

Measuring collaboration between child- and adult- serving programs

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Acknowledgements

The Transitions RTC aims to improve the supports for youth and young adults, ages 14-30, with serious mental health conditions who are trying to successfully complete their schooling and training and move into rewarding work lives. We are located at the University Massachusetts Medical School, Worcester, MA, Department Psychiatry, Systems & Psychosocial Advances Research Center. Visit us at:

<http://labs.umassmed.edu/transitionsRTC/index.htm>

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Collaboration

- *Collaboration* involves information exchange, activity modification, resource sharing, and building capacity the partner/s for reciprocal benefit and to achieve shared goals (Himmelman, 2001)
- Consistent relationship between collaboration & increased service utilization (e.g. Rosenheck et al., 1998; Rothbard et al., 2004).



CHILD SYSTEM 18-21 Yrs.

ADULT SYSTEM

Education

Child Welfare

Juvenile Justice

Child Mental Health

Medicaid

Criminal Justice

Adult Mental Health

Medicaid

Higher Education

Housing

Vocational Rehabilitation

Substance Abuse

Labor

Birth

AGE



Death

Barriers to Cross-age Collaboration

- Different funding streams
- Different “cultures”/approaches
- Different agents accountability
- Different training/background
- Different target populations



Ultimate Goals

1. Identify features programs that could be leveraged to increase cross-age collaboration
2. Predict programs that will lead or struggle with cross-age collaboration efforts



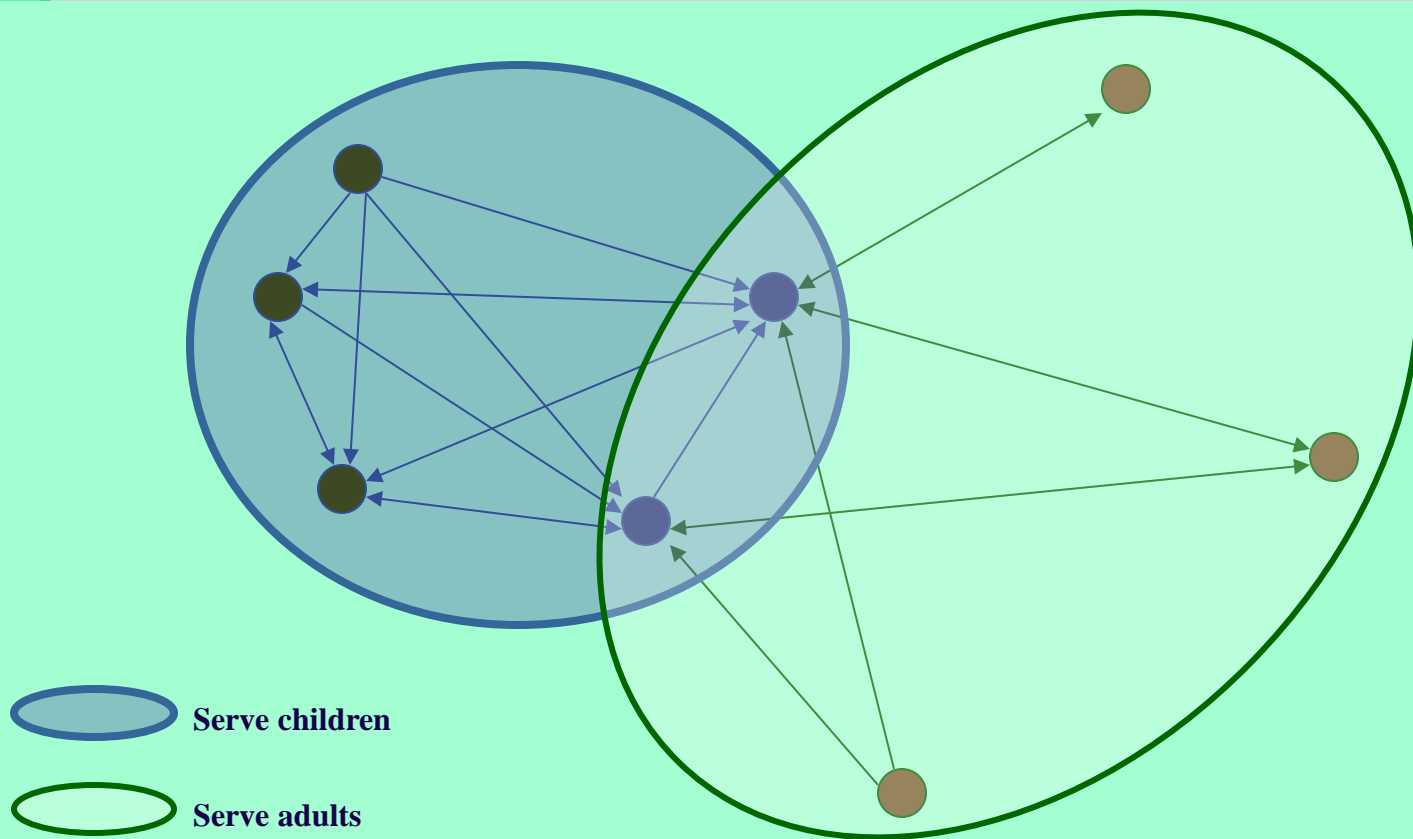
Immediate Goal

- Identify strong measures cross-age collaboration
- Examine correlates the strong measure



