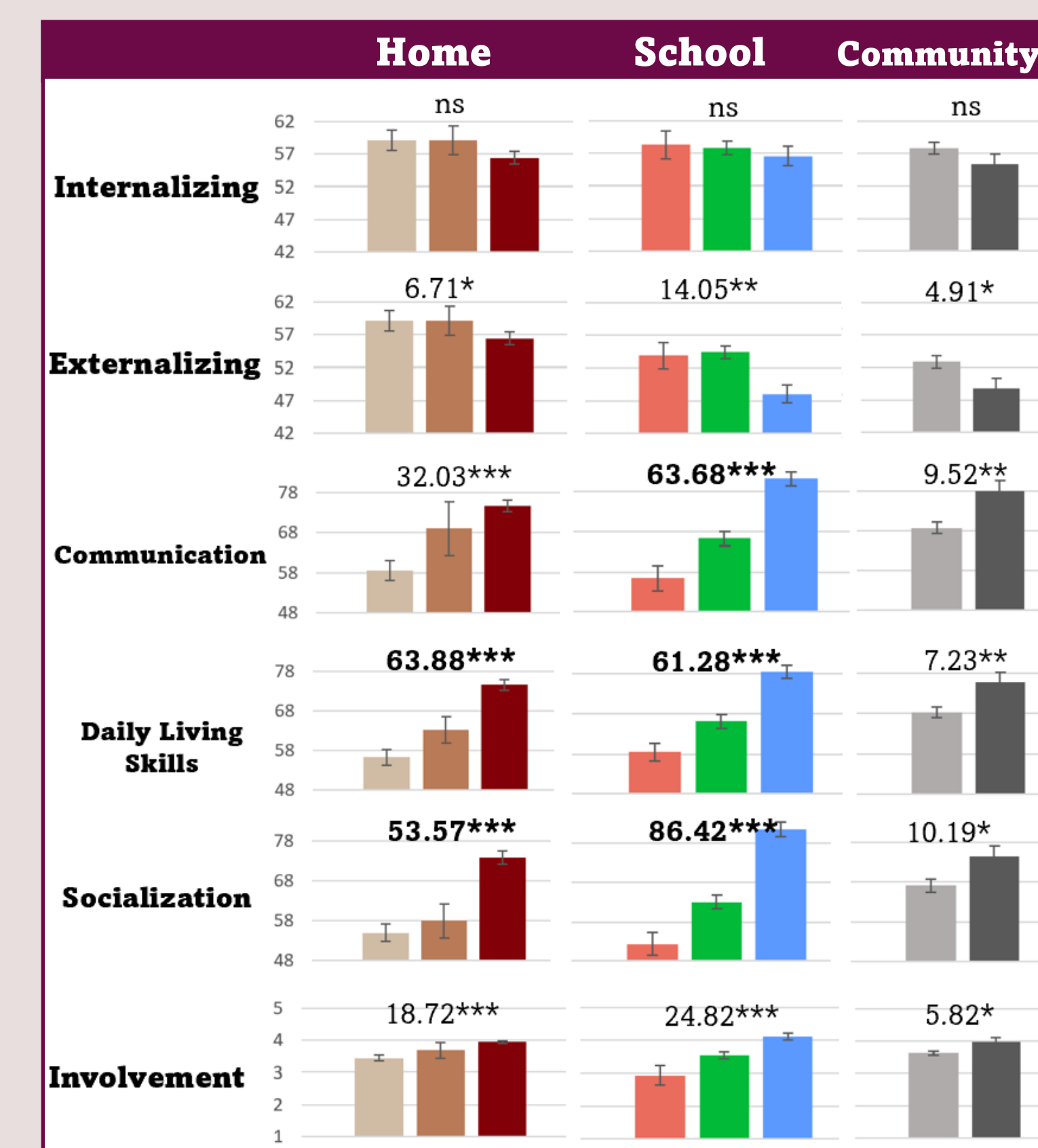
Support for Transition

**Environmental supportiveness & NVIQ** are robust predictors of participation profile membership.

Covariates	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	3>2**	ns

Bolded beta coefficient values represent significant effects ( $p < .05$ ) in the adjusted model.

Autistic youth across participation profiles differed most in **adaptive functioning**.



BCH 3-step multinomial logistic regression tests ( $\chi^2$ ): \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Externalizing behaviour & adaptive skills may be *intervention targets* for ↑ participation.

Activity Participation

Adaptive Skills