

Community Capital: Leveraging inter- organizational networks to improve youth employment equity

Emma Ware

Wellesley Institute works in research and policy to improve health and health equity in the GTA through action on the social determinants of health.

Acknowledgments

The author would like to thank Jane Wang for her research assistance, Anne Gloger for her valuable consultation and help with participant recruitment, and Camille Orridge.

Community Capital | Report
© Wellesley Institute 2017

10 Alcorn Ave, Suite 300
Toronto, ON, Canada M4V 3B2
416.972.1010
contact@wellesleyinstitute.com



TABLE OF CONTENTS

Introduction	1
Community capital and youth employment services.....	2
The Kingston-Galloway-Orton (KGO) region	3
This Study	5
Methods.....	6
Results	8
Discussion	20
Conclusion	22
Recommendations.....	22
Limitations	24
References	i

Introduction

A group of researchers in the United Kingdom (UK) have recently re-invigorated interest in the value of social networks for improving health using the concept of community capital (Parsfield et al. 2015). They define community capital as the sum of assets, including relationships, in a community and the value that accrues from these. A community's assets can encompass different types of capital, including:

- a) social capital (social networks, shared norms and trust),
- b) economic capital (valued goods and services and the capacity to produce them),
- c) cultural capital (both built heritage and intangible culture such as shared values, beliefs and practices),
- d) human capital (healthy, educated and engaged people),
- e) environmental capital (natural resources), and
- f) public structural capital (structures and institutions) (see Hancock 2001, Callaghan and Colton 2008).

A community's capital therefore ranges from individual level talent and expertise (like the capacities of workers) to community level resources (like parks, programs and social services). Central to the concept of community capital is that social networks and relationships, as well as the capacity to create them, are essential for tapping into and fully realizing the potential of a community's richness.

Community capital provides a powerful opportunity for improving health and health equity in the GTA through networks and relationships at the inter-organizational and intersectoral level. Inter-organizational networks and community hub models help connect social services as widespread as community centres, settlement agencies, government services, cultural associations, employment services, educational systems and health care. Creating stronger connections between services has been shown to improve health, and social and economic outcomes for communities (Wood Green Community Services 2015). For example, in one Toronto initiative between schools and health care, providers worked together to close gaps in access to health care in low-income communities, improving both health and educational outcomes for young students (Yau and DeJesus 2016). Despite widespread agreement on the value of inter-organizational networks, such networks are often difficult to establish and maintain, and subsequently fail to meet people's optimistic expectations (Weiner and Alexander 1998). The reason may be that we lack a practical understanding of how networks operate and how they might be strengthened to serve different community needs.

The idea of looking at whole social service networks within our communities to consider not only the individual services available, but also the value of the connections between them, echoes recent calls for the importance of systems thinking (Diez Roux 2011, Mahamoud et al. 2013). Developing a sound working knowledge of how our communities' formal and informal

organizational networks connect, function and change to meet the needs of Torontonians is essential to leverage the full potential of our social service systems and to improve the equity in the social determinants of health in our city.

Because of this, social networks can be considered a social determinant of health. From networks connecting individuals (Cohen 2004) to networks at the inter-organizational and inter-sectoral level (Bolland and Wilson 1994, Isaacs et al. 2013), network relationships and their outcomes are important drivers of good public health.

Community capital and youth employment services

One area in which Toronto's social service system faces pressure to improve is in addressing youth unemployment. The youth unemployment rate in the GTA is the highest in Ontario and Canada. Eighteen percent of Toronto youth aged 15-24 are unemployed (Toronto 2015) as compared to 14.5-17 percent in Ontario (Geobey 2013, Civic Action 2015) and 13-14.5 percent in Canada as a whole (Statistics Canada 2016). The income and opportunities gained through employment are well known to be connected to positive social and health outcomes throughout life (Furstenberg and Hughes 1995). Sufficient income is required to afford healthy food, healthy housing and a healthy social and recreational lifestyle. Addressing access to employment as a social determinant of health early on in life has the potential to make a meaningful impact on health.

Youth face many barriers to employment and these barriers represent equity issues. For instance, the unemployment rate among newcomer youth (ages 15-19) is 31 percent, as compared to the 28 percent citywide average for this age group (City of Toronto 2015). Other barriers that youth face include racism and racialization, young parenthood (and lack of access to child care), having a criminal record, lack of social networks, lack of pre-employment skills or education, transportation problems and lack of interview skills (Civic Action 2015). In a multicultural city like Toronto, cultural and language barriers may also be present. Youth experiencing social barriers to employment are at risk of experiencing health inequities linked to increased rates of poverty and other disadvantages experienced by those kept out of the job market (Hammer 1993, Lappalainen et al. 2016).

Inter-organizational networks may be especially important to support populations such as youth with complex barriers that require a system to be adaptive to their unique circumstances. For instance, a newcomer youth with language barriers trying to build a resume would benefit from a collaboration between language services and employment services. In a diverse population with multiple barriers, it is particularly important for organizations to share resources and competencies in supporting youth. A connected service system can help youth seeking employment to address the specific barriers they face. When

services are connected, any door is the right door, and people are less likely to fall through the cracks.

In this report, we investigate inter-organizational community capital in the Kingston-Galloway-Orton (KGO) region in Scarborough, Toronto, Ontario by examining the way in which different services work together to address the barriers youth face to gaining employment. Specifically, we investigate support for youth overcoming barriers related to 1) a lack of education, training and/or employment experience, 2) language barriers, and 3) parenthood (and lack of child care).

The Kingston-Galloway-Orton (KGO) region

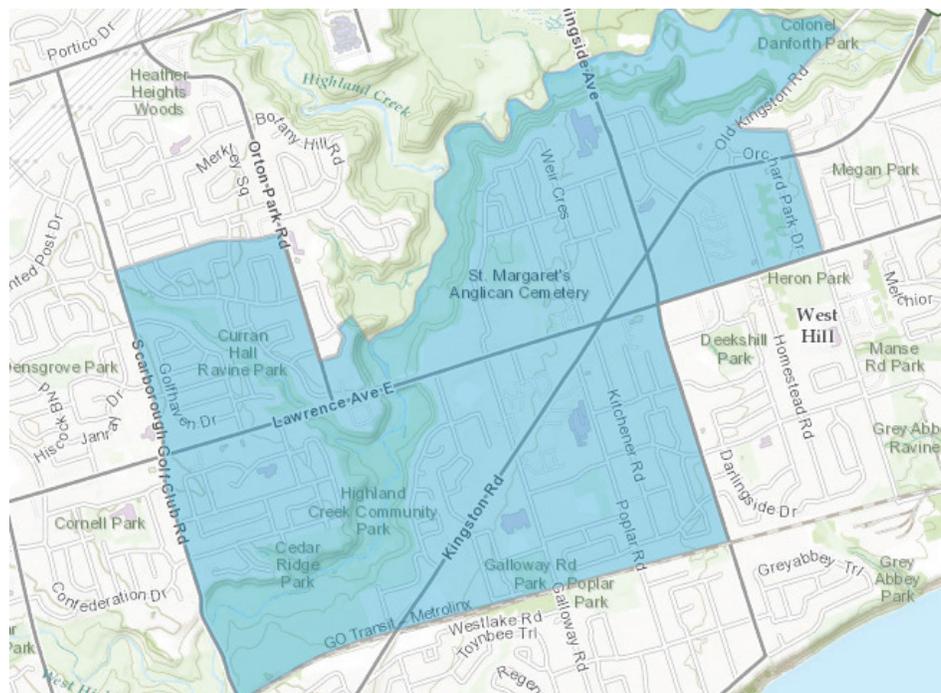
The KGO area in Scarborough, Toronto is an area defined by the boundaries of Scarborough Golf Club Road, east to Manse Road, just north of Ellesmere Road and south to the railway tracks south of Kingston Road (Abbas 2011) (Figure 1). In 2005, the KGO area was defined as a priority neighbourhood, identifying it as an area with poor service coverage and facing significant challenges such as high levels of shelter use, unemployment and low levels of educational attainment (City of Toronto 2012). Toronto's 13 priority neighbourhoods received an estimated \$225 million from governments, companies and other entities between 2005 and 2011 to help build up community supports (Dale 2013). Since this time, the City of Toronto adopted a new neighbourhood scheme, and the City no longer recognizes the KGO region as a neighbourhood. However, many services and residents there still identify the KGO boundaries as defining their community catchment area (e.g. [The East Scarborough Storefront](#)). In Toronto's new neighbourhood scheme, KGO contains the east part of Woburn neighbourhood and the west part of West Hill neighbourhood (Figure 2). Eleven years after the KGO area received priority neighbourhood status and an infusion of funding for social services, the KGO area, and the new neighbourhoods that constitute it (Woburn and West Hill) still meet the criteria to be identified as a high-needs neighbourhood, now a designation called [Neighbourhood Improvement Areas \(NIA\)](#) under the City's new Strong Neighbourhoods Strategy 2020 ([TSNS2020](#)).

