IMPACT OF TRANSITION ACTIVITIES AND SELF-DETERMINATION ON WELLBEING IN AUTISTIC YOUNG ADULTS

AMANDA BOYD,
PHD, CRC, LCPC
CONNECTIONS SCHOOLS
APRIL 24, 2026

ILLINOIS TECH

NEW CONNECTIONS ACADEMY

AGENDA

- Introduction
- Background
- Methods & Results
- Discussion, Limitations, Application
- Questions & Comments

INTRODUCTION

INTRODUCTION

Welcome and thank you!

Senior Vocational Counselor at Connections Schools in NW suburbs

-Provide transition services and counseling to students with IEPs

Doctoral alumni of Illinois Tech's Rehabilitation Counselor Education (RCE) program

Dissertation study, defended in June 2025

Inspired to bridge the gap between applied practice, legislation, and research

WHAT OUTCOMES ARE YOU LOOKING FOR?

OVERVIEW OF CURRENT BEST-PRACTICES AND CURRENT STUDY

In my world:

-WIOA and IDEA: Includes the types of transition activities that should be implemented while in high school

To knowledge, few studies exist demonstrating how transition activities affect outcomes in adulthood

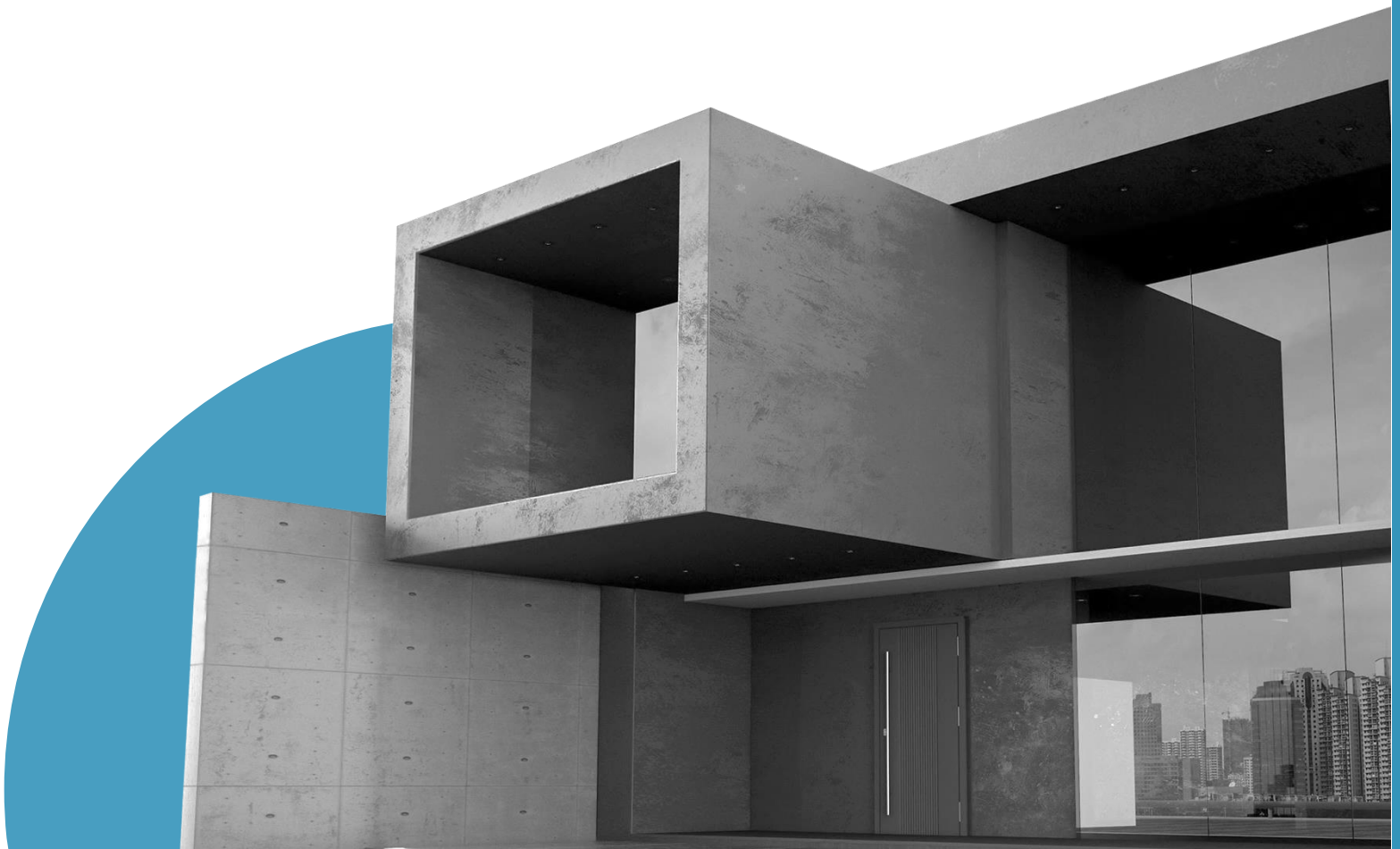
-Research on transition for IDD population highlights the importance of self-determination as indicator of positive outcomes

