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HOW TIES TO PROFESSIONAL SUPPORT NETWORKS IMPACT SOCIAL OUTCOMES
AMONG HOMELESS YOUTH

by

KARA TSUKERMAN

Under the Direction of Eric R. Wright, PhD

ABSTRACT

The U.S. Department of Housing and Urban Development has made ending youth homelessness a central focus, including providing numerous resources to service providers and awarding millions of dollars in grants to programs specifically catering to youth (HUD 2019b). Using a social network framework, this research uses data from a sample of homeless youth to explore how networks of providers influence how youth interact with housing, health care, and education systems. Binary and multinomial logistic regressions show that particular types of professional support ties can provide youth with alternatives to sleeping unsheltered as well as a place to go other than the ER for health services. However, professional support ties reduce the odds that youth are enrolled in school. This study reveals important insights into the broader processes of the role of integration into the service system and the varied and complex relationships between youth and service providers.

INDEX WORDS: Homeless youth, social network, social support, housing, health, education

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KARA TSUKERMAN

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

in the College of Arts and Sciences

Georgia State University

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Kara Tsukerman
2019

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May 2019

DEDICATION

This thesis is dedicated to my mother. All of my accomplishments in life are because I was lucky enough to have her as a mother.

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Thank you to my thesis chair, Eric Wright, for his continued expert guidance and advisement on this paper and my graduate school experience in general. I am so thankful to have been able to work with him. Thank you also to Erin Ruel and Dan Pasciuti for their timely revisions and advice, and for ensuring that I am the best methodologist that I can be.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	V
LIST OF TABLES	VIII
LIST OF FIGURES	IX
1 INTRODUCTION	1
1.1 Literature Review	4
<i>1.1.1 Social Support – Personal Support Networks.....</i>	<i>5</i>
<i>1.1.2 Social Support – Professional Support Networks.....</i>	<i>6</i>
<i>1.1.3 Housing</i>	<i>7</i>
<i>1.1.4 Health Care</i>	<i>8</i>
<i>1.1.5 Education</i>	<i>11</i>
2 THEORETICAL FRAMEWORK AND RESEARCH QUESTIONS.....	14
3 METHODS	16
3.1 Data	16
3.2 Constructs.....	17
<i>3.2.1 Independent Variables.....</i>	<i>17</i>
<i>3.2.2 Dependent Variables.....</i>	<i>18</i>
<i>3.2.3 Control Variables.....</i>	<i>20</i>
3.3 Statistical Analysis	21
4 RESULTS	23

4.1	Descriptives.....	23
4.2	Housing	25
4.3	Health Care.....	1
4.4	Education	2
5	DISCUSSION	3
5.1	Housing	3
5.2	Health Care.....	5
5.3	Education.....	6
6	CONCLUSIONS	9
	REFERENCES.....	11

LIST OF TABLES

Table 1 Study Sample Characteristics	24
Table 2 Housing.....	1
Table 3 Health Care	2
Table 4 Education	3

LIST OF FIGURES

Figure 1 Graphical representation of relationships.....	16
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1 INTRODUCTION

The U.S. Department of Housing and Urban Development (HUD) has made ending youth homelessness a central focus in recent years, including providing numerous resources to service providers and awarding \$43 million dollars in grants in 2018 to programs specifically catering to youth (U.S. Department of Housing and Urban Development 2019b). Whether funded by HUD or non-governmental sources, a complex web of homeless service providers exists to provide a wide variety of services to homeless youth, adults, and families. However, low wages and emotional burdens among workers coupled with the inherent difficulties in serving these vulnerable populations leads to high turnover among providers (Mullen and Leginski 2010). The changing nature of homeless service organizations along with the difficulty in accurately enumerating the homeless can make it difficult to measure progress. Given this structural instability, this research seeks to answer the question: To what extent do homeless service providers function as a social support network influencing how homeless youth interact with housing, health care, and education systems?