According to [an analysis by City of Toronto's Social Development, Finance and Administration department](#) using 2011 Census/National Household Survey data the KGO area has a total population of 23,427 people. Fifteen percent or approximately 3,400 are youth. For 37 percent of residents, English is a second language, with the top five non-English languages consisting of Tamil, Bengali, Tagalog (Pilipino, Filipino) and Persian (Farsi) and Urdu. KGO has an unemployment rate of 14 percent, and 22 percent of adults have no high school certification; 32 percent have a high-school diploma and 46 percent have some form of postsecondary education. Approximately 30 percent of the KGO population lives in a household with an income below the low-income cut-off. KGO has some social services that are relevant to helping youth find work. These include employment, educational and training

services, youth-centred services, settlement services, government services, and multi-service organizations (City of Toronto 2013).

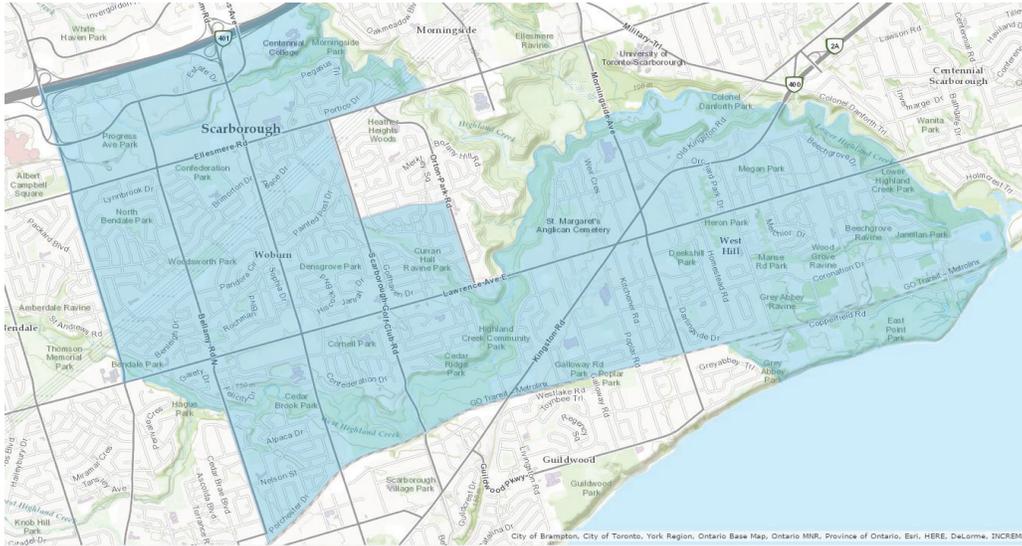
Youth in the KGO area face complex and diverse barriers to employment. Social networks between service organizations are particularly important because of their potential to act as a tool for enhancing fairness in a system that can be more difficult for some youth to navigate than others. When organizations are meaningfully connected, youth facing barriers are more likely to be connected to the right services that can help them.

Figure 1. The Kingston-Galloway-Orton (KGO) Area.



The KGO area designated a Toronto priority neighbourhood in 2005, is still considered by many services in the area to define the boundaries of their catchment area.

Figure 2. The Toronto Neighbourhoods of West Hill, Morningside and Woburn.



Today with the City of Toronto's new neighbourhood scheme the KGO area falls within the boundaries of Woburn and West Hill. These two neighbourhoods are Neighbourhood Improvement Areas (NIA) under the City's new Strong Neighbourhoods Strategy 2020 (TSNS2020).

This Study

The purpose of this report is to describe how a network of KGO organizations connect with one another to address the employment barriers youth face in the KGO area, and how this network effort is supported by a subset of broker organizations. Broker organizations are organizations that help to move things – information, resources and people – between and across inter-organizational network members (Butts 2008). The role of a broker is a significant concept in this paper given that access to needed services for supporting youth seeking employment can require negotiating with a number of different service providers.

A better understanding of how inter-organizational community capital is leveraged in response to helping KGO youth facing employment barriers can help lead to stronger research approaches, interventions and policy strategies to leverage these networks in pursuit of greater employment equity.

The specific barriers to youth employment considered in this study include 1) a lack of education, training and/or employment experience, 2) language barriers and 3) parenthood (and lack of child care).

We were interested in examining the evidence for the following three tenets regarding the KGO service network's response to youth employment barriers:

- Organizations designated to provide social support services to youth are part of a network of community service organizations that interact with one another when addressing the barriers to youth employment.
- Brokers exist within the network of organizations that assist in connecting services to one another to address the employment barriers youth face.
- The pattern of network connectivity and the brokers of these interactions will differ depending on the specific employment barrier being addressed.

Methods

A mixed method research design was used. Social network analysis (SNA) was used as a method that describes and evaluates the relationships among entities (organizations) that make up a system (the KGO neighbourhood) (Borgatti et al. 2013). We used qualitative methods to give context to the SNA results by conducting individual, semi-structured interviews with key informants from across the service organizations in the KGO area. The research methods were reviewed and approved by Ryerson University’s Research Ethics Board, in accordance with the ethical principles of the Tri-Council Policy Statement (TCPS), ethical conduct for research involving humans.

Sample Selection

Social network analysis follows a whole network approach, in which all network members are targeted for inclusion in the study (Borgatti et al. 2013). Network members in this study were defined as organizations serving youth in the KGO community. In consultation with Anne Gloger, a Principal at [the East Scarborough Storefront](#) (ESS), a backbone organization in the KGO area, we identified a network of 35 organizations to be targeted for inclusion in the study.

Key informants were selected in consultation with our contact at ESS, and included a variety of professionals ranging from managers, program coordinators and directors. Selection aimed to ensure variation in the types of professions interviewed and to get representation from different service types.

