

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.

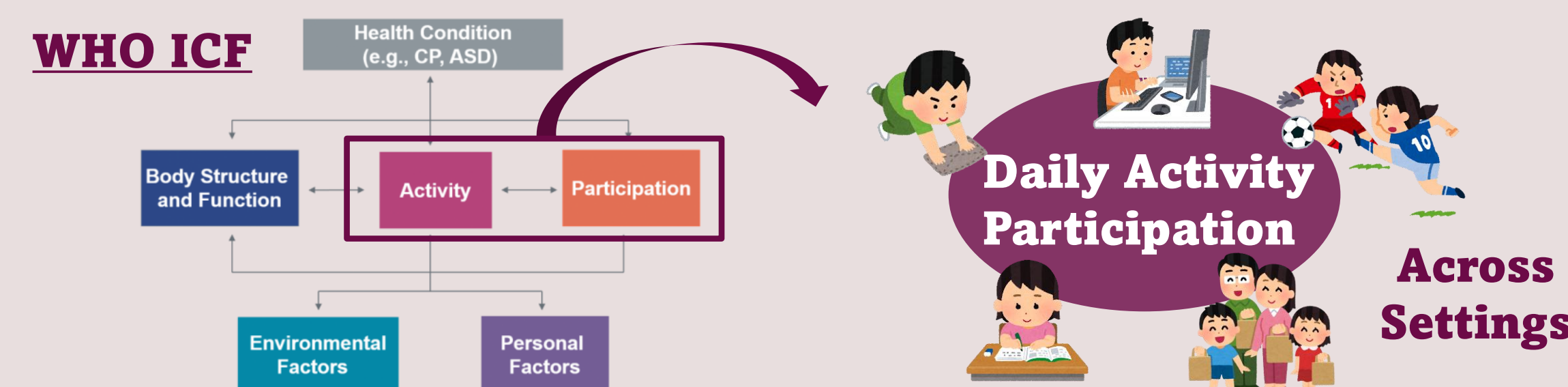
There is limited evidence for participation patterns among autistic youth.

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 individuals 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 and 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