In January 2017, HUD's annual Point-in-Time (PIT) count tallied close to 41,000 homeless and unaccompanied youth between the ages of 18 and 24, including almost 9,500 parenting youth in families with over 12,000 children. The majority of the homeless overall (65%) were sleeping in sheltered locations, such as emergency shelters and transitional housing programs, and 35% were unsheltered on the night of the count. However, the majority of unaccompanied youth (55%) were unsheltered on the night of the count. In addition to national data, the Annual Homeless Assessment Report (AHAR) gives broad statistics of homelessness by state. In Georgia, 526 of the almost 7,500 individuals experiencing homelessness were classified as unaccompanied youth (Henry et al. 2017). The PIT count includes only those living

unsheltered in places not meant for human habitation and sheltered in various types of dwellings designed to house the homeless at a single point in time. Actual prevalence estimates are much higher and range from range from tens of thousands to over a million homeless youth, with over 3 million youth experiencing an episode of homelessness in any given year (Morton et al. 2018; Pergamit et al. 2013).

Because homeless youth tend to move around more than homeless adults and are often able to find alternatives to living on the street, such as staying in hotels/motels or “doubled up” with friends or relatives, also known as “couch surfing,” they are harder to count and more likely to be missed in the PIT (Hallett 2012). They are also more likely to be involved in sex work than homeless adults and less likely to access homeless services, making them a more hidden population (Wright et al. 2016; Zerger, Strehlow, and Gundlapalli 2008). In addition to the numerous publications on the factors that contribute to homelessness in general, including mental health issues, substance abuse, and domestic violence, we know that youth experience a dynamic set of factors that lead them to homelessness. These include leaving home due to abuse and neglect, being forced out due to substance abuse or sexual orientation/gender identity, and aging out of the foster care system (Edidin et al. 2012; Fallahi 2016; Narendorf et al. 2017; United States Interagency Council on Homelessness 2013). Homeless youth often have a history of childhood violence and physical/sexual abuse and increased involvement in risky behaviors like needle-sharing and “survival sex.” In addition, the overrepresentation of LGBT+ youth among the homeless can lead to increased stigmatization and a higher risk of exploitation due to more limited formal employment opportunities (Edidin et al. 2012; Holger-Ambrose et al. 2013; Kidd 2007; Maccio and Ferguson 2016; Tenner et al. 1998). Furthermore, homeless youth can be difficult to engage for reasons including the stigma of using homeless services, fear of being

returned to an unsafe home environment, fear of stigmatization due to LGBT+ identity, alcohol/substance use, negative experiences with police, and lack of knowledge of available services (Ha et al. 2015; Hudson et al. 2010; Pedersen, Tucker, and Kovalchik 2016; Pergamit and Ernst 2010; Tyler, Akinyemi, and Kort-Butler 2012). Currently, researchers believe that homeless youth who are not connected to any service providers are largely excluded from the current literature and may have greater unmet needs than connected youth, as well as a harder time exiting homelessness (Slesnick et al. 2016).

Despite inherent difficulties in engaging the homeless, particularly youth, there are numerous benefits to having contact with homeless service providers. Providers can provide vital links to medical care, substance abuse treatment, mental health services, food, clothing, job assistance, shelter placements, assistance with identification and personal records, and referrals for other services. de Vet et al. (2013) explain that, "Services delivered by case managers often include practical support, help with developing independent living skills, acute care in crisis situations, support with medical and psychiatric treatment, and assistance with contacts between clients and people in their social and professional support systems" (2013:e13). The information and services provided by homeless-serving organizations have been described as an "enabling" factor in determining whether the homeless seek medical care (Gelberg, Andersen, and Leake 2000), and, by inference, potentially other social services.

This research fills an important gap in the literature on homeless youth and their integration into the service system. The past decade has seen a shift from a focus on veteran homelessness to youth homelessness (Pergamit et al. 2013; United States Interagency Council on Homelessness 2017). Despite youth-focused censuses and dramatic investments by the federal government, youth homelessness is on the rise (Henry et al. 2018; U.S. Department of Housing

and Urban Development 2019b, 2019a). The United States has set new federal initiatives to end homelessness of all types, however, because youth have intermittent contact with service providers and are difficult to engage, it is hard to measure progress on stated goals (United States Interagency Council on Homelessness 2018).

Using a social network framework, this exploratory research uses data from a sample of homeless youth to increase the knowledge of how networks of providers influence how youth interact with housing, health care, and education systems. This perspective can promote a better understanding of the extent youth are integrated into the existing system and reveal important service gaps in some areas while arguing for greater or continued funding needs in others, as well as promote better program evaluation and more efficient policy development. Most of the existing literature on social support and social network functions on homeless youth focuses primarily on family and peer group support. While this support is a crucial resource, so too is the support of professionals. This research focuses attention on the social functions of homeless service providers as the link between homeless youth and services. The undercount of the homeless in general, and particularly of homeless youth, makes understanding the gaps that homeless service providers fill of the utmost importance for this vulnerable population.