Social Network Analysis

One of the most common approaches to measuring interorganizational collaboration
(e.g. Morrissey et al., 1994; Pablo et al., 2013; Milward et al., 2010)



From Davis et al., 2012



Potential Correlates



Individuals across different Functional Units (e.g. engine assembly, trunk assembly) need;

- 1) Overlapping responsibility
- 2) Reward/accountability based on collective performance
- 3) Mechanisms that make it easy to understand what each other is doing
- 4) Clear procedures that foster coordination

(Majchrzak & Wang, 1996)



Program Characteristics Associated with Collaboration

- Program “Demographics”
- Program leadership belief /perceptions
 - coordination is important
 - Key stakeholders support coordination
 - Funders support coordination
 - Accountability for coordination

(Fletcher et al., 2009)





METHODS

Data Collection Methods

- 3 Networks: 2 HTI sites and one previous PYT site
- “Key Informant” identified for each program in the network
- Data collection spring and summer 2011 (2nd year HTI grants); Summer 2014 PYT site (9 yrs post grant)
- Phone and web interview (initial consent rate about 80%)



Data collected at program level

- Program collaboration practices
 - Index Interdisciplinary Collaboration
 - Questionnaire on within- and cross-program collaboration
- Leadership beliefs/perceptions
- Involvement in HTI project
- Program “demographics”
 - Size/Age program
 - Types services provided
 - Ages served and age continuity



Social Network Analysis Questions

1. How often do staff in your program meet with staff in this other program for client planning purposes?
2. How often do staff/administrators in your program and these programs meet together to discuss issues of mutual interest?
3. How often does your program refer clients TO this other program?



Social Network Analysis Questions

4. How ten does your program receive client referrals FROM this other program?
5. How ten does your program share resources with each these other programs (e.g., administrative support, shared staff)

CODING

Not at all
Rarely
Don't Know

=

No
Connection

Occasionally
Fairly ten
Very ten

=

Connection



Definition Cross-age

- Each program categorized
 - Youth
 - TAY (transition-age youth/young adults)
 - Adults
- “Cross-age” connection = connection with a program that serves a different age category
 - e.g. a Youth program referring clients to an Adult program)