-Despite becoming influential in the field of psychology, very minimal research currently exists on Positive Psychology's PERMA wellbeing (Seligman, 2012) as an outcome for ASD population

Current study aims to build the understanding of the association between transition activities completed in high school and self-determination on PERMA wellbeing

BACKGROUND

(BRIEF)



WELLBEING & POSITIVE PSYCHOLOGY

Quality of life (QoL) and wellbeing are important outcomes in ASD research

Individuals with ASD experience consistently lower QoL and psychological wellbeing across the lifespan

Positive psychology has been highly regarded in disability studies

- shifting perspective: deficit-based to focus on character strengths
- However, outcomes through positive psychology lens have scarcely been explored in ASD population & in rehabilitation research

PERMA: including positive emotions, engagement, meaning, positive relationships, and accomplishment (Seligman, 2012)

POSTSECONDARY OUTCOMES

National Longitudinal Transition Study-2 (NLTS2) results for individuals with ASD after high school (Roux et al., 2015):

- **81% were not living independently**
- **64% did not engage in postsecondary education**
- **42% were not employed**
- **32% did not participate in their communities**
- **24% reported social isolation**

POST-SECONDARY OUTCOMES

Predictors of post-school employment (Chiang et al., 2013)

- high annual household income
- parental education level - bachelor's degree or higher
- being female
- higher level of social skills
- absence of an intellectual disability
- career counseling in high school
- secondary school's communication with vocational training programs or employers
- graduation from high school
- ***high school interventions (Pillay & Brownlow, 2017)***
  - ***more attention now on transition activities completed in secondary school***

TRANSITION ACTIVITIES & PRE-ETS "CONTINUUM"

- Transition services required by law (IDEA) of 2004 and (WIOA) of 2014
- WIOA outlines the activities, called Pre-Employment Transition Services (Pre-ETS), that should be included in vocational rehabilitation while students are in high school:

1. Job Exploration Counseling
2. Work-Based Learning Experiences
3. Counseling on Postsecondary Education Opportunities
4. Workplace Readiness Training
5. Instruction in Self-Advocacy

These transition activities can be conceptualized as continuum from least integrated to most integrated (classroom-based to competitive employment)

TRANSITION ACTIVITIES: PAID EMPLOYMENT

High school employment experiences linked to postsecondary employment success for graduating students with ASD (Carter et al., 2012)

Considered in the highest "tier" or level of integration

One study found only 24.4% of high school students with ASD participated in paid employment while in school (Qian et al., 2021)

- Still persistent barriers to employment

Emphasis on Pre-ETS and paid employment as transition activities necessary to gain skills needed in adult life

SELF-DETERMINATION

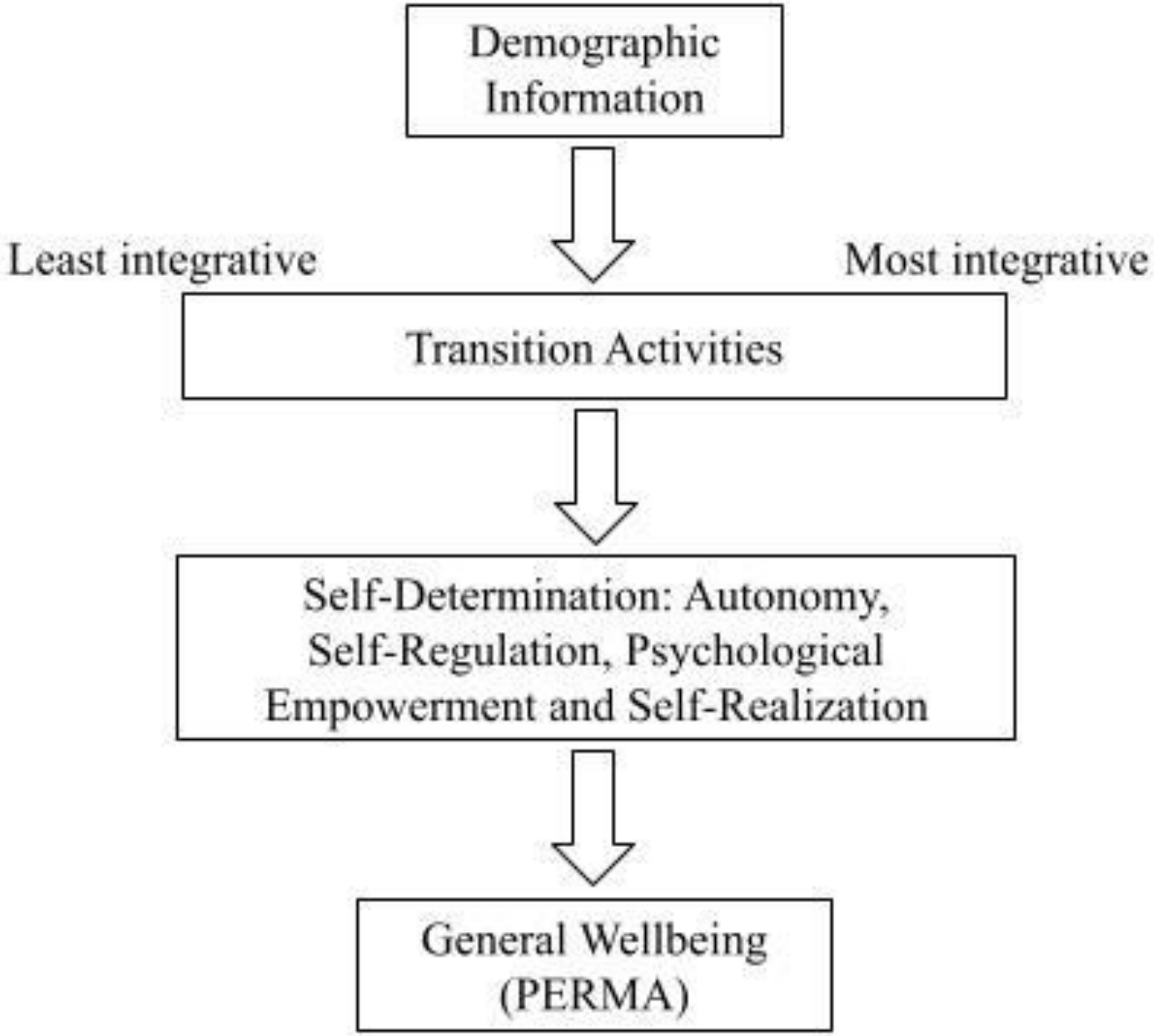
Review of literature focusing on self-determination and Pre-ETS found positive results in employment-related outcomes after high school