1.1 Literature Review

This chapter synthesizes available research on homeless individuals, with a focus on homeless youth. I begin by describing what is known about the personal and professional social support networks of the homeless. Few studies of social support and homelessness explicitly focus on service providers in their analysis of support resources. This research fills the knowledge gap by helping elucidate the role of professional support networks in youths' engagement with housing, health care, and education systems.

1.1.1 Social Support – Personal Support Networks

Homeless people typically lack social support. This is generally believed to be because they have smaller social networks with more weak or broken social ties, which often decrease in size over time, compared to similarly aged peers (Barman-Adhikari et al. 2016; Falci et al. 2011; Fitzpatrick 2017; Wright, Attell, and Ruel 2017). Social networks include ties from personal or primary groups, like family members and friends, and secondary or professional groups, like service providers. It is important to understand not only the compositional attributes of one's network but also the kinds of support each network provides (Barman-Adhikari et al. 2016). Social support is often characterized by emotional support, including "caring, affection, and approval," informational support including advice and knowledge about where to go for services, and instrumental support such as food, clothing, transportation, and rental assistance (Falci et al. 2011:827; Thoits 2011). The support provided by social ties through these social control mechanisms can buffer stress and improve mental and physical health (Hwang et al. 2009; Thoits 2011), as well as encourage those in need to seek mental health services (Crosby et al. 2018; Perry and Pescosolido 2015). Perceived support has been shown to mediate the relationship between mental health and past life experiences in homeless adults by providing some defense against depression and anxiety (Fitzpatrick 2017). Physical health and the likelihood of victimization has also shown to be positively affected by different types of personal network support (Hwang et al. 2009).

Despite the insufficiencies commonly found in the social networks of the homeless, youth experiencing homelessness often rely on a variety of support mechanisms. Homeless youth have been shown to seek emotional, informational, and instrumental support from family members and network members they knew prior to becoming homeless while receiving less

instrumental support from street-based peers (Barman-Adhikari et al. 2016; Kennedy et al. 2017). Personal support networks have also been shown to decrease mental illness severity in homeless youth (Wright et al. 2017). There is a debate in the literature on whether perceived or received support is best. However, often the weaker effect of received support is due to how it is measured and both are important sources of support for vulnerable populations (Biederman, Nichols, and Lindsey 2013; Thoits 2011).

1.1.2 Social Support – Professional Support Networks

The extent that one has family/peer support may be related to their reliance on professional support. For homeless youth who cannot rely on personal support networks, professional support networks could provide the first positive experiences youth have with adults after entering homelessness (Ferguson, Kim, and McCoy 2011). From a social network theoretical perspective, professionals who serve as case managers can help “reconstruct the ‘community’ for clients by creating a synthetic, professionally-based set of social network ties for individuals” which ultimately can serve as part of their social support system (Pescosolido, Wright, and Sullivan 1995:48). Because the system of providers in many cities is so fragmented, many studies conflate “professionals,” “service providers,” and “community-based providers” for a more holistic understanding of how these individuals impact vulnerable populations (Barman-Adhikari et al. 2016; Biederman et al. 2013; Crosby et al. 2018; Wright et al. 2017).

In addition to personal support networks, professional support networks are critical for linking vulnerable populations to services. In their research on homeless women, Biederman et al. (2013) found that they rely on a variety of service professionals, like nurses, therapists, and caseworkers, but also nonprofessional volunteers like church staff and homeless agency volunteers. Because many homeless women cannot depend on family and friend sources of

support, the variety of service providers was integral to their emotional feelings of being “cared for” and tangible needs such as food, clothing, and hygiene products. Youth who report experiencing street victimization, youth with prior involvement with foster care, and youth sleeping in locations with less access to family and friends are significantly more likely to use professionals for instrumental and emotional support (Barman-Adhikari et al. 2016). Other especially vulnerable populations, such as LGBT homeless youth, have been shown to benefit more from professional support networks (Wright et al. 2017). Qualitative research on formerly homeless youth indicates a strong reliance on professional help for emotional and instrumental support, as well as skills leading to personal growth and development (Kurtz et al. 2000).