Key Informant Interviews

Key informant interviews were conducted over the phone and lasted approximately 30 minutes. The interview questions aimed at understanding the nature of informal and formal connections between different organizations in the community. Questions probed the actions that services took when encountering youth who were facing the three barriers targeted in this study: 1. lack of education, training and/or employment experience, 2. language barriers and 3. parenthood (and lack of child care). Specifically, organizations were asked a. “What organizational services do you have in place to address this barrier?” b. “What connections

with other organizations do you have in place to address this barrier?” Another set of questions investigated what kinds of barriers and challenges organizations face when trying to connect youth with the right social services to meet their needs for seeking employment. The interview data was analysed using thematic analysis, “a method for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a data set” (Braun et al. 2014, p. 1).

Survey Instrument

The social network analysis was carried out using an online survey instrument. The survey format and questions were developed by referring to other service delivery network surveys (Provan et al. 2005, Isaacs et al. 2013). The first part of the instrument gathered information about the attributes of each organization, for example, the type of organization, type of population, and the services offered. The second section listed the network organizations and asked respondents a series of questions about their relationships with each organization on the list. Respondents were asked “How frequently are you or your co-workers in contact with each organization?” Respondents answered on a five-point Likert scale. To get information about the network’s response to specific employment barriers that youth face, participants were asked “Do you or your co-workers work with this organization concerning [X] as a barrier to access employment?” Substituting [X] with our three selected barriers, 1) lack of education, training and/or employment experience, 2) language barriers and 3) parenthood (and lack of child care).

Participants were asked to identify which types of services were offered at their organization: employment, education and training, housing, settlement, community/recreation centres, government, child care, youth-centred and other. These service identifiers were used to group organizations to maintain anonymity and confidentiality of the participants. To ensure minimal chance of identification in the results each group of organizations was composed to contain at least three organizations. In consultation with a consultant at the [ESS](#) who is knowledgeable about KGO and its services, we categorized organizations into six sectors: 1) multiservice organizations (MULTI), 2) employment, training and education services (TRAINING), 3) settlement services (SETTLEMENT), 4) government services (GOV), 5) services geared towards youth (YOUTH) and 6) other organizations (OTHER). The OTHER category constituted all organizations that did not fit into one of the first five categories and included organizations with legal services, public libraries, services for young parents, and services that identify as backbone organizations that connect other organizations to each other.

Analysis

The analysis was conducted using UCINET (Borgatti 2002) in combination with network visualization software called Netdraw (Borgatti 2002).

The field of SNA considers the structure of the social environment and has developed a series of methods for describing and measuring patterns or regularities in relationships among interacting units (Borgatti et al. 2013). For this study, we focused on two analysis measures to describe the patterns of connectivity among network members: *betweenness centrality* and *network density*.

Betweenness centrality was used to identify organizations that may be acting as brokers linking network members to one another. Betweenness centrality assigns a value to each organization that represents the degree to which that organization is the shortest path linking two other organizations.

Network density was used as a measure of cohesion among network members. The network density measures the number of ties in a network expressed as a percentage of all possible ties that could exist between pairs within that network.

Accounting for Missing Data

The SNA was conducted on all organizations that completed the survey (21). In addition, to make full use of the qualitative interview data we had collected, we added five organizations to the SNA that had completed the interview but did not complete the survey. Adding nodes (organizations) to account for missing data is considered methodologically sound in SNA, if the data collected account for 70 percent of the whole network being represented in network maps (Borgatti et al. 2013). In this case our data (21 organizations) accounted for 81 percent of all the data presented in the selected network (26). The missing data is accounted for by making the assumption that organizational ties are reciprocal for the missing data points. Therefore, when an organization in the network has responded that they connected with an organization whose survey data was missing, that organization B would also be recorded as connecting with organization A.

Results

Out of 35 organizations invited to participate in the social network analysis survey, 21 organizations completed the survey, a 60 percent response rate. For the key informant interviews 14 (70%), out of 20 invited to participate, participated in the interview. As described above in our methods section, five organizations that completed the interview, but did not complete the survey were added to the SNA, resulting in a final network of 26 organizations.

Three main themes from our findings are presented below:

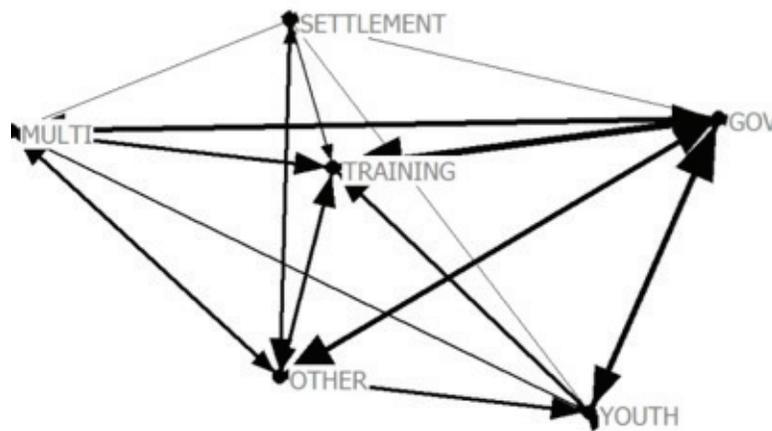
1. Despite challenges, organizations in the KGO employ various strategies to form networks which help them address barriers to youth employment.

2. Brokers in the KGO area are active both at the organizational and individual levels and are important in connecting youth to the right services, as well as in building and sustaining the organizational network.
3. There are different patterns of network connectivity, network cohesion and network brokers for overcoming different barriers to employment.
4. There are varying degrees and types of pre-existing support for the different barriers to employment and each poses a unique challenge for the network to overcome.

Despite challenges, organizations in the KGO area employ various strategies to form networks

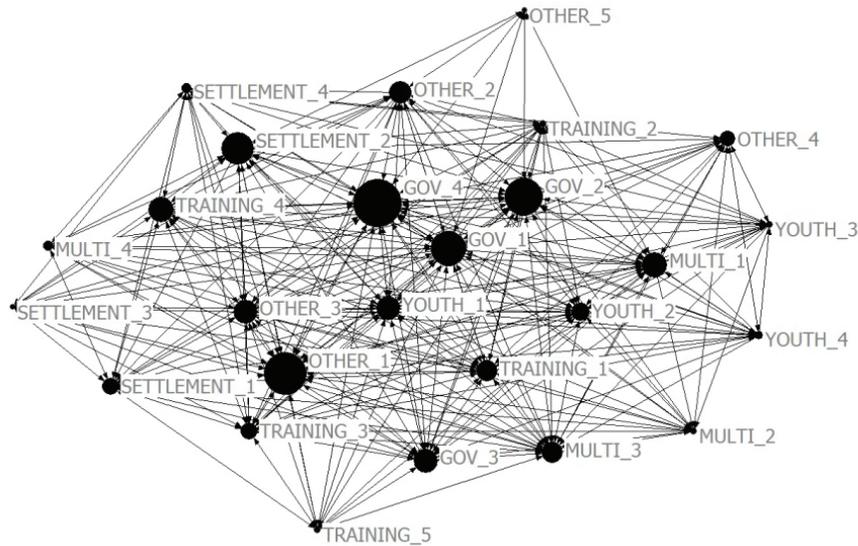
Figures 3 and 4 presents KGO organizational network’s general pattern of connectivity at the sectoral and organizational level (respectively) when responding to the question “how often do you and your co-workers connect with each organization?” Any response above “never” is represented as a tie between organizations. Therefore, each tie shows that organizations (or sectors) are connecting at least once per year.