"Component elements" of self-determined behavior:

choice making, decision making, problem-solving, goal setting and attainment, self-regulation/management, internal locus of control, self-efficacy, self-awareness, and self-knowledge (Wehmeyer, 1999)

Measuring self-determination: Autonomy, self-regulation, self-realization, and psychological empowerment (Wehmeyer, 2003)

Directionality of this relationship (self-determination and vocational activities) has not explicitly been investigated


Demographic Information
Least integrative
Most integrative
Transition Activities
Self-Determination: Autonomy, Self-Regulation, Psychological Empowerment and Self-Realization
General Wellbeing (PERMA)

RESEARCH QUESTIONS HYPOTHESES

1) Which transition activity tier group would report higher levels of self-determination and well-being?	Tier 3 (Competitive Employment/College Enrollment)
2A) What is the association between engagement in transition activities and general wellbeing when controlling for demographics and ASD severity?	Engagement with higher levels of transition activity will be positively associated with overall wellbeing
2B) What is the association between self-determination and wellbeing after controlling for demographic, ASD severity, and transition activities?	Self-determination variables* will be positively associated with overall wellbeing *Self-realization, psychological empowerment, autonomy, self-regulation
3) Is the relationship between engagement in transition activities and wellbeing mediated by self-determination?	The relationship will be partially mediated by overall self-determination.

METHODS

(ULTRA BRIEF)