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

Focused on Waves 9 & 10



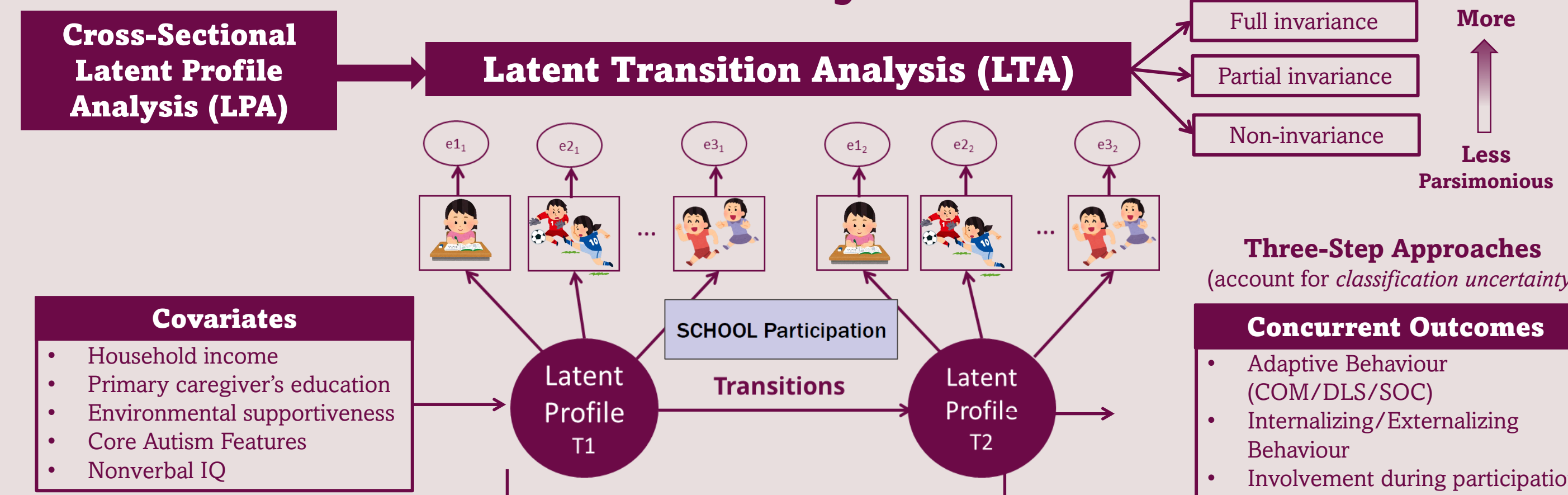
Measures

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): $\alpha = .80-.85$

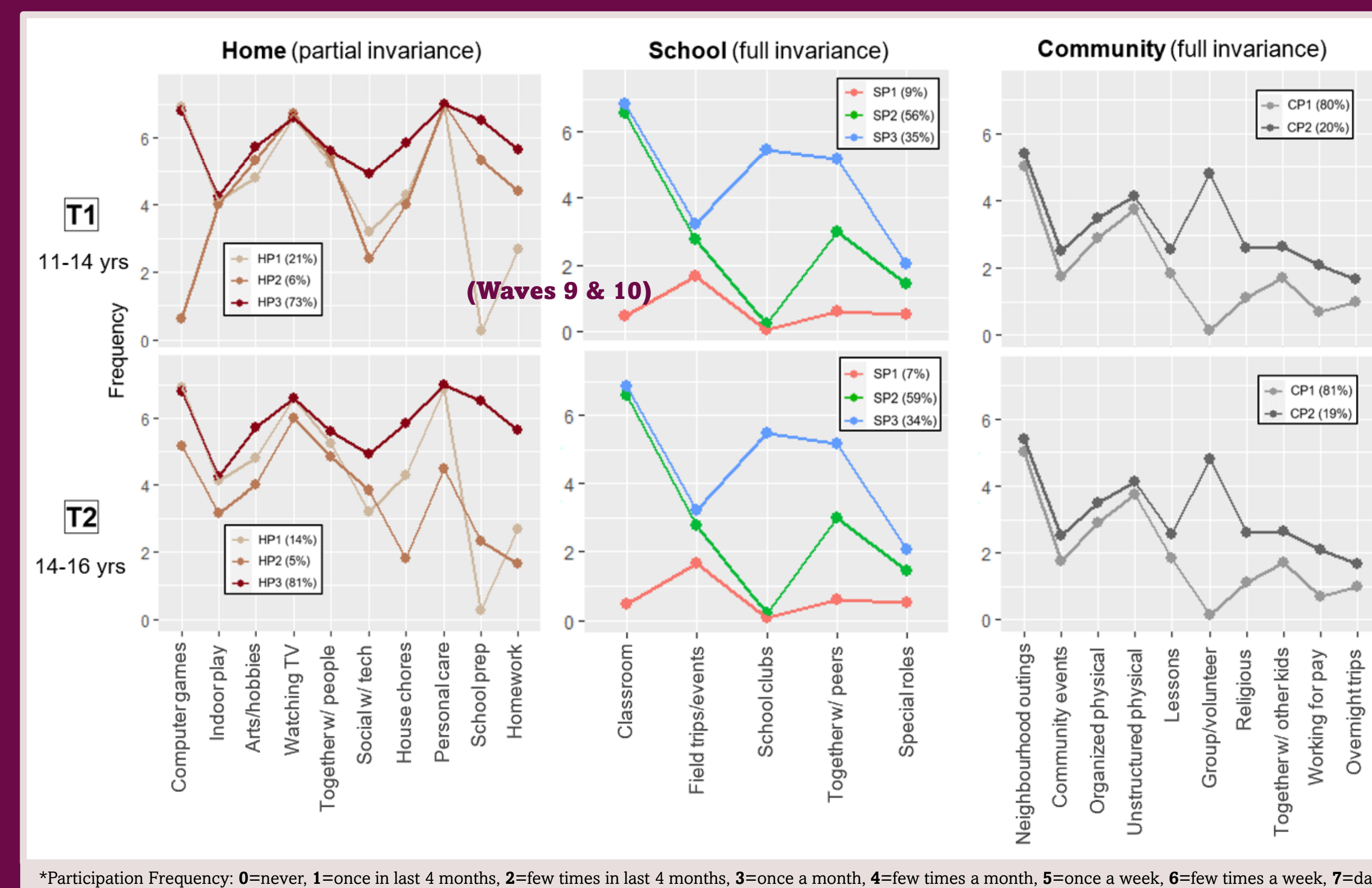
Pathways Study	Wave 8 (10-12 years)	Wave 9 (T1) (11-14 years)	Wave 10 (T2) (14-16 years)
Participation	--	PEM-CY	PEM-CY
Adaptive Behaviour	--	VABS	--
Challenging Behaviour	--	CBCL	--
Core Autism Features	ADOS	--	--
Nonverbal IQ	WASI-II/Leiter-R	--	--
Family Background	(FBIQ)	FBIQ	(FBIQ)

Analysis



Key Findings

2 to 3 distinct participation profiles 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
Stability

	T1	HP1	T2	HP2*	HP3
HP1		46.2		6.0	
HP2		0		0	100
HP3		6.5		4.6	88.9

	T1	SP1	SP2	SP3
SP1		13.9	69.9	16.2
SP2		10.3	76.3	13.4
SP3		0	27.4	72.6

	T1	CP1	T2	CP2
CP1		88.93		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 Support

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

"Movers" seemed to shift to **higher** participation profiles, indicating *opportunities* for improvement.