Figure 3. Regular sectoral contact network



Ties are represented by connecting lines and indicate that the connected sectors are in contact at least once per year. Line thickness and arrowhead size represent the relative strength of the ties between sectors. A larger line and arrow head indicate that more organizations within the sector indicated more frequent connections with the connected sector.

Figure 4. Regular contact network



Ties are represented by connecting lines and indicate that the connected sectors are in contact at least once per year. Node size represents relative betweenness centrality, the degree to which that sector acts as a broker as the shortest path linking two other sectors. The largest nodes can be thought of as primary brokers in the KGO network.

Figure 4 shows that KGO organizations are well connected. Many of these connections were originally established by organizations participating in working groups, roundtables or network meetings.

I sit in on a few working groups, which is our community action planning committees, which sort of brings together organizations with the focus on helping youth who experience some barriers connecting resources together. If you need something to be shared or you have an issue that somebody can address, you voice your issues there, and people come up with ideas together about how to address them.” – TRAINING_4

A formal referral system was the most commonly cited strategy for connecting youth with other organizations in the community.

We have a referral form when we are referring our participants to any one of these organizations that may support them, be it a food bank or housing, then the client would have a referral form directly addressing the service that they have to attend.” – MULTI_3

Challenges to organizational connectivity were related to funding (i.e. targets, competition for limited funding) and organizational capacity (i.e. limited time and human resources).

“I guess the biggest challenge to collaboration is competition, and the structure of how people get funding and organizations get funding. It’s based on metrics and numbers and targets, and if sometimes you’re competing with one or another.” – TRAINING_4

“Some of the challenge is time because of the immediate need of serving clients and fulfilling the program requirements and meeting the deadlines and meeting the numbers. I think that’s a big challenge, having the time to go out and establish connections.” – SETTLEMENT_1

Brokers in the KGO area are active both at the organizational and individual levels and are important in connecting youth to the right services, as well as in building and sustaining the organizational network.

There are certain organizations that were identified as “primary brokers” in the community. For these organizations, facilitating community connectivity is part of their core mission and funding mandate. Primary brokers play an important role in building, sustaining and advocating for collaborative networks in the KGO community.

OTHER_1 is one of these primary brokers that facilitates organizational connectivity in KGO. OTHER_1 is described as a community resource hub for residents, and invests in long-term community development that builds partnerships and connections among different agencies. OTHER_1 carves out opportunities for connectivity and collaboration by providing a physical space for different organizations, and embeds collaboration and community engagement in all its processes and projects.

“The heart of OTHER_1’s work is connecting with other organizations and then allowing them to have a platform for their programme or service. Essentially OTHER_1 doesn’t provide programs or services, it’s all our partners that do. OTHER_1 plays the role of facilitator, connector, building bridges then it’s our partners that provide the actual service or program here.” – OTHER_1

Many organizations also supported brokerage by investing in the human resources at the individual level that would connect youth to the services they needed most. This “brokerage” role came in many forms depending on the sector you were looking at. For instance, the employment sector had job developers and career coaches, the settlement sector had settlement workers, and the youth sector had youth outreach workers. Brokerage workers are generally very knowledgeable about and well connected to the whole system and therefore are uniquely placed to help connect youth to the services they need. This strategy is effective for

helping youth overcome barriers to employment because it personalizes brokerage in a way that helps to address complex challenges.

“...there’s a dedicated individual who works with these clients to find or connect them to employers and advocate on their behalf or connect them with some mentoring services. The job developer helps them find their employer and then retain that job.” - TRAINING_4

“The youth outreach workers help young people gain the confidence to do the resume, to do the role-playing for the interview, get some interests down. They would also help them, if they wanted to, to apply for college and do the OSAP application. They’ve been successful in helping young people get jobs.” – YOUTH_1

Another brokerage strategy for connecting youth to other organizations is to connect youth to volunteer opportunities throughout the community. This helps, not only to give youth work experience, but also to build their network and empower them to act as their own brokers to connect themselves with the services they need.

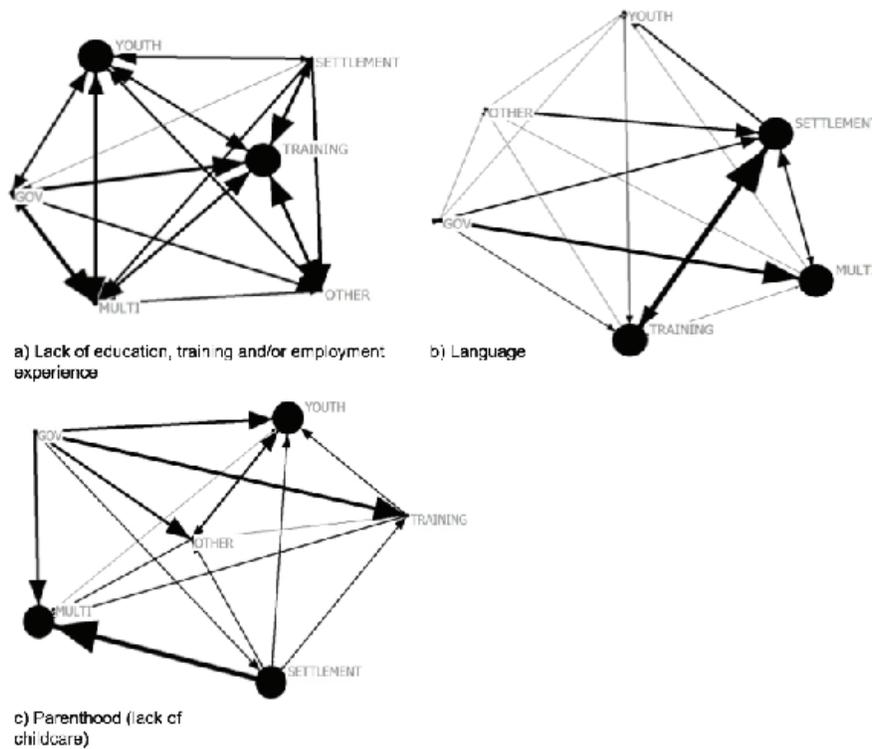
“At OTHER_1 we have a volunteer civil engagement program, we have around 300 volunteers. Youth who are maybe say 12, 13 or 14, right before they get their first job are encouraged to volunteer in the community, to be involved.” – OTHER_1

There are different patterns of network connectivity, network cohesion and network brokers for overcoming different barriers to employment.

When we asked organizations how they connected in response to each of the three barriers to employment: 1) Lack of education, training and employment experience, 2) Language, 3) Parenthood (and lack of child care), we found different patterns of network connectivity, network cohesion and network brokers in response to each barrier. Each pattern of network connectivity can be seen at both the sectoral and organizational level in the maps in Figures 5 and 6 (respectively).

The maps are a visual representation of the organizations’ answers to the question, “Do you or your co-workers work with this organization concerning [X] as a barrier to access employment?” Substituting [X] with our three selected barriers, 1) lack of education, training and/or employment experience, 2) language barriers and 3) parenthood (and lack of child care).