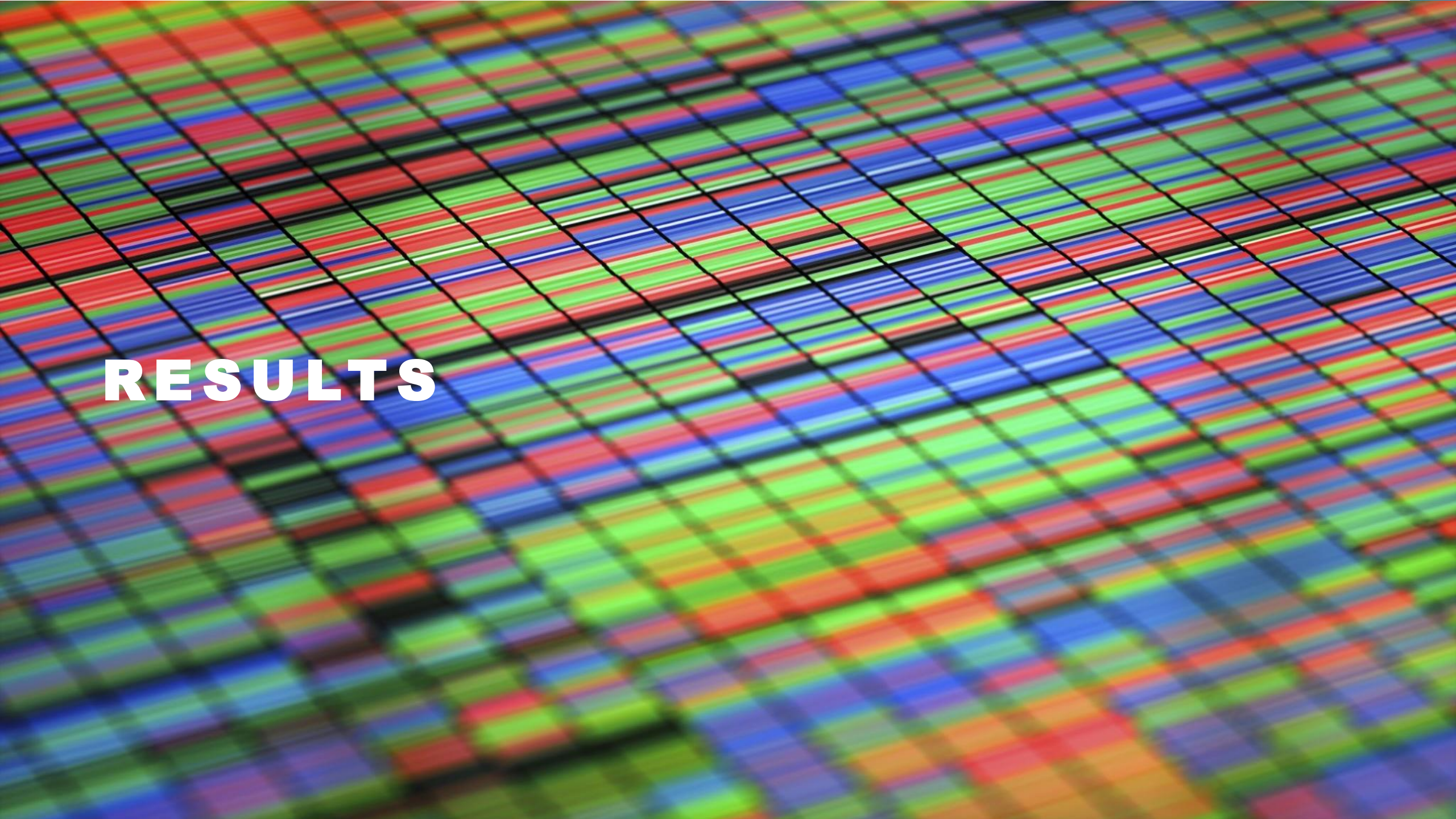
METHODS

- **152 autistic young adults**
  - **18-30 years old**

<u>Online survey including:</u>
Demographics
Transition Activities and Services Scale*
Autism Spectrum Quotient – Short Form (AQ-S)
(Hoekstra et al., 2011)
ARC Self-Determination Scale – Adult Version
(Wehmeyer & Kelchner, 1995)
PERMA-Profiler
(Butler & Kern, 2016)

combined

Transition Activity Tier Level	Transition Activities Endorsed within Tier
Tier 0: No Transition Activity	
Tier 1: Classroom/Education-Based Activity	Career interest inventories, values surveys, ability testing, life-skills questionnaires, transition planning assessments, research on careers/colleges of interest through O*NET Online or related platform, individual or group sessions with college and career vocational counseling, social skill building groups, life skills educational classes, self-advocacy training
Tier 2: Hands-on Activity within Secondary Setting	Unpaid work-based learning such as on-campus school jobs, unpaid work training through school district, volunteer work, hands-on life skills activities such as cooking or technical skill building, college tours, job shadowing
Tier 3: Paid Community Employment or Postsecondary Education Preparation	Paid competitive employment through an employer, paid supported employment through an employer, admission and enrollment in a degree-seeking college or vocational certificate program


RESULTS

RESULTS

Predominately White autistic young adults

- Interestingly, self-reporting higher ASD severity than the cutoff

Majority female*

Large gender-diverse group, reflects gender fluidly of ASD population (Warrier et al., 2020)

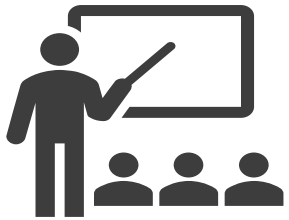
28% held paid employment while in high school

74% had some level of postsecondary education experience

RESEARCH QUESTION 1

"Which transition activity tier group would report higher levels of self-determination and well-being for individuals with ASD?"

No significant differences between transition tier groups in self-determination or wellbeing



Further examination showed that self-determination and wellbeing were positively correlated with *total transition activities* completed in high school