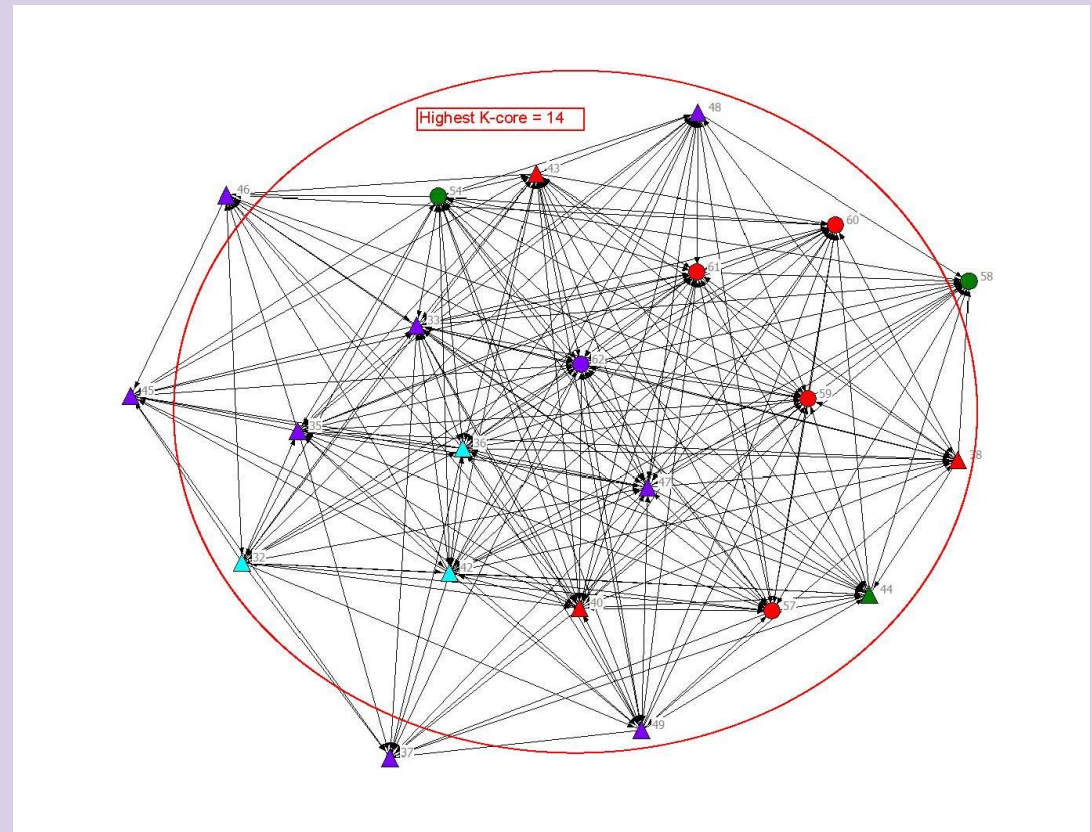
Results: Whole Network



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Social Network Analysis

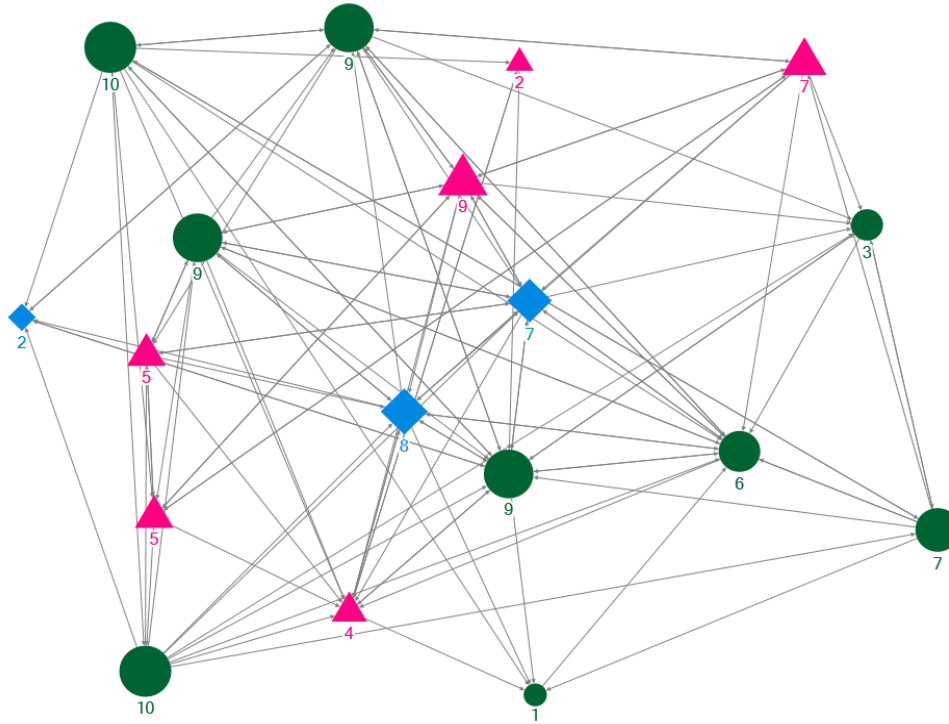
- Method for assessing the presence and strength relationships between organizations in a network
- Yields various statistics for characterizing relationships