Figure 5. Sectoral network response to three different barriers to youth employment



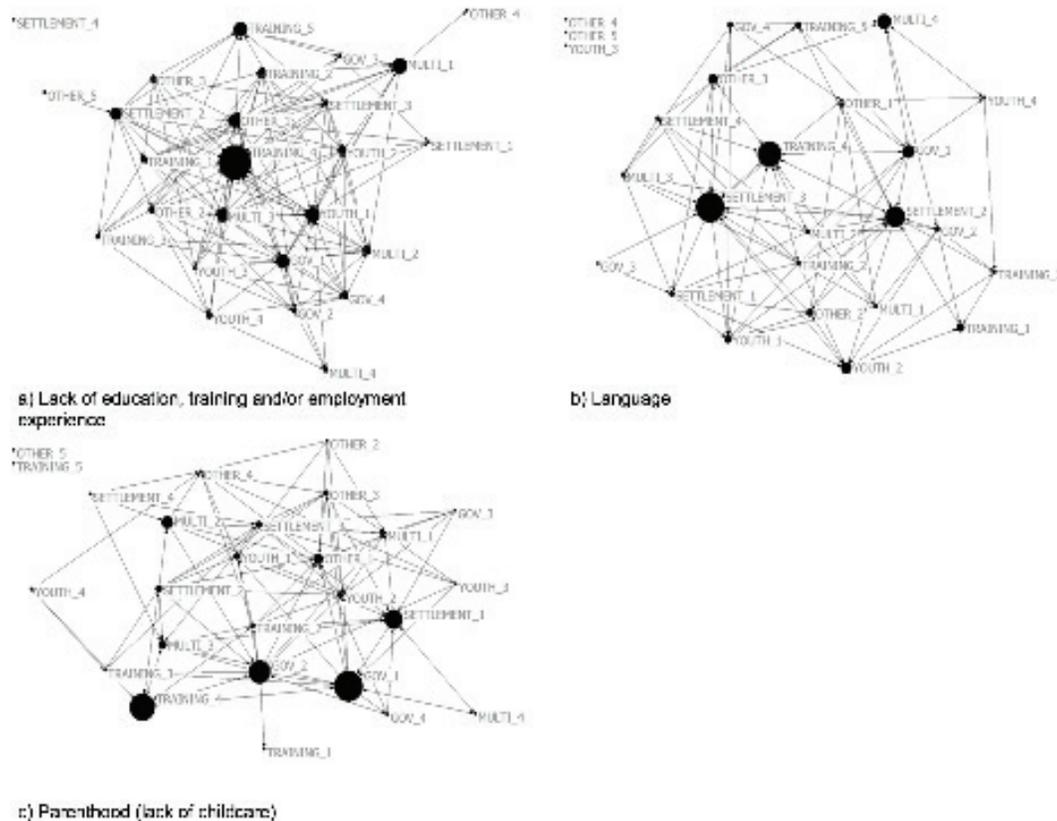
a) lack of education, training and employment experience as a barrier to accessing employment, b) language, and c) parenthood (lack of child care). Ties are represented by connecting lines and indicate that the connected sectors are in contact when addressing lack of each barrier. Line thickness and arrowhead size represent the relative strength of the ties between sectors. A larger line and arrow head indicate that more organizations within the sector indicated more frequent connections with the connected sector. Node size represents relative betweenness centrality, the degree to which that sector acts as a broker as the shortest path linking two other sectors. The largest nodes can be thought of as primary brokers in the network helping youth overcome a lack of education, training and employment experience as a barrier to employment.

Network cohesion (measured as density)

One of the things we looked at across the network’s response to different employment barriers was network cohesion, measured as network density, the number of ties in a network expressed as a percentage of all possible ties which could exist between pairs within that network. This gives us a measure of overall network connectedness when dealing with different barriers to youth employment. Network cohesion was highest when organizations were responding to youth experiencing a lack of education, training and/or employment experience. The density score for this network response was 24 percent (95% CIs 21%, 27%), meaning that 24 percent of all possible ties in the network were present. Network cohesiveness was lower in response to language barriers to youth employment, where 17 percent of all possible ties were present (95% CIs 14%, 19%). The lowest network cohesiveness, with 15 percent of all possible ties present, was found when organizations were connecting to deal with parenthood as a barrier to youth employment (95% CIs 12%, 18%). In the general

pattern of network connectivity 68 percent of all possible ties exist in the KGO network (95% CIs 65%, 72%). Table 1 and Figure 7 presents the network cohesion when responding to different barriers that youth face.

Figure 6. Organizational network response to addressing three different barriers to youth employment:



a) lack of education, training and employment experience as a barrier to accessing employment, b) language, and c) parenthood (lack of child care). Ties are represented by connecting lines and indicate that the connected organizations are in contact when addressing each barrier. Node size represents relative betweenness centrality, the degree to which that sector acts as a broker as the shortest path linking two other sectors. The largest nodes can be thought of as primary brokers in the network helping youth overcome each barrier to employment.

Network brokers (betweenness centrality)

Another important factor in the network's response to different employment barriers is which organizations and sectors are prominent as network brokers. In the organizational network maps (Figure 6), node size represents relative betweenness centrality, the degree to which that sector acts as a broker as the shortest path linking two other sectors. The largest nodes can be thought of as primary brokers in the network helping youth overcome each barrier to employment. Table 2 presents the betweenness centrality values for each organization in the

network response to each of the barriers to employment. In the network’s response to youth lacking education, training and/or employment experience, TRAINING_4 scored the highest as a network broker (betweenness centrality 157.51). In the network’s response to language as a barrier to youth employment SETTLEMENT_3 served as the highest scoring primary network broker (betweenness centrality 113.86). GOV_1 had the highest network broker score (betweenness centrality 97.5) when assisting youth facing parenthood (and lack of child care) as a barrier to employment. In the general pattern of KGO network connectivity GOV_4 and OTHER_1 had the highest network brokerage scores (betweenness centrality 23.32 and 20.34 respectively indicating their roles as brokers for the network overall).

Table 1. Density scores are used to measure network cohesion across the KGO network’s responses to different barriers to youth employment.

Network density measures the number of ties in a network expressed as a percentage of all possible ties which could exist between pairs. SE = Standard Error, Std Dev = Standard Deviation, CI = Confidence Interval

	Density	Number of ties	Std Dev	SE	95% lower limit	95% upper limit
General	68%	443	47%	2%	65%	72%
Lack of education, training and/or employment experience	24%	157.00	43%	2%	21%	27%
Language	17%	107.00	37%	1%	14%	19%
Parenthood	15%	97.00	36%	1%	12%	18%

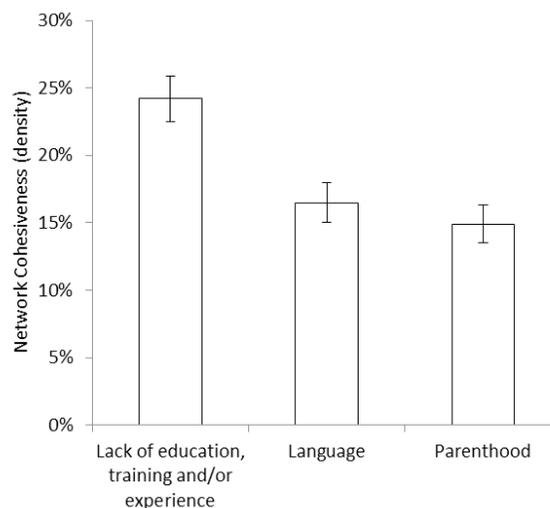


Figure 7. Network cohesiveness as expressed through network density of the network response to different barriers affecting youth employment.