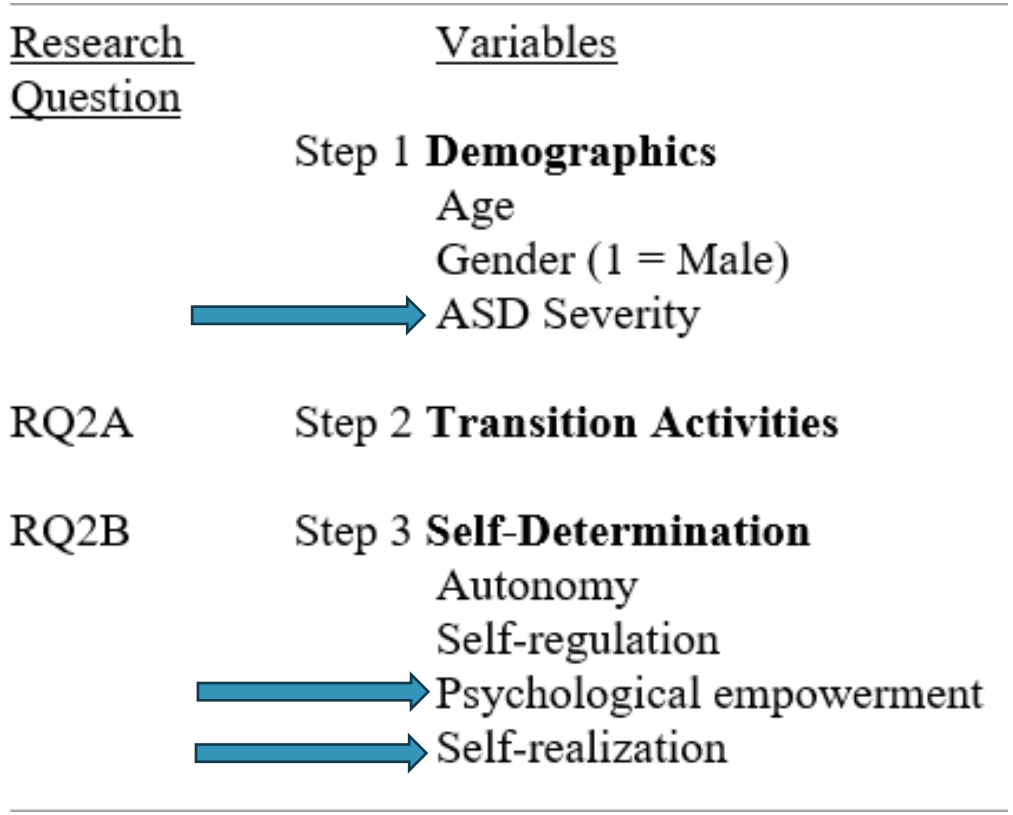
*This transition activity variable was retained

RESEARCH QUESTION 2

"What is the association between engagement in transition activities and general wellbeing for young adults with ASD, controlling for demographics and ASD severity?"

AND

"What is the association between self-determination and wellbeing after controlling for demographic, ASD severity, and transition activities? "