1.1.3 Housing

An important way homeless youths’ social support networks impact their homeless experience is through their housing options. There is not one uniform federal definition of a homeless youth, and they fit into different categories depending on where they sleep, their age, and whether or not they’re enrolled in school. The annual PIT count enumerates those who are considered literally homeless and “lack a fixed, regular, and adequate nighttime residence and includes a subset for an individual who resided in an emergency shelter or a place not meant for human habitation” (U.S. Department of Housing and Urban Development 2012b). While not part of homeless estimates sent to Congress, individuals, families, and youth who sleep in hotels/motels or “doubled up” with friends or relatives are acknowledged in federal literature on homeless students (NCHE 2018). Of the over 1 million homeless students tracked during the 2015-2016 school year, the vast majority (76%) were sleeping doubled up and 6.5% were in hotels/motels. In one study, younger youth were significantly more likely to sleep doubled up than older youth, who tend to use shelters more, however, sleeping location varied by sexual and

gender identity (Hein 2010). Younger youth and doubled up youth are more likely to have larger support networks which might facilitate an alternative to sleeping in a shelter or on the street (Low, Hallett, and Mo 2017; Wright et al. 2017). Ha et al. (2015) found that stigma and shame associated with the “homeless” designation and a desire for independence kept youth from utilizing shelter services, despite how integral they can be for offering food, referrals, and resources to patrons. Residents of hotels/motels and those who sleep doubled-up are under-researched in homeless literature, despite high rates of food insecurity, worse school performance, inadequate living conditions, and psychological effects stemming from lack of space and privacy, and there is no published literature on service providers’ impact on these populations (Brownrigg 2006; Gonzalez Guittar 2017; Lewinson 2010; Low et al. 2017).

1.1.4 Health Care

The lack of stable and permanent housing can have a direct effect on one’s health. For the homeless, support networks are integral for accessing health services. Homeless individuals’ mortality rate is 2-5 times higher than in non-homeless populations and they experience worse health outcomes than those who are stably housed (Aidala et al. 2016; Fazel, Geddes, and Kushel 2014; Henwood et al. 2013). The frequent use of the hospital emergency department (ED) as a primary source of health care among the homeless is well documented. Conditions such as infections, heart disease, substance abuse, injuries, suicides, homicides, and poisoning are commonly dealt with in the ED rather than often more suitable and cost-effective non-emergency settings (Fazel et al. 2014). Fazel et al. (2014) reviewed over 30 studies on homeless health and reported higher levels of psychiatric disorders in homeless people compared with the general population, specifically drug and alcohol dependence, psychosis, and depression. Homeless individuals are at an increased risk of injury due to inadequate living conditions, environmental

exposure, and the “immediate survival demands” that one prioritizes over health, such as searching for food, shelter, and other basic necessities. This leads to the homeless utilizing the emergency room at almost double the rate of non-homeless individuals and staying for longer periods of time (Mackelprang, Graves, and Rivara 2014:289). Despite high rates of ED usage, homeless people report a variety of unmet health needs and barriers to accessing care (Narendorf 2017). Kertesz et al. (2014) explain that federally funded Healthcare for the Homeless clinics nationwide are often inadequate to meet the needs of the population due to not enough funding and regulations, leading to largely non-existent outreach efforts.

Rates of HIV/AIDS are higher among homeless and precariously housed individuals and can be difficult to manage under the chronic stress of insecure housing (Aidala et al. 2016; Wenzel et al. 2012; Zeglin and Stein 2015). The U.S. Department of Housing and Urban Development estimates over 145,000 people living with HIV/AIDS (PLWHA) with unmet housing needs (U.S. Department of Housing and Urban Development 2012a). In a review of studies on PLWHA, Aidala et al. (2016) report overwhelming evidence that insecure housing is linked to worse disease management and outcomes, including less consistent antiretroviral drug use and more visits to the emergency room.