Table 2. Betweenness centrality scores of network organization in response to different barriers to youth employment.

Betweenness centrality is a measure of the degree to which an organization connects the shortest path between two other organizations. High betweenness centrality indicates the organization’s role as a broker in the network.

Sector	Betweenness Centrality (Brokerage Scores)				
	Organization	Training	Language	Parenthood	General
Government services	GOV_1	50.51	41.53	97.50	16.06
	GOV_2	7.66	10.17	73.03	17.66
	GOV_3	5.65	0.00	0.00	10.33
	GOV_4	5.54	12.73	4.20	23.32
Multiservice organizations	MULTI_1	57.32	3.81	1.42	11.12
	MULTI_2	10.32	8.55	33.82	1.13
	MULTI_3	23.89	6.30	19.28	8.45
	MULTI_4	5.00	49.64	0.20	2.55
Settlement services	SETTLEMENT_1	1.03	9.78	56.97	6.39
	SETTLEMENT_2	48.74	76.77	13.92	14.47
	SETTLEMENT_3	4.97	113.86	13.90	0.36
	SETTLEMENT_4	0.00	5.73	0.00	2.50
Education, training and employment services	TRAINING_1	10.23	23.17	0.00	8.34
	TRAINING_2	15.66	9.03	6.60	1.08
	TRAINING_3	0.00	3.85	0.00	6.34
	TRAINING_4	157.51	95.61	83.33	10.71
	TRAINING_5	53.47	15.24	0.00	1.32
Youth-centred services	YOUTH_1	50.94	19.87	11.90	9.93
	YOUTH_2	7.13	32.71	0.70	6.88
	YOUTH_3	1.41	0.00	0.00	1.15
	YOUTH_4	6.80	1.95	1.85	1.36
Other services	OTHER_1	29.29	5.10	25.45	20.34
	OTHER_2	11.24	17.65	0.00	9.49
	OTHER_3	1.68	29.96	9.93	10.31
	OTHER_4	0.00	0.00	0.00	5.22
	OTHER_5	0.00	0.00	0.00	0.20

There are varying degrees and types of pre-existing support for the different barriers to employment and each poses a unique challenge for the network to overcome.

The interview data helps to give context to the different network responses observed in response to the three different barriers to employment: 1) lack of education, training and/or employment, 2) language and 3) parenthood (and lack of child care). Respondents discussed how each barrier presents a unique set of challenges and each has different degrees of pre-existing programs and resources in place to address it.

Lack of education, training and/or employment experience

The relatively cohesive network response to lack of education, training and/or employment experience as a barrier to youth employment may be explained, in part, by the pre-existing investment in programs and human resources for youth seeking help with this barrier. Many organizations invest in personalized brokerage programs, where youth receive one-on-one counselling that can connect various services, people and programs. For instance, TRAINING_4 uses a job developer program. Job developers work to build relationships with employers and seek out potential job opportunities which they match with youth's interests and skillset. YOUTH_1 has a youth outreach worker program, which, like the job developer role, personalizes brokerage for youth facing complex challenges to building their education and skillsets. As seen in Figure 6a and Table 2, TRAINING_4 and YOUTH_1 play a relatively strong brokerage role in the network, and this may be explained by the investment they both make in offering personalized brokerage services for youth.

Language

Compared to the network's response to lack of education, training and employment experience as a barrier, the network's response to language as a barrier was less cohesive.

Like employment services, the settlement sector invests in personalized consultation to help youth and families overcome language barriers and navigate the system. SETTLEMENT_2 and SETTLEMENT_3, for instance, both provide services designed to integrate newcomers by providing them with information to better understand life in Canada. These include language and employment services, as well as personalized counselling services to help families navigate the system.

Despite the resources available to help youth facing language barriers, there is a general perception that language as a barrier is relatively challenging for the system to help youth overcome. Many participants highlighted how broadly language can act as a barrier, beyond the need to learn English as a second language.

For instance, respondents also identified the lack of professional competencies and the lack of capacity to communicate skills to employers, as ways that language acts as a barrier to employment.

“Languages are a method of communication to me and that is more than knowing English or knowing a certain language but it’s also professionalism and it’s also how to speak to different audiences and write professionally” – OTHER_1

Another interpretation of language barriers relates to literacy in terms of other life skills that can impact youth’s job readiness and skillset to maintain employment.

“It’s not just how to read or write, it’s computer literacy, it’s financial literacy, it’s all those things that we integrate quite seamlessly but those are learned skills. And if you’re thinking about employment all those things go back to literacy” – OTHER_5

Another interpretation of language as a barrier refers to youths’ lack of knowledge of potential careers. This lack of “employment literacy” is a barrier from entering the labour market because youth are not aware of employment opportunities to which they can tailor or develop their skillset towards attaining.

“Employment literacy, where they don’t even know what jobs are called or what it takes to get to these jobs, so how could that ever be a goal? You really must step back and start at square one with all these things that other people learn in grade school and high school.” – MULTI_1

Therefore, effective brokerage to resolve language barriers, not only needs to connect youth with language classes, but also requires connections to address a general unfamiliarity with the rules and communication tools necessary for navigating the employment system.

Parenthood (and lack of child care)

The network’s response to youth encountering parenthood (and lack of child care) as a barrier to employment showed the lowest cohesion of all three network responses studied (Figure 6c, Table 1).

While several interview respondents identified parenthood as one of the most significant barriers to youth employment, they generally believed that there were insufficient resources (i.e. subsidized child care) available in the system to overcome this barrier.

“... if you’re 18 and you’ve got a two-year-old, subsidy day care has a waitlist. Unless you have a family member that will help you, it becomes a barrier that you can’t get over.”

The response from some organizations was to help young parents navigate the existing system (e.g. finding and applying for government subsidies). Yet, there was a strong sense that they may be better off on social assistance. Respondents felt that social assistance would allow young parents access to more reliable supports (e.g. income and medical benefits), than if they were employed in precarious jobs without sufficient supports (contract, part-time and temporary work).

“It is unlikely to get a job that somehow can pay your day care costs and have something left over. The reality is, you’re better off being on social assistance. Also, not many jobs give you benefits today. You get sick, you need medications and you can’t afford them. You know, like even two part-time jobs doesn’t give you medication coverage.” – YOUTH_1

In several organizations, child care was considered out of the scope of their mandate, and thus the organization had no process to assist clients with this barrier.

“According to our mandate, that’s [parenthood or child care] not part of the suitability or eligibility. That falls into a different category. No, we don’t refer anyone because we don’t have a mandate to identify that as a barrier.” – TRAINING_5

One organization pointed out that lack of local employment opportunities in the area makes parenthood a more difficult barrier to overcome.

“It would be beneficial if there was a way for local youth to find local jobs because in terms of day care, like finding local day care is not so hard. We’re constantly working with that barrier. For someone who’s never been separated from their child and have that separation anxiety based on their own experiences, you know it’s hard to even think of working when it’s a long commute ...” – OTHER_4

We found evidence for at least one formal partnership between a TRAINING organization and government service providing access to child care. However, this was limited to supporting part-time work opportunities only.