ASD Severity significant predictors until SD variables entered the picture

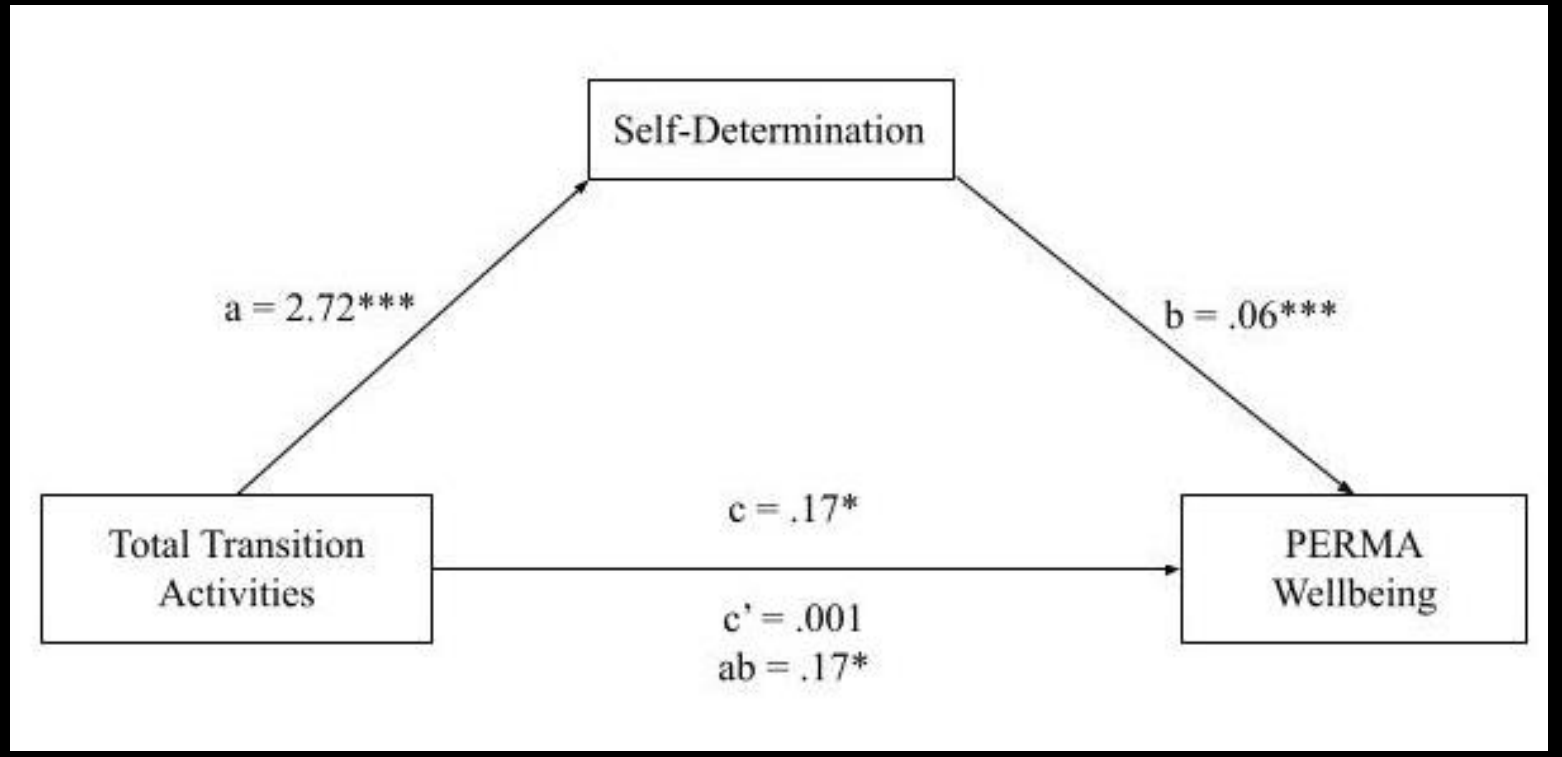
RESEARCH QUESTION 3

"Is the relationship between engagement in transition activities and wellbeing mediated by self-determination?"

YES! Total mediation. What this means:

Increased activities = associated with increased wellbeing

<u>Influence of total transition activities on wellbeing is explained entirely through self-determination</u>



PAUSE:
QUESTIONS?
THOUGHTS?

DISCUSSION

Unique: Pre-ETS as continuum and HS transition activities measured

- Similarly, different in holding self-determination as an outcome and mediator

Emphasizes need for wholistic and well-rounded services while in high school:

- Maximizing exposure to transition activities can lead to greater adulthood self-determination and sense of wellbeing.

DISCUSSION

Research has demonstrated the importance of competitive employment while in high school (Southward & Kyzar, 2017) and importance of distinguishing between this level and more sheltered activities (Taylor & Seltzer, 2012)

Lack of evidence in this study for tiering groups based on Pre-ETS transition activities (regarding SD and wellbeing in young adulthood)

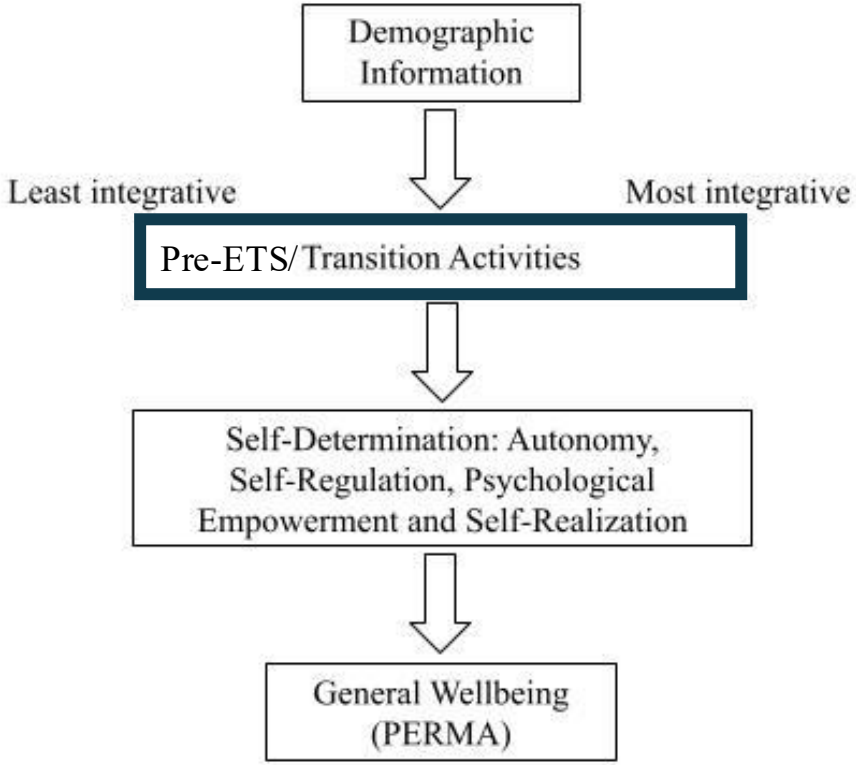
However, *total transition activities* completed was significantly correlated with these constructs

Important implications for practice and legislation

Transition Activity Tier Level	Transition Activities Endorsed within Tier
Tier 0: No Transition Activity	
[illegible]	Career interest inventories, values surveys, ability testing, life-skills questionnaires, transition planning assessments, research on careers/colleges of interest through O*NET Online or related platform, individual or group sessions with college and career vocational counseling, social skill building groups, life skills educational classes, self-advocacy training
[illegible]	Unpaid work-based learning such as on-campus school jobs, unpaid work training through school district, volunteer work, hands-on life skills activities such as cooking or technical skill building, college tours, job shadowing
[illegible] Paid Community Employment or Postsecondary Education Preparation	Paid competitive employment through an employer, paid supported employment through an employer, admission and enrollment in a degree-seeking college or vocational certificate program

DISCUSSION

- ASD severity may play a role in level of impact that transition activities has on wellbeing for autistic young adults
  - Those with greater support needs face barriers in accessing structured services
- Simply increasing the amount of activities will not increase wellbeing
  - Individualization, quality, and accessibility
  - Make the Pre-ETS "continuum" meaningful



DISCUSSION

Practical application: Self-Determination Models of Instruction (SDLMI) (Wehmeyer et al., 2000)