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

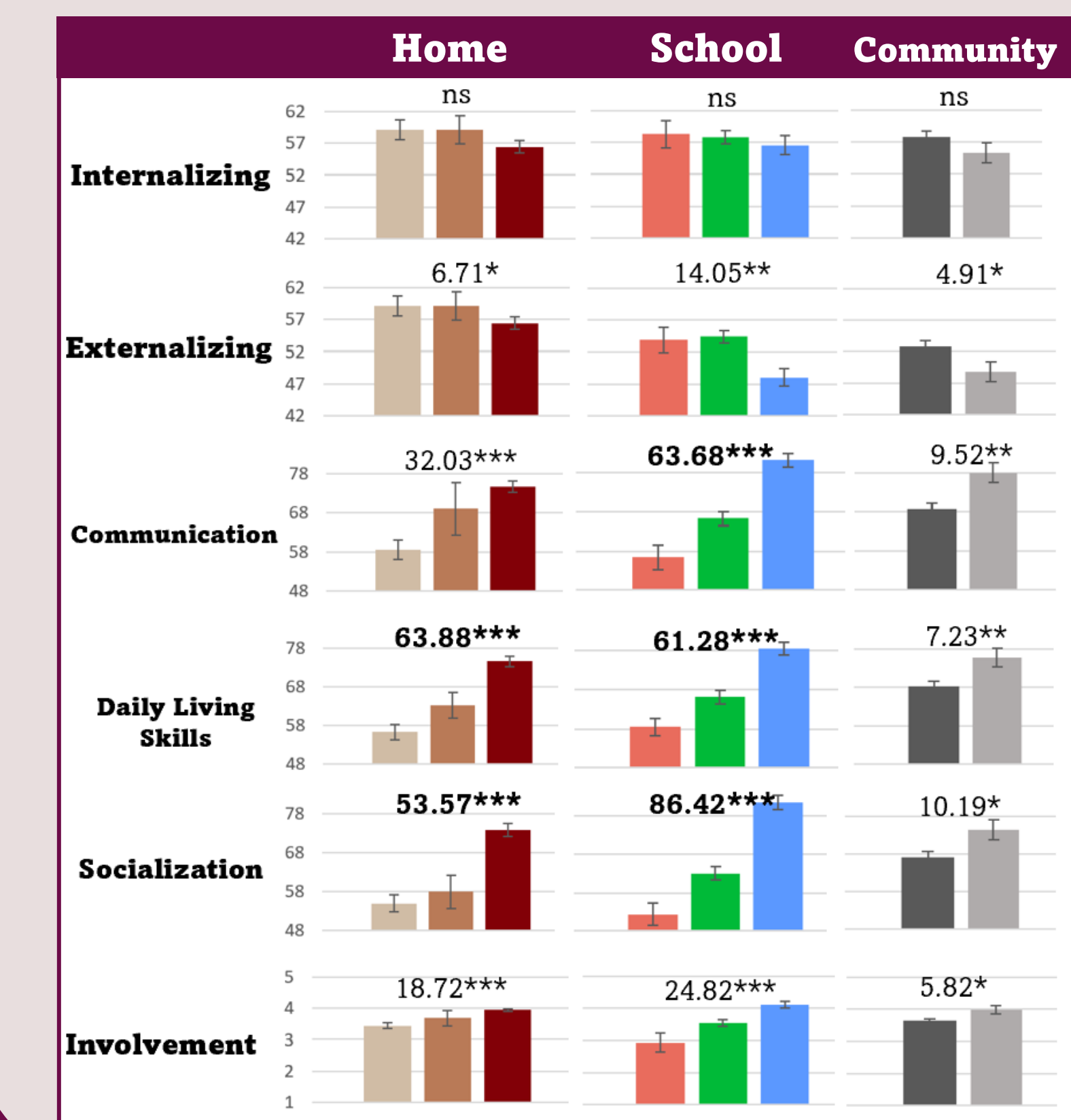
Support for Transition

Environmental supportiveness & NVIQ are robust predictors of 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	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 (χ^2): * $p < .05$, ** $p < .01$, *** $p < .001$

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

Activity Participation

Adaptive Skills