Excessive hospital usage comes with significant costs and resource drainage. For instance, changes in Massachusetts law requiring homeless people to prove that they have been living in a place not meant for human habitation has significantly increased the number of families using the ED in order to receive discharge papers at a cost of over \$200,000 paid by Medicare and over 8,600 hours of hospital use over the study period (Kanak et al. 2018). Previous studies in Philadelphia estimated an average annual cost of \$7,500 per person for behavioral health, corrections, and homelessness services equaling \$20 million annually, which

authors note is likely an underestimate (Poulin et al. 2010). Similarly, a 2007 study in Indiana looked at 96 chronically homeless ED users over a three-year period and found that the city of Indianapolis spent over a million dollars on their health services while Florida saved an estimated \$2.5 million dollars by housing six chronically homeless ED users (Butcher 2017; Wright, Littlepage, and Federspiel 2007).

There is evidence linking the support of service providers to decreased ED usage and improved health outcomes through case management (McCormack et al. 2013) and/or facilitating access to other types of care (Herndon et al. 2003). A randomized trial of chronically homeless individuals in Chicago showed that case management significantly reduced the number of ED visits and shortened the hospital stays of those in the intervention group (Sadowski et al. 2009). In a study of heterosexually active homeless men, past year HIV testing was significantly associated with access to medical and dental services (Wenzel et al. 2012). Drop-in centers, often favored by homeless youth due to low barriers to entry, can serve as a single destination to access a wide variety of providers and services (Pedersen et al. 2016). In a sample of homeless youth in Los Angeles, drop-in center usage was the strongest predictor of HIV/STI testing (Ober et al. 2012). Though shelter utilization is lower among homeless youth than adults (Ha et al. 2015), interviews with homeless youth with mental health issues revealed that shelters can serve as a connection to much needed mental health services (Narendorf 2017). Among a sample of drug users who had been homeless at some point, Sapra et al. (2013) found that informational support from at least one network tie was positively associated with mental health service usage. Social networks are especially important for other vulnerable populations, like homeless women, whose likelihood of HIV testing was higher among those with more social support (Nyamathi, Stein, and Swanson 2000).

1.1.5 Education

The K-12 school system is one where a homeless designation ensures access to professional network supports. According to the National Center for Homeless Education, there were 1,304,446 homeless students, 111,753 of which were unaccompanied, enrolled during the 2015-2016 school year (NCHE 2018). Homeless youth attending school are given special provisions under the McKinney-Vento Homeless Assistance Act, including help enrolling in school, fee waivers, the removal of barriers to accessing extracurricular activities, free meals, transportation, mentoring, counseling, and referrals to agencies that provide additional services (U.S. Department of Education 2016). However, McKinney-Vento and the various other federal initiatives designed to assist homeless students lack funding and evaluation requirements, allowing many of these students to remain hidden and making remaining in school difficult while facing unstable housing conditions (Abdul Rahman, Fidel Turner, and Elbedour 2015; Hallett 2012). Some estimates show that the likelihood of graduating from high school decreases 10-16% depending on the number of times a youth runs away from home (Aratani and Cooper 2015) while the dropout rate ranges from 40-75% depending on the sample (Ingram et al. 2016; Julianelle 2008). Barriers to remaining in school stem not only from the inability of some youth to meet their basic needs, but also from discrimination due to LGBT+ identity, conflicts between school and job requirements, frequent moves, higher absences, difficulty finding space to complete schoolwork, and difficulty fitting in (de Bradley 2008; Julianelle 2008; Low et al. 2017). LGBT+ youth, who are overrepresented among homeless youth, experience high rates of verbal and physical harassment and dropout but have shown lower rates of seeking out support from school staff than housed students (Bidell 2014; Corliss et al. 2011; Hein 2010).

College students experiencing homelessness also face a unique set of challenges to staying in school. According to Gupton (2017), unlike grade schools which are required to keep track of homeless students under McKinney-Vento, there is no such requirement for colleges. Although some evidence can be gleaned from financial aid applications, there is an unknown number of homeless college students in the U.S., with estimates ranging from 6-14% in a recent nationwide study (Broton and Goldrick-Rab 2018). In a small study of homeless community college students, Gupton (2017) found that college was a source of stability and escape from lonely and chaotic group home environments. Because none of the colleges in the study tracked student homelessness, the students were largely invisible and did not seek or receive any additional support from the colleges, which affected their academic success. Broton and Goldrick-Rab (2018) explain that college students nationwide also experience high rates of food insecurity, which can also affect educational attainment.