- Goal setting and decision-making skills, yes, but ALSO ***psychological empowerment/self-realization*** as unique contributors to wellbeing
- Cultivation of SD skills can lead to improved wellbeing

ASD severity no longer significant predictor in presence of these SD variables

Aligns with positive psychology (Seligman, 2012)

- PERMA-Profiler only recently validated in ASD population
- Current research gives insight into the factors that contribute to (and how SD interacts with) PERMA wellbeing

OTHER IMPLICATIONS

Implications for research and practice in transition planning, vocational rehabilitation, and positive psychological outcomes

Legislative frameworks influence long-term outcomes beyond employment

Self-development and mental health

Positive Psychology & PERMA wellbeing as useful tools, tied to self-determination

School personnel: need curriculum models to supplement goal setting objectives with interventions that foster self-realization and psychological empowerment

Going beyond compliance in IEP/re-eval/SOP documentation

VR services: resist being solely focused on employment placement; focus on holistic interventions: SD assessment and prioritizing emotional wellbeing

And if nothing else, a validation study

LIMITATIONS & FUTURE RESEARCH

- Use of online survey tools, like Prolific, comes with potential for sampling bias
  - Participants that are comfortable with web-based communication
  - May be more academically-inclined
  - Future studies may include other methods of data collection
- Survey studies cannot conclude causality
- Use of Transition Activities and Services Scale
  - Informed by Pre-ETS (WIOA, 2014)
  - No psychometrics & did not observe quality of services
  - Call for measurement tools
    - Could model after VDI (Taylor & Seltzer, 2012), but instead focus on transition activities in secondary school (Tier 1 & 2 from current study)
- Age: could have included participants of out school for extended time
  - Longitudinal studies

LIMITATIONS & FUTURE RESEARCH

Wellbeing measurement: PERMA-Profiler

- Needs comparison to other wellbeing assessment tools
- Subscales not included in study

Other factors contributing to SD and wellbeing:

- Supportive family environments (Nota et al., 2007; Wehmeyer & Schwartz, 1998)
- Peer mentorship (Carter et al., 2013)
- School climate factors: teacher support, inclusivity, and safety (Thapa et al., 2013; Suldo et al., 2009)

QUESTIONS?

Thank you!

aboyd@newconnectionsacademy.net
W: (224) 801-8868

EXTRA SLIDES (IF YOU LIKE RESEARCH)

POWER ANALYSES

A priori: Moderate to large effect size was anticipated based on prior research (Kim, 2019; Clarke et al., 2021)

- G*Power version 3.1.9.6. determined a sample of 126 was needed
- Power level: .80
- Alpha level : 05

Post-hoc achieved power: greater than .99

- 9 total predictors (in HRA)
- f^2 =1.15

DEMOGRAPHICS

Participant Demographics (N = 152)				
Variable	n	%	M	(SD)
Age			24.65	2.93
Gender				
Male	54	(35.5)		
Female	66	(43.4)		
Gender Diverse	32	(21.1)		
Ethnicity				
White	90	(59.2)		
Black/African American	21	(13.8)		
Hispanic	9	(5.9)		
Asian	8	(5.3)		
Mixed/Other	24	(15.8)		

Education		
Some High School	1	(0.7)
Current High School	2	(1.3)
High School or Equivalent	43	(28.3)
Current College	44	(29.0)
College Graduate	51	(33.6)
Some College	3	(2.0)
Graduate School	8	(5.3)
Employment		
Full-time	52	(34.2)
Part-time	42	(27.6)
Internship	4	(2.6)
Workshop/Training	1	(0.7)
Unemployed	40	(26.3)
Other (Disabled, Student, Self-Employed)	13	(8.6)

Tier 1:			N = 28	(18.4)
No Services Received	8	(.05)		
Transition/Vocational Assessments				
Yes	123	(80.9)		
No	29	(19.1)		
Career/College Exploration				
Yes	107	(70.4)		
No	45	(29.6)		
Received services pertaining to goals				
Yes	77	(50.7)		
No	75	(49.3)		

Tier 2:			**N = 39**	**(25.7)**
Work-Based Learning				
Yes	47	(30.9)		
No	105	(69.1)		
Volunteer Work				
Yes	101	(66.5)		
No	51	(33.6)		
District Job				
Yes	17	(11.2)		
No	135	(88.8)		

Tier 3:			N = 85	(55.9)
Competitive Employment				
Yes	32	(21.1)		
No	120	(79.0)		
Supported Employment				
Yes	11	(7.2)		
No	141	(92.8)		
College Enrollment				
Yes	69	(45.4)		
No	83	(54.6)		