“It was single parent initiative. We had this in partnership with XXXXXX ... the only thing that was preventing them to get a job was day care. They did not have day care. What we did is that we had another partnership with YYYYYY and the day care because they were in the same building where the XXXXXX office was located. So, for those parents who got connected through us with employment but did not have day care, we were able to get them day care service. It was a wraparound service. It was very holistic. We weren’t able to accommodate full-time employment, we started with small steps, part-time jobs.” – MULTI_3

Discussion

The social network analysis (SNA) presented here provides a snapshot of inter-organizational level community capital in KGO in response to different employment barriers facing youth. Organizations designated to provide social support services to youth are part of a network of community service organizations that interact with one another when working to help youth overcome barriers to employment. Many organizations act as brokers within the network and assist with connecting services to each other. The patterns of service connectivity and the brokers that facilitate this connectivity change depending on the specific employment barrier being addressed. Each of the employment barriers looked at varying levels of pre-existing supports and each poses a unique challenge for the network to overcome.

Our social network analysis showed that KGO organizations often work together to meet the needs of youth seeking employment. Our key informant interviews revealed a few common strategies that facilitate service network connectivity in the KGO area. First, many informants mentioned network meetings, working groups and roundtables as being important for building and sustaining networks. Regular face-to-face meetings with other organizations created a space to establish and strengthen network ties and for trouble-shooting creative solutions to emerging needs of youth. Second, formal referral systems were built into organizational practices, and used to convey personalized recommendations regarding the services that a youth should seek out at other organizations within the community. Third, funding was common theme found to determine an organization's capacity for connecting youth with other services. When connecting youth with other services was part of an organization's funding mandate, there were resources and programs dedicated to help these efforts. Without dedicated funding, many organizations felt that such collaborative activities detracted from achieving the main goals and deliverables of their agency.

Several organizations played a lead role as network brokers. Brokers were important to help build and maintain the network by facilitating collaborations between services and by engaging the whole network in community building initiatives. Over time, brokers aim to increase the whole network's connectivity and cohesion, and therefore build up community capital.

One prominent way that broker organizations supported youth seeking employment was by having specific job positions that personalized their brokerage services, connecting youth to the specific services and people they needed to overcome the specific barriers they faced. This took a variety of forms in different sectors, such as job developer (TRAINING sector), youth outreach worker (YOUTH sector), volunteer coordinator (OTHER sector) and settlement counsellor (SETTLEMENT sector). Brokers relied on their relationship with other organizations, and their knowledge of the organizational networks to connect youth with the right services.

The network's response to help youth overcome employment barriers showed marked flexibility in responding to different types of barriers. For each barrier, different network sectors and organizational brokers took a lead in connecting services and resources. The level of network cohesion also varied across the barriers studied. Cohesion was highest in the network's response for youth dealing with a lack of education, training and/or employment experience and was less robust when youth presented with language and parenthood (and lack of child care) as barriers to employment.

The high cohesion in the network's response to lack of training, education and/or employment experience as a barrier to employment makes sense in solving a problem that requires highly individualized solutions. The training, education and or employment experience needed is likely to vary widely across different youth with different interests, skills, backgrounds, and education levels. High levels of organizational connectivity are therefore essential to help youth find personalized service solutions and pathways to employment. Leading these efforts, the training and youth sector both played a prominent brokerage role, and employed personalized brokerage services (e.g. job developer, volunteer coordinator and the youth outreach worker) as a strategy to help youth tap into the networks' toolkit of services.

Language barriers were viewed by many organizations as being a particularly "wicked" problem. Wicked problems are where the nature of both the problem and the solution are complex, ill-defined and contested (Head 2008). Language was described as a complex barrier that extended far beyond a lack of English language skills. Basic employment literacy, life skills and cultural norms were seen as a part of the challenge when acquiring and maintaining employment in Canada. Perhaps due to the difficulty of defining the problems associated with language barriers, the network lacked cohesion in its response and in the development of solutions. It is encouraging, however, to see that organizations in both the settlement sector and the training sector are active as brokers for helping youth overcome language challenges. This could lead to collaborations and innovative solutions through integrating language and employment services.

In contrast to language as a barrier to employment, parenthood was viewed as being a clearly defined problem (lacking child care) and having a relatively clear set of solutions. These included investing more in child care subsidies, and creating good local jobs with sufficient salaries and benefits so that young parents could afford child care, while still making gains through employment. In Toronto, there are insufficient resources in place to implement these solutions. A recent City of Toronto Report found that 75 percent of Toronto families cannot afford licenced child care (Cleveland et al. 2016). Many key informants believed that it was more financially responsible for most young single parents to go on social assistance, than to try to pay for child care and work. Finding a relatively non-cohesive network response to this barrier makes sense given that a highly connected network has little capacity to help youth overcome this barrier if the resources simply do not exist to provide a solution. One

way networks might help alleviate this situation is by bringing together the wisdom of the collective to find innovative solutions in the capacities of the network. Such an innovation was described by one of our informants, where a unique collaboration provided child care support to some parents initially breaking into the job market. While these innovations are encouraging, ultimately, they are constrained by limited resources.

Implications

In Ontario, there are a number of promising initiatives undertaken at the municipal and provincial levels that create pathways for community capital. For example, the Toronto Poverty Reduction Strategy indicates that it is guided by a collective impact approach that is used to drive change, and to develop, implement and evaluate the strategy. The Government of Ontario is also currently investing in supporting community hubs by removing barriers, streamlining funding, setting up knowledge exchange networks and making schools more accessible for these initiatives (Government of Ontario 2015, Community Hub Framework Advisory Group 2016). Although these are encouraging strategies, they could be strengthened even further by taking a community capital approach and using social network analysis to inform their design, and support for communities.

Despite promising initiatives, there are a number of limitations that community networks still face. For instance, a network's ability to leverage change largely depends on existing community resources, where there are no resources networks are constrained and ultimately cannot exist. Investing in networks does not remove the need to invest in community services themselves, as without dedicated investments in community services networks and the promising initiatives they offer, are limited. These limitations could be mitigated with the integration of social networks in strategies produced at both the municipal and provincial levels. The government can use community networks work to strengthen existing initiatives, especially around youth. There is evidence that the Ontario Public Service, through ministries such as the Ministry of Education, the Ministry of Child and Youth Services and the Ministry of Community and Social Services, is interested in investing in social capital and community collaborations to advance its key mandates. For example, the Action Plan for Youth Employment in Toronto supports equity based youth employment; the Toronto Poverty Reduction Strategy attempts to develop actions that create pathways to prosperity; and finally both the Toronto Newcomer Strategy and Toronto Youth Equity Strategy seek to create barrier free communities where all youth can thrive.

Recommendations

Community capital improves health equity in Ontario, and the use of social network analysis can help communities, policy makers, network groups and service organizations see the whole picture. To build it into our systems there needs to be a considerable push

for governments to invest in the development and evaluation of networks that works to strengthen community capital. The City of Toronto has the tools, resources, and authority to lead the way in the use of community capital in order to create meaningful change. Leveraging these tools at the government, network and individual levels to establish community capital and build social networks will offer a longer-term strategy that reduces poverty and increases positive health outcomes for all Ontarians.

At the government level, policy makers and funding bodies should develop programs and policies to facilitate the following activities:

- Invest in the development and evaluation of networks to strengthen community capital;
- Fund the research and development of organizational networks;
- Champion networks as a tool to improve equity, and encourage network design that is informed by an understanding of how networks function in response to different access barriers.