Site A

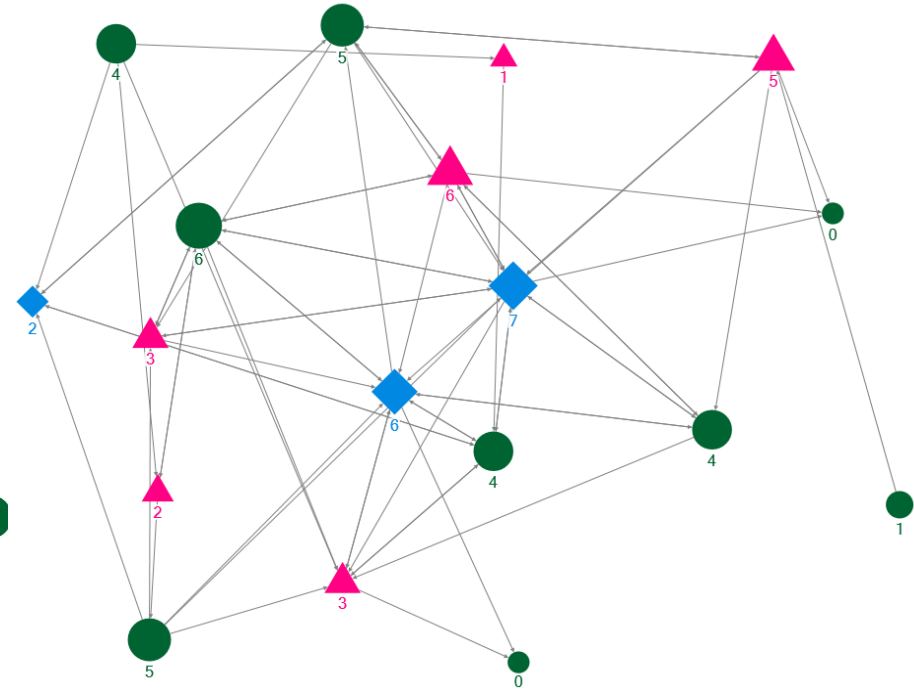
- Youth 33%
- ◆ TAY 17%
- ▲ Adults 50%

Full Network



Total links: 113

Cross-Age Collaborations

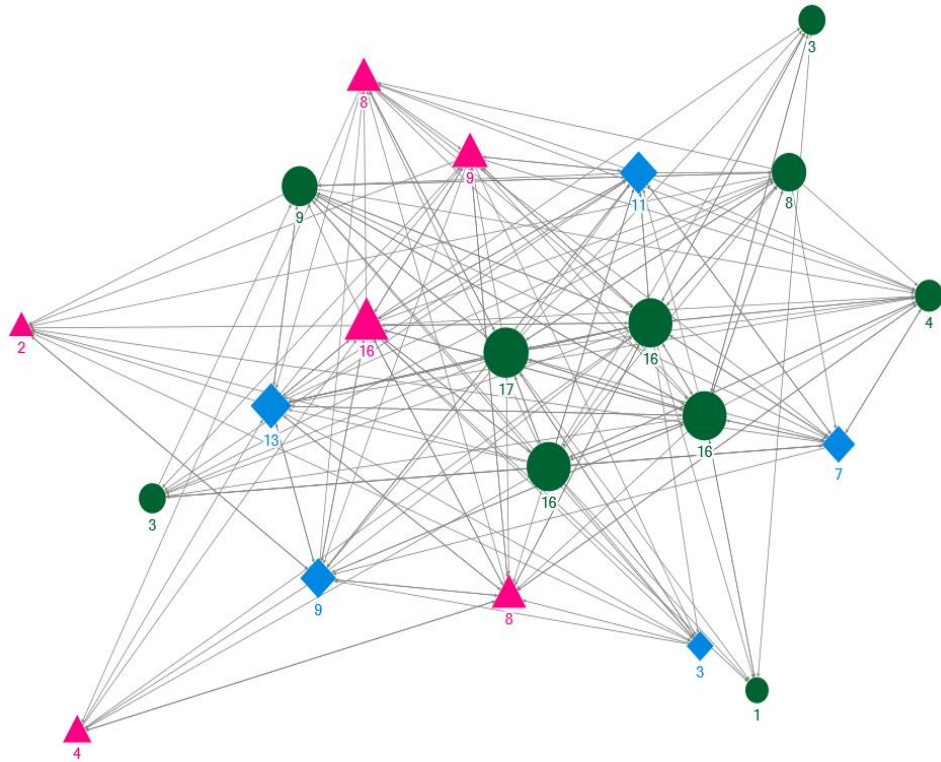


Total links: 64

Site B

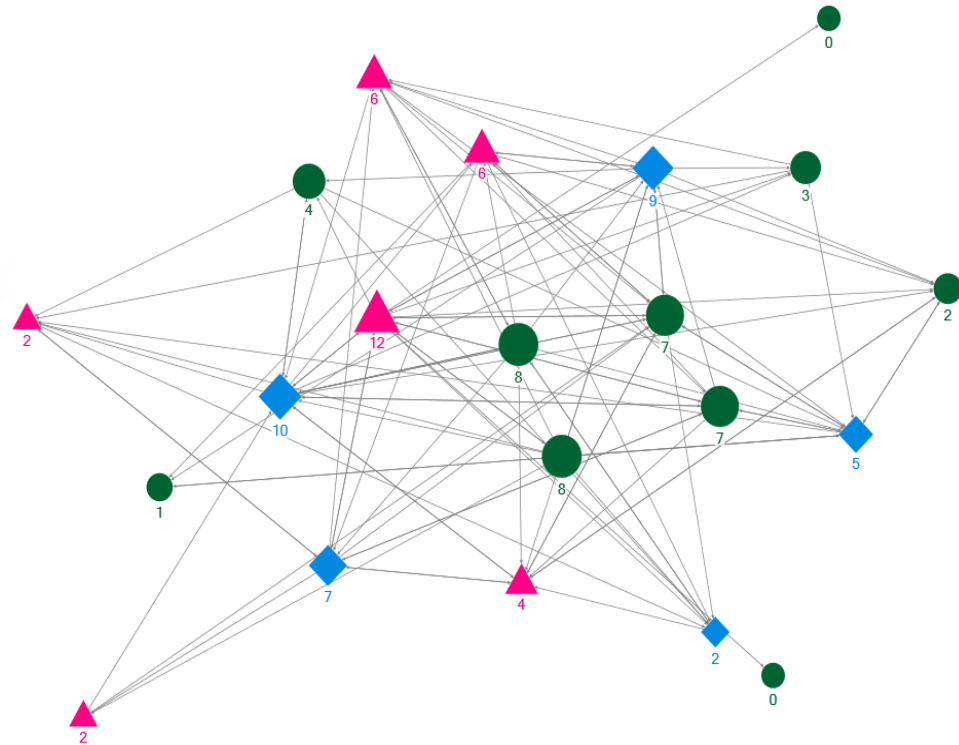
- Youth 48%
- ◆ TAY 24%
- ▲ Adults 29%

Full Network



Total links: 183

Cross-Age Collaborations

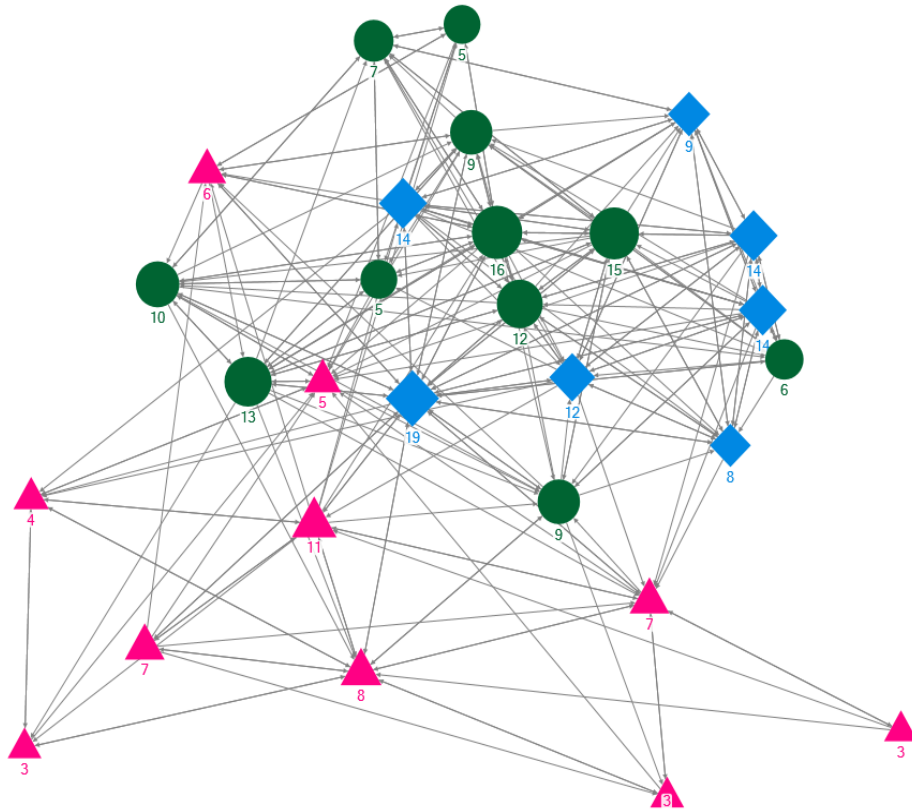


Total links: 105

Site C