Service providers can assist the educational efforts of homeless youth by filling in the gaps left behind by federally-mandated programs or in situations where none exist. A large study of homeless youth who use drop-in centers and transitional living programs showed that over half of the 81% of youth who were in school, work, or job training attributed the support they received from providers to positively impacting their ability to participate in those settings (Gwadz et al. 2017). Because homeless youth can be hard to engage and/or reluctant to seek help (Kurtz et al. 2000; Tyler et al. 2012), using cell phones, texting, and social media to facilitate case management has been positively appraised by homeless youth as more convenient and less disruptive of their school/work environments (Bender et al. 2015). Finally, LGBT+ specific service providers and organizations can help increase feelings of support and inclusion among sexual and gender minority homeless youth (Bidell 2014).

The purpose of this research is to help understand the extent to which professional support networks influence how homeless youth interact with housing, health care, and education systems. As described in the literature review, professional networks help to increase access to these critical services and improve outcomes. This research fills a gap in the network literature on homeless youth as the majority of research focuses on personal network ties. Explicitly studying the role of professional networks on youths' engagement with the important social service systems described above has policy implications and can argue for more targeted funding and research dollars to understand and influence who is being reached by homeless service providers and who remains disengaged.

2 THEORETICAL FRAMEWORK AND RESEARCH QUESTIONS

This research draws on classic sociological theories by Georg Simmel (1964) and Émile Durkheim (1951) and a conceptual framework by Pescosolido, Wright, and Sullivan (1995) to explore how service providers help integrate vulnerable people into society by increasing their access to different groups and their accompanying benefits. According to Simmel (1964), modern society allows an individual to be a member of not only one primary group as in preindustrial society, but multiple groups that often intersect with one another. "As the individual leaves his established position within one primary group, he comes to stand at a point at which many groups 'intersect'" (1964:141). Membership in multiple groups can increase one's social connectedness "and reenforce [sic] the integration of his personality" (1964:142). Simmel notes that membership in too many groups can lead to conflict but also allows one to "assert himself energetically" (1964:142).

Durkheim (1951) explores group membership dynamics with an examination of social integration and social regulation. Social integration happens when an individual feels connected to a group or society as a whole. This is often achieved through religion, family, work, etc. Social regulation describes the norms or expected behaviors that go along with membership in society and help one define their place in a larger group. Whereas not enough of the former can result in disconnection from society, not enough of the later can leave one feeling alienated or normless. Both scenarios can have detrimental consequences for the individual, however, too much integration and regulation are also not ideal.

More recent work by Pescosolido et al. (1995) explain models of case management (CM) and their function for integrating the mentally ill in society. "Simply put, the case manager functions, in theory, as the human link between the client and community, particularly the maze

of organizations and providers in the fragmented service system” (1995:40). CM is a strengths-based approach which believes that access to appropriate resources is necessary for success. The model emphasizes the team approach found in more intensive models of CM, like Assertive Community Treatment (ACT), over Standard Case Management (SCM). SCM limits the involvement of the case manager to when the client is in need rather than offering ongoing assistance and monitoring. This method of treatment is often characterized by high caseloads and a “crisis-management approach with little time to work proactively with consumers” (1995:42). Advantages of the team model include different vantage points to assess needs from multidisciplinary team members, higher retention of team members due to less reliance on the individual, a safety net ensuring less distress for the client if a team member departs, and a decreased likelihood that clients get “lost in the system” as they are monitored by different team members (1995:45).

While a young person is homeless, service providers can help integrate the youth into other aspects of society that can increase the chances of future housing stability as well as improved health and educational outcomes. In this regard, service providers seek to connect them to services and offer support on the streets. Due to the weak and broken social ties that often accompany homelessness, professional networks serve as part of an alternative safety net for these difficult to engage youth. While more support is gained from larger networks where clients have a greater chance of having their instrumental and emotional needs met, there can be a point where CM teams are too large, and the exact number of members needed to provide the most optimal service can vary based on the team itself (Pescosolido et al. 1995; Wright et al. 2006). The impact of the social network created by service providers on how youth interact with

housing, health, and education systems has not been explicitly studied among homeless youth.

The existing literature and theory provided above lead to the following hypotheses:

H1: Youth with more ties to professional supports are less likely to report sleeping in an unsheltered location, controlling for personal support network resources and demographics.

H2: Youth with more ties to professional supports are more likely to have a place to go other than the emergency room when in need of health care, controlling for personal support network resources and demographics.