STUDY CORRELATIONS

Variables	*M*	*(SD)*	1	2	3	4	5	6	7	8	9
1. Age	24.65	(2.94)	--								
2. Gender (1 = Male)	--	--	-.04	--							
3. Autism Severity	18.68	(2.93)	.23**	-.27**	--						
4. Total Transition Activities	3.84	(1.95)	-.05	.14	-.17*	--					
5. Autonomy	55.44	(12.58)	.03	-.004	-.28**	.32**	--				
6. Self-Regulation	12.59	(3.96)	-.19*	-.09	-.02	-.007	.12	--			
7. Psych. Empowerment	10.48	(3.02)	.02	.13	-.33**	.17*	.54**	.09	--		
8. Self-Realization	8.34	(3.15)	.02	.17*	-.35**	.24**	.48**	.04	.64**	--	
9. Self-Determination (Total)	86.85	(17.26)	-.01	.03	-.33**	.31**	.94**	.34**	.70**	.65**	--
10. PERMA Wellbeing Mean Score	5.59	(1.79)	-.09	.07	-.23**	.18*	.45**	.11	.59**	.72**	.59**

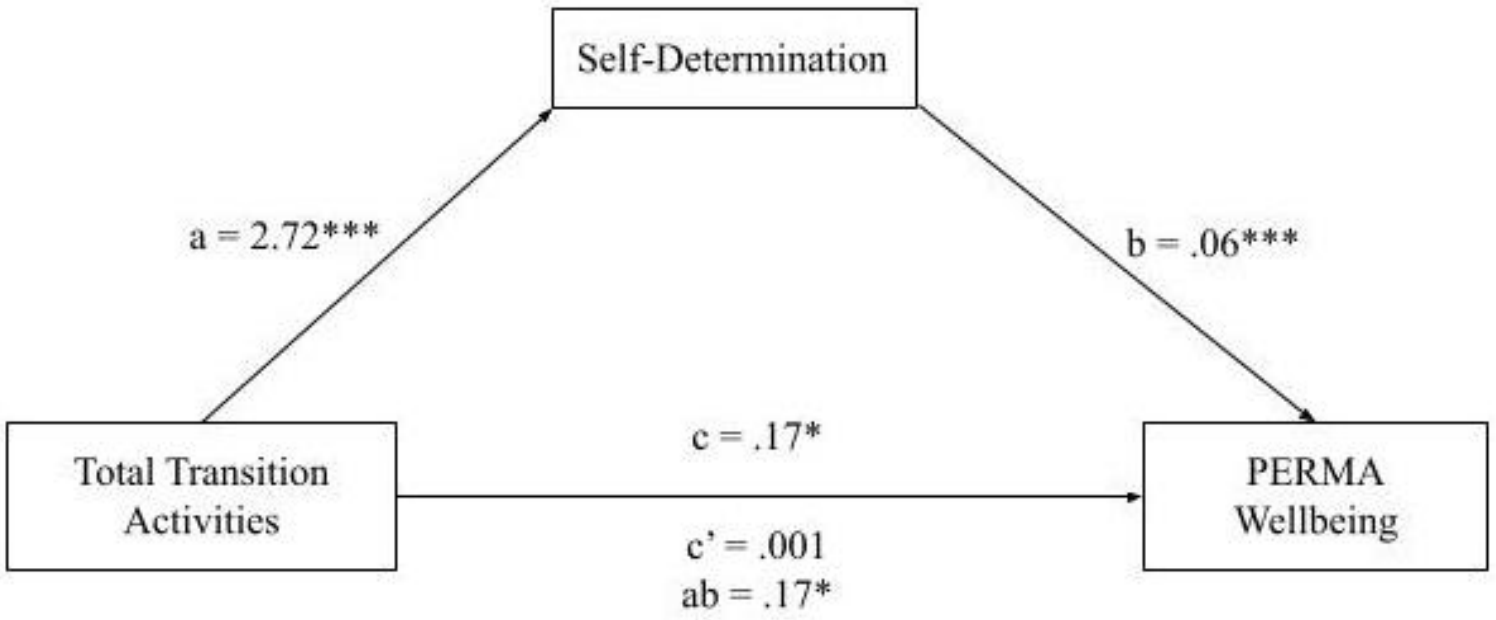
HIERARCHICAL REGRESSION ANALYSIS

ASD severity significant at steps 1 and 2

Total Transition Activities not a significant predictor in the model

Self-realization and psychological empowerment significant SD variables (step 3)

Variable	R^2	ΔR^2	*B*	*SE*	β	*p*
Step 1	.06*					
Age			-.03	.05	-.05	.59
Gender (1= male)			.02	.31	.00	.96
ASD Severity			-.08	.03	-.22	.01**
Step 2	.08*	.02				
Age			-.03	.05	-.04	.61
Gender (1= male)			-.04	.31	-.01	.90
ASD Severity			-.08	.03	-.20	.02*
Total Transition Activities			.14	.07	.15	.07
Step 3	.57***	.49***				
Age			-.08	.04	-.13	.03*
Gender (1= male)			-.15	.22	-.04	.49
ASD Severity			.03	.02	.09	.18
Total Transition Activities			-.01	.05	-.01	.91
Autonomy			.01	.01	.09	.20
Self-Realization			.33	.04	.58	.00***
Self-Regulation			.02	.03	.03	.57
Psych. Empowerment			.12	.05	.20	.01**



c path: more activities reported higher levels of wellbeing
a path: transition activities significantly predicted SD
b path: SD significantly predicted wellbeing
c′ path: direct effect not significant after controlling for SD
ab path: indirect effect

Suggests full mediation