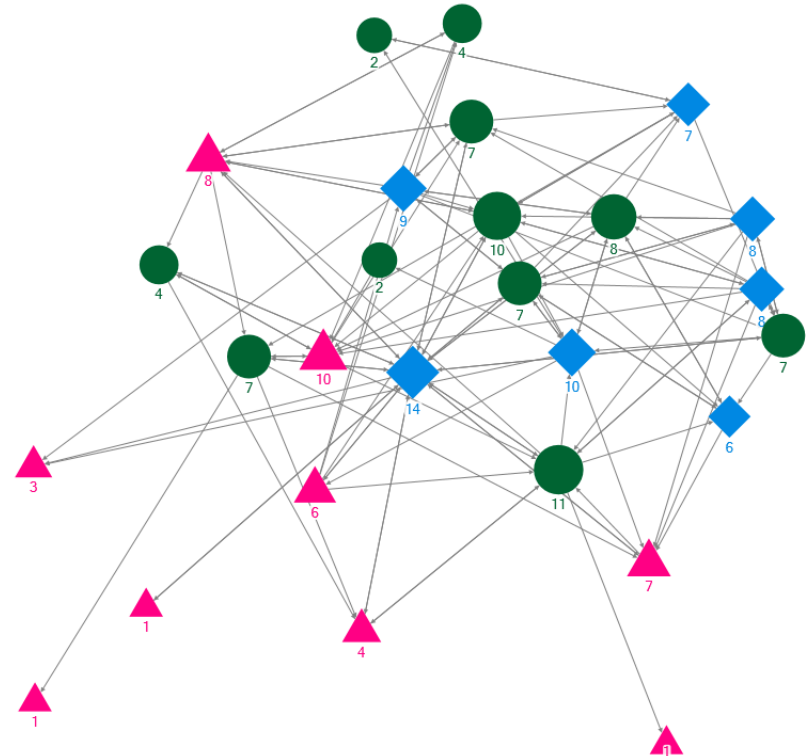
- Youth 39%
- ◆ TAY 25%
- ▲ Adults 36%

Full Network



Total links: 254

Cross-Age Collaborations



Total links: 119



° **RESULTS: PROGRAM
LEVEL DATA**

Dependent Variable #1: EI-Index

EI-Index=

(# reported external connections – # reported internal connections) /

(# external connections + # internal connections)

Incoming and Outgoing

Range -1 to .82. Mean (SD)= .05 (.41)

