

# Visually mapping the social networks of youth with and without disability: Qualitative investigation of social network perceptions and understandings

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## Introduction

**Purpose:** (1) Investigate understanding and experiences of the structure within social networks. (2) Explore potential utility of social network (SN) visualizations (maps) in helping youth with learning disability (LD), attention deficit disorder (ADD), and Asperger syndrome (AS), better understand their social world.

**Background:** Occupational performance in a social world requires more than communication and interpersonal skills, it also requires the ability to adequately perceive and navigate social structures (e.g. peer groups, cliques) and support networks (e.g. guidance counselors, supportive friends). Social network maps are used in the social sciences and have been shown to be meaningful to individuals in assessing their own social environment (McCarty, 2002). Network maps can potentially be used in assisting youth with disabilities gain insights into the roles and groupings of network members, which may be useful in facilitating social functioning.

## Methods

- Institutional review board approval
- Participants interviewed in a comfortable and private community-based home-like research facility or the participant's home.
- An open-source Java-based computer program, Egonet (McCarty, n.d.), was used to analyze network relationships and create the visual map of each youth's social network.
- Once the network map was created and key individuals identified (e.g. central and peripheral), the map was used to guide cognitive interview.
- Interviews were audio-recorded, transcribed verbatim, and conceptually coded: thematic analysis.

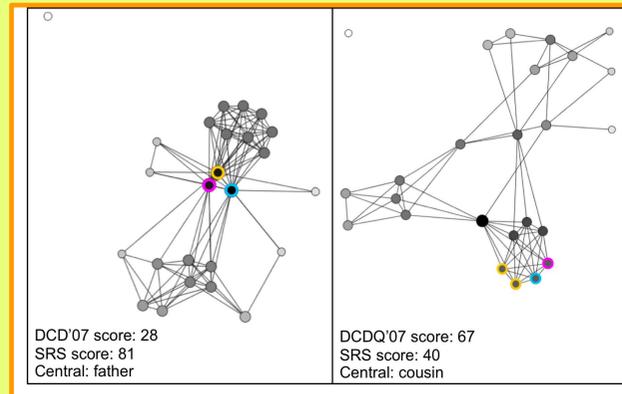
## Participants

N=36

- n=19 Clinical (LD, ADD, ASD)
- n=17 Comparison

	13.9 ± 1.3	13.9 ± 1.2		Count (Percentage)
Age, mean, SD			Clinical assessment tool	
Gender			BOT-2 (motor coordination)	
Male	16 (84.2)	14 (82.4)	≥ 25 <sup>th</sup> percentile	2 (10.5)
Female	3 (15.8)	3 (17.6)	6 <sup>th</sup> – 24 <sup>th</sup> percentile	13 (68.4)
Grade, mean, SD	7.2 ± 1.6	7.6 ± 1.5	0 – 5 <sup>th</sup> percentile	4 (21.1)
School Setting			Beery VMI (visual motor integration)*	
Public	9 (47.4)	9 (52.9)	≥ 25 <sup>th</sup> percentile	8 (47.1)
Charter	2 (10.5)	0 (0.0)	6 <sup>th</sup> – 24 <sup>th</sup> percentile	3 (17.6)
Private	6 (31.6)	8 (47.1)	0 – 5 <sup>th</sup> percentile	6 (35.3)
Home	2 (10.5)	0 (0.0)	AASP (sensory processing)	
Parental Education			0 standard deviations from normative sample mean	3 (17.6)
High School or below	2 (10.5)	0 (0.0)	1 standard deviation from normative sample mean	11 (58.0)
College or more	17 (89.5)	17 (100.0)	2 standard deviations from normative sample mean	5 (26.3)
Race				
Caucasian	15 (78.9)	13 (76.5)		
Other	4 (21.1)	2 (11.8)		
Not reported	0 (0.0)	2 (11.8)		

Network Maps



Interview Guide

- Questions & Probes
1. Tell me about \_\_\_ (people in various network positions; groups)
  2. What are your experiences with \_\_\_ (person; group)?
    - What sorts of things do you do with \_\_\_?
    - Who decides what you do?
    - What happens when you want to do something different?
  3. "Look at how \_\_\_ (person) \_\_\_ (is so connected, acts like a bridge between groups, is all alone).
    - What are your experiences with \_\_\_ (person)?
    - How would you describe \_\_\_ (person)
    - How does he interact with others in the network? How about with others not pictured your network?
    - What sorts of things does this person do with those around him?
  4. (If applicable) What are your experiences with \_\_\_ (network member known through sibling) ?
    - What are your experiences with your siblings other friends?
    - Why do you like/prefer to hang out with \_\_\_?
  5. (If not yet already answered) Tell me about how you met and became close with your closest friend(s)

## Themes from Youth in Clinical Group (n = 19)

### Forming Networks

"Usually in big social settings and I don't tend to like to go out in them... 'til recently when I figured, well, I need to at least have the basics [regarding social skills] or else I might not function real well."

Understanding social self

"We both have some sort of mental...issues, [he] has Asperger's and I have ADD...we can understand each other"

Finding similarities

"I don't really know what they're doing. Uh, I mean, like, I don't really get involved in other people's social lives outside of me because I don't like barging in on what they're doing. It's kind of rude."

Misapplying social rules

"He dressed strangely. He was a bit disgusting. But I ignored that because he was a good friend."

Weighing social rules

### Group Engagement

"Even if I wanted to [change the subject/activity], I wouldn't ask; 'cause I didn't, [I] don't want, to cause trouble."

Avoiding social negotiations

"I was the main one who kept the conversation going."

Verbal strategies: even when socially awkward

"I would just listen in and see if ...anything made sense to me"

Language communication issues

## Discussion

- Some youth operated on the fringe of their social groups; others have managed to develop skill sets needed to foster socially supportive and inclusive peer groups.
- Communication and processing difficulties contributed to some youth's social struggles.
- Processing lags impacted ability to read in-the-moment social interactions.
- Youth who had developed some insight into their social /communication shortcomings were able to employ socially acceptable strategies. Use of socially acceptable strategies helped keep them from becoming socially ostracized.
- Clinical youth had unexpected levels of insight into their own social difficulties and resultant social strategies – these things were obviously thought about.

## Potential Clinical Utility

- Some youth from the clinical group spontaneously gained new insight from seeing & discussion SN map. Some even formed social interaction plans reflective of newly gained insights.
- Youth from comparison group only modestly interested in SN map – many reported their map to look as expected; no new insights from seeing & discussing SN map.
- Social network analysis and the resultant network visualization create a tangible social map of the youth's social world.
- The combination of a social map plus parents' active engagement in guiding their youth's network has the potential to be a powerful means of facilitating social integration beyond the supportive family network.
- However, creating the social map/network visualization was a tedious and cumbersome process that taxed the attention of the youth in the clinical group.

## REFERENCES

- McCarty, C. (2002). Measuring structure in personal networks. *Journal of Social Structure*, 3(1). Retrieved from <http://www.cmu.edu/joss/content/articles/volume3/McCarty.html>
- McCarty, C. (n.d.). Egonet-2011-03-31. Downloaded from <http://sourceforge.net/projects/egonet/>