Through our key informant interviews, we heard that network groups could be more successful if they were able to engage all members in network strategic planning, evaluation and development. Some ways in which this could be done include:

- Engaging the whole network to identify and prioritize community needs and design whole network solutions;
- Establishing network level goals, outcomes and metrics;
- Using social network analysis to evaluate and optimize a network's structure, activities and qualities to improve network outcomes for specific community needs.

At the level of individual organizations, network members have developed best practices in organizational-level planning, evaluation and development. These strategies could be strengthened even further by:

- Using information gained through social network analysis to understand how they fit into the larger network, and what connections and activities might be beneficial to develop;
- Connecting to network brokers and creating partnerships to help identify and fill gaps, or “structural holes,” in service connectivity.

Conclusion

The concept of community capital helps us think about communities as systems and highlights the idea that relationships and networks are essential for connecting resources within communities to help those who need them. It is important to think about networks as dynamic and flexible. Networks connect in different ways depending on the problem being addressed and the different solutions and resources available. How an inter-organizational network optimally connects in response to helping youth overcome one barrier may be

markedly different from how they should connect to optimize their response to other barriers. Being able to realize the full potential of community capital requires an adaptive network that can respond and evolve rapidly to meet the changing community needs. This is a precondition for an equitable network that can meet the diverse and complex challenges of a diverse community. In an adaptive well-connected network, any door is the right door, no matter who you are and what challenges you face.

While creating seamless, adaptive and equitable service networks may seem idealistic, research like this is a necessary step towards achieving this goal. Taking the time to study the function of existing service networks in response to specific barriers identified in communities can help inform networks at a variety of levels about how their hubs could be optimally designed to make the most impact for their unique communities. Social networks could improve our community's capacity to coordinate services, meet diverse community needs, come up with effective solutions to complex problems, and organize towards achieving collective goals. Ultimately, this information can be used to evaluate and strengthen our community capital to provide connected and more equitable services. Understanding how our communities work as whole systems, and how different services work together to improve equity in social service outcomes is an essential step towards improving health equity through the social determinants of health in our city.

References

- Abbas, R. (2011). Kingston - Galloway / Orton Park: Community Resource and Needs Assessment. Toronto, Immigrant Women Integration Program (IWIP) Community Leadership and Development.
- Bolland, J. M. and Wilson, J. V. (1994). Three faces of integrative coordination: a model of interorganizational relations in community-based health and human services. *Health Services Research* 29(3): 341.
- Borgatti, S. P. (2002). Netdraw Network Visualization. Harvard, MA, Analytic Technologies.
- Borgatti, S. P., Everett, M. G., Johnson, J. C. (2013). Analyzing social networks, SAGE Publications Limited.
- Borgatti, S. P., Everett, M.G. and Freeman, L.C. (2002). Ucinet 6 for Windows: Software for Social Network Analysis. Harvard. MA, Analytic Technologies.
- Braun, V., Clarke, V., Terry, G. (2014). Thematic analysis. *Qualitative Research in Clinical Health Psychology*: 95-114.
- Butts, C. T. (2008). Social network analysis: A methodological introduction. *Asian Journal of Social Psychology* 11(1): 13-41.
- Callaghan, E. G. and Colton, J. (2008). Building sustainable & resilient communities: a balancing of community capital. *Environment, Development and Sustainability* 10(6): 931-942.
- City of Toronto, Social Development Finance and Administration Department. (2013). 2011 Kingston Galloway Orton Neighbourhood Area Snapshot. 2011 Census / National Household Survey Analysis, City of Toronto.
- City of Toronto, Social Development Finance and Administration Department. (2012). Strong Neighbourhoods: Responding to a Call to Action. A Progress Report on Strong Neighbourhoods Strategies Toronto, City of Toronto and United Way Toronto.
- City of Toronto. (2015). Staff report for action on Toronto's Youth Employment Action Plan: Update. Toronto Employment and Social Services.
- Civic Action (2015). Escalator: Jobs for Youth Facing Barriers – Reaching the Next Level of Opportunity. Toronto, ON.
- Cleveland, G., Krashinsky, M., Colley, S., Avery-Nunez, C. (2016). City of Toronto Licensed Child Care Demand and Affordability Study. City of Toronto.
- Cohen, S. (2004). Social relationships and health. *American psychologist* 59(8): 676.
- Community Hub Framework Advisory Group. (2016). Enabling and Celebrating Community Hubs: One-Year Progress Update on Community Hubs in Ontario: A Strategic Framework and Action Plan, Government of Ontario.

- Dale, D. (2013). Toronto to pick new priority neighbourhoods. *The Toronto Star*. Toronto, Joseph E. Atkinson.
- Diez Roux, A. V. (2011). Complex systems thinking and current impasses in health disparities research. *American Journal of Public Health* 101(9): 1627-1634.
- Furstenberg Jr, F. F. and M. E. Hughes (1995). Social capital and successful development among at-risk youth. *Journal of Marriage and the Family*: 580-592.
- Geobey, S. (2013). *The Young and the Jobless*. Canadian Centre for Policy Alternatives (Ontario).
- Government of Ontario. (2015). *Community Hubs in Ontario: A Strategic Framework and Action Plan*, Government of Ontario.
- Hammer, T. (1993). Unemployment and mental health among young people: a longitudinal study. *Journal of Adolescence* 16(4): 407.
- Hancock, T. (2001). People, partnerships and human progress: building community capital. *Health Promotion International* 16(3): 275-280.
- Head, B. W. (2008). Wicked problems in public policy. *Public Policy* 3(2): 101.
- Isaacs, S., Valaitis, R., Newbold, K. B., Black, M., Sargeant, J. (2013). Brokering for the primary healthcare needs of recent immigrant families in Atlantic, Canada. *Primary Health Care Research and Development* 14(1): 63-79.
- Lappalainen, K., Manninen, P., Räsänen, K. (2016). Association Among Sociodemographic Factors, Work Ability, Health Behavior, and Mental Health Status for Young People After Prolonged Unemployment. *Workplace Health & Safety*.
- Mahamoud, A., Roche, B., Homer, J. (2013). Modelling the social determinants of health and simulating short-term and long-term intervention impacts for the city of Toronto, Canada. *Social Science & Medicine* 93: 247-255.
- Parsfield, M., Morris, D., Bola, M., Knapp, M., Yoshioka, M., Marcus, G. (2015). *Community Capital: The Value of Connected Communities*.
- Provan, K. G., Veazie, M. A., Staten, L. K., Teufel-Shone, N. I. (2005). The use of network analysis to strengthen community partnerships. *Public Administration Review*: 603-613.
- Statistics Canada. (2016). *Labour Force Survey, June 2016*.
- Wood Green Community Services (2015). *Building the evidence base: the foundation for a strong community hub: The evidence reviewed by the Premier's Community Hubs Framework Advisory Group*. Government of Ontario.
- Weiner, B. J. and J. A. Alexander. (1998). The challenges of governing public-private community health partnerships. *Health Care Management Review* 23(2): 39-55.
- Yau, M. and S. DeJesus. (2016). *Model Schools for Paediatric Health Initiative: An Integrated Initiative to Ensure Equity in Health and Education for Inner-city Students*. *Research Today* 9(1).