A higher score (closer to +1) indicates more cross-age collaboration



Dependent Variable #2: Cross-Age Collaboration

Cross-Age Collaboration=

*# reported connections with programs serving
other age groups / # possible cross-age
connections*

Incoming and Outgoing

Range .00 to .91. Mean (SD)= .44 (.22)

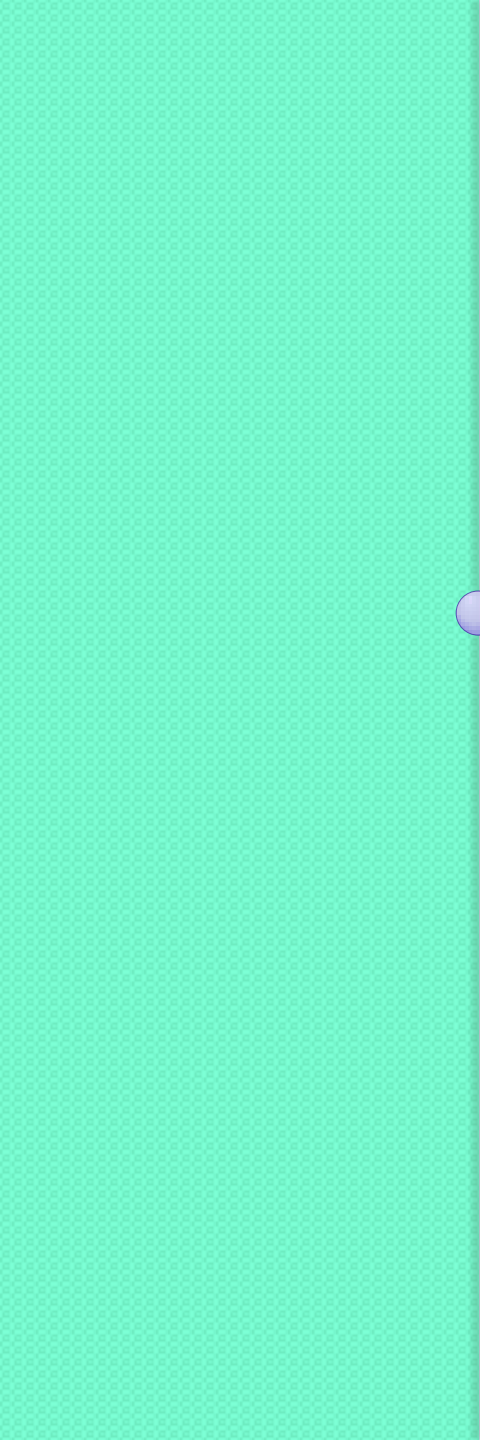
Higher scores indicate more cross-age collaboration

Cross-Age – EI Index;

Spearman's Rho=.61, $p < .001$

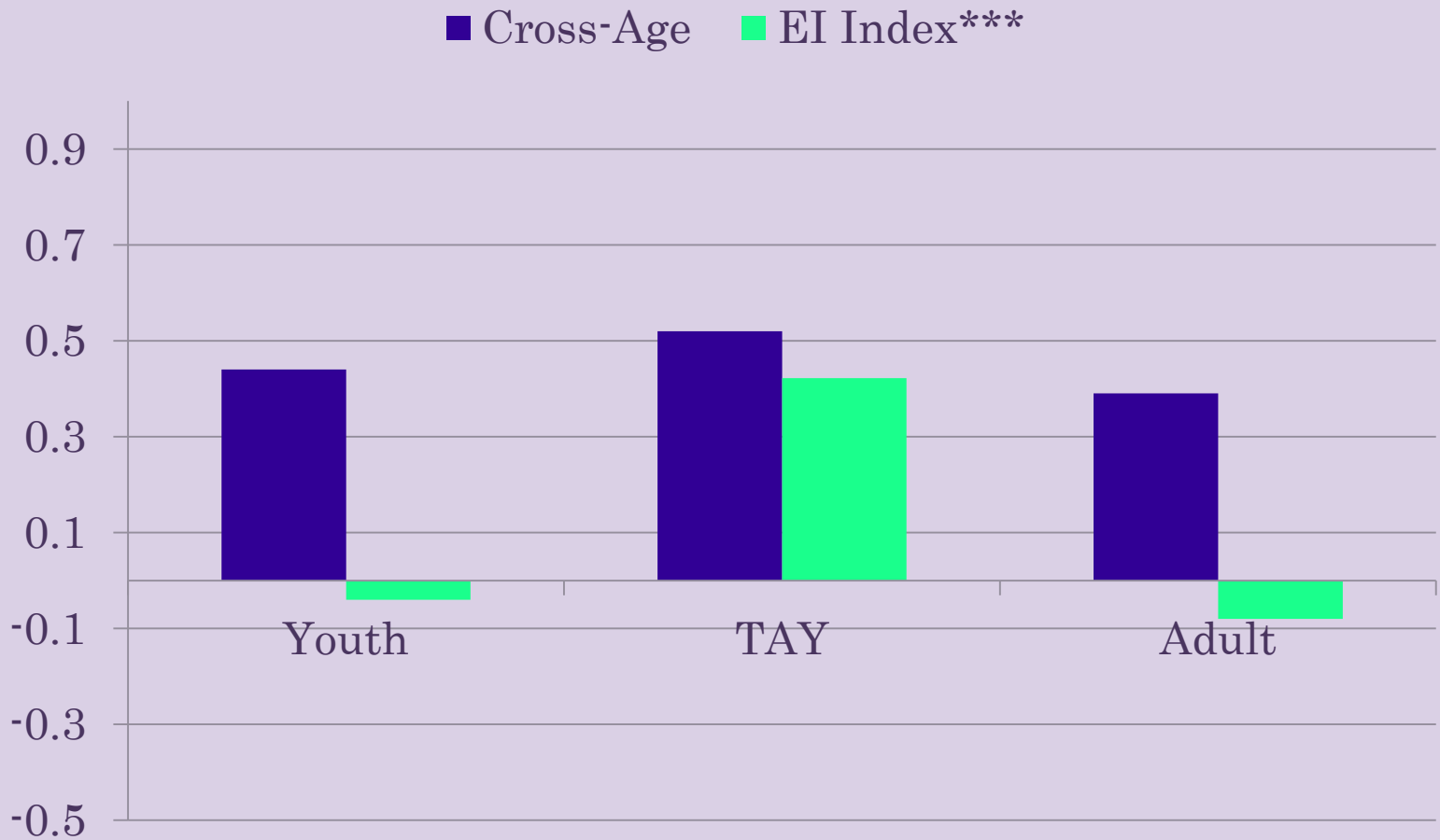


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° **RESULTS: PREDICTORS
OF CROSS-AGE
COORDINATION**

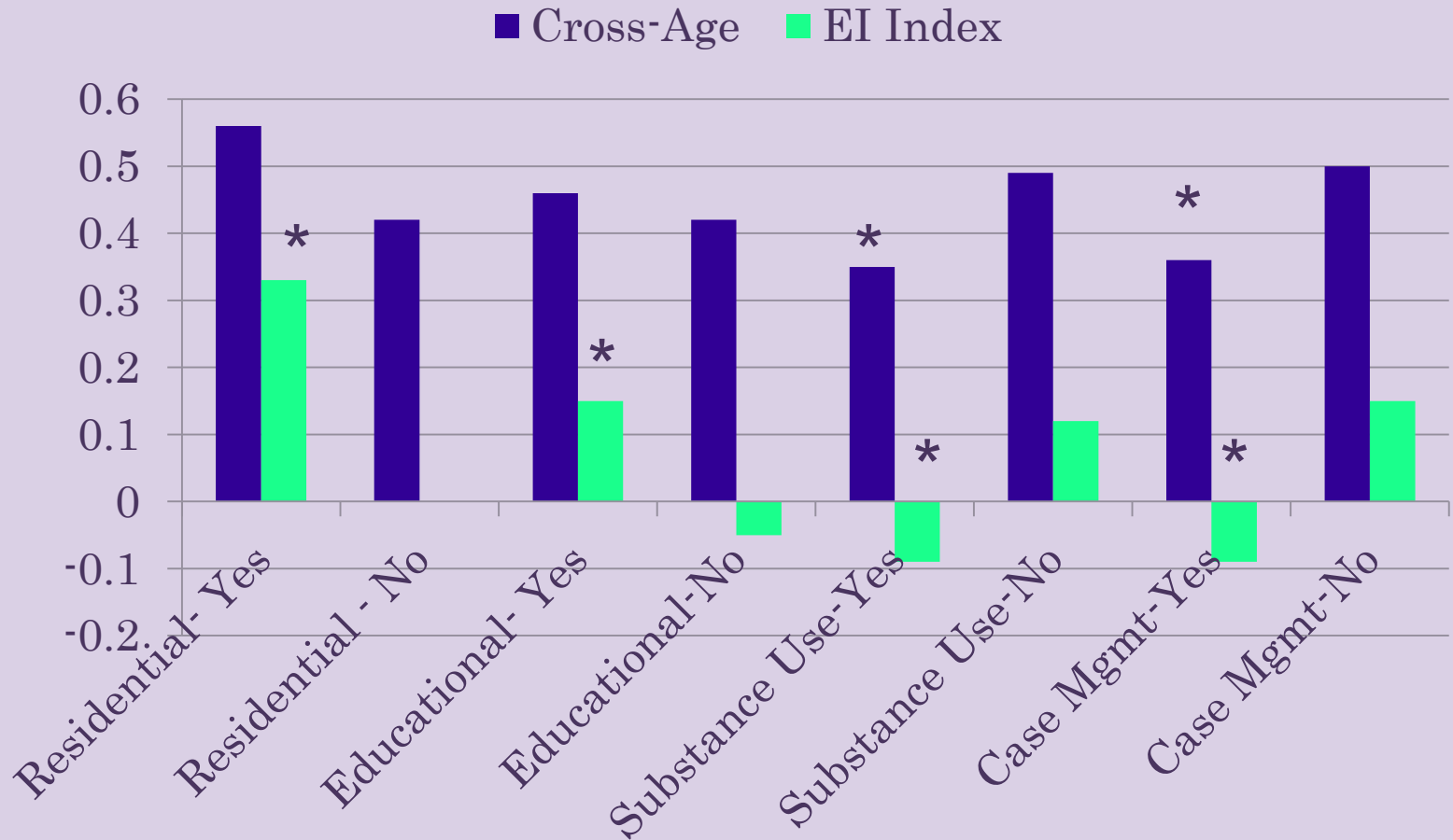
Program - Age Group



*** p<.001



Program - Services



*Yes vs. No $p < .05$



Collaboration & Perspectives

Collaboration Measures	Cross-Age	EI-Index
<p>Index Interdisciplinary Collaboration</p> <p>Examples: “I communicate in writing with colleagues from other disciplines” (5 point scale) (Bronstein, 2003)</p>	p= .05 (positively correlated)	NS
<p>Within Program Collaboration</p> <p>Example: Jobs in my program have overlapping responsibilities (range 10-60)</p>	NS	NS
<p>Cross Program Collaboration</p> <p>Examples: We have a good idea how other programs we interact with work (range 10-60)</p>	NS	NS
<p>Perspectives on System/Leadership</p> <p>System leadership has set up accountability mechanisms that require coordination</p>	NS	NS



Independent Variable: Measure Same Age coordination

Same -Age coordination =

reported connections with programs serving the same age group / # possible same-age connections

Range = .17 to .90. Mean (SD)= .62 (.20)

**Cross-Age – Same-Age;
EI-Index – Same-Age;**

**Pearson's = .33, p<.01
NS**



Network Connectivity

Network Connectivity =

*# reported connections regardless age served /
possible connections*

Range = .11 to .95. Mean (SD)= .54 (.19)

Cross-Age – Network Connectivity; Pearson's = .91, p<.001

EI-Index – Network Connectivity; Pearson's = .40, p=.001



Conclusions/Summary

- We've created two interesting variables!
- Measuring cross-age collaboration through a proportion actual/possible connections is new
 - Appears validated by general coordination measure



Conclusions/Summary

- Strong Cross-Age Collaborators:
 - Collaborate well in general
 - Perceive that funders and key stakeholders value and reward coordination
 - Educational services ↑
 - Substance Abuse & Case Mgmt ↓
 - Ages served not significant
- System leadership can leverage their “support” to increase cross-age collaboration (malleable variable)



Next steps

- Explore differences between our two dependent variables
- Tease out Cross-Age and EI-Index scores for individual questions