H3: Youth with more ties to professional supports are more likely to be enrolled in school, controlling for personal support network resources and demographics.

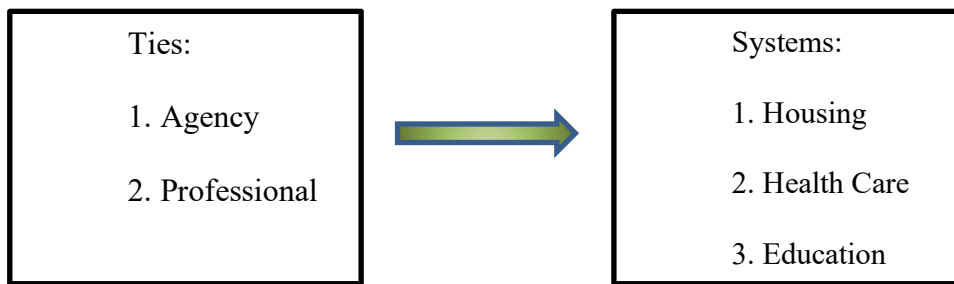


Figure 1 Graphical representation of relationships.

3 METHODS

3.1 Data

The primary purpose of this study is to examine the extent homeless service providers function as a social support network influencing how homeless youth interact with housing, health care, and education systems using the Atlanta Youth Count and Needs Assessment (AYCNA). The AYCNA was conducted over two, two-week periods during the summer of 2015. The goals of the project were to estimate the number of homeless and precariously housed youth living in metro Atlanta, Georgia and inform policymakers and service providers about

their needs and factors that contributed to their housing situation (Wright et al. 2016). According to the AYCNA final report, advanced capture-recapture sampling methods show that there are approximately 3,374 homeless youth in Atlanta, Georgia (2016:3,7). Survey eligibility was dependent on being between 14-25 years of age and considered homeless under the federal definition described previously. Youth were asked their age and the following questions: “In the past month, did you double up or stay overnight with friends, relatives, or someone you didn’t know well because you didn’t have a regular, adequate, and safe place to stay at night?”; “In the past month, did you stay in a motel or hotel because you had nowhere else to sleep?”; “In the past month, did you stay in a shelter or other facility that provides short-term housing for people who do not have their own place to sleep?”; “In the past month, did you stay overnight in a car, park, public place, abandoned building, bus or train station, or airport because you didn’t have a regular, adequate, and safe place to sleep?” Once a respondent said “yes” to one of those questions and confirmed that they are financially independent, they were eligible to take the survey (2016:24). The dataset includes 693 completed surveys from this population. Youth were asked a total of 72 questions about demographic information and a variety of issues and experiences thought to be common among homeless youth, including “current housing situation, homeless history, traumatic life experiences and contact with law enforcement, general health status and major health problems, mental health and substance use, sexuality and sexual behavior, social support, and dreams and aspirations” (2016:24,27,33,36,41,44,50,52).

3.2 Constructs

3.2.1 *Independent Variables*

I measure professional support in two ways:

Agency ties. This independent variable in this study measures youths' contacts with homeless service providers. The majority of AYCNA youth, 99% (n=688) answered the question "Over the past month, have you been contacted or received services from any of the following programs or agencies?" Sixty-nine percent (n=477) of youth who responded had contact with at least one provider. Twenty percent (n=138) selected "Covenant House"; 10.3% (n=71) "Some other organization"; 9.3% (n=64) "Lost-N-Found"; 7.4% (n=51) "Stand Up for Kids"; 7.1% (n=49) "Salvation Army"; 4.9% (n=34) "Mercy Care"; 3.5% (n=24) "Chris Kids"; 2.9% (n=20) "Hope Atlanta"; 1.6% (n=11) "Someone Cares"; 1.6% (n=11) "Young People Matter"; 0.6% (n=4) "Sconiers Homeless Prevention". I created a scale variable out of respondents' answers to whether or not they had contact with each of the agencies and gave each a value of one.

Professional support ties. This independent variable measures whether the youth has a professional in their support network. The majority of AYCNA youth, 95% (n=659) answered the question "Do you have professionals you can talk to about important matters or turn to for help when you have a problem?" The majority, 60% (n=397), said "None"; 29% (n=190) were categorized into "1 to 3"; 11% (n=72) were categorized into "4 or more". I collapsed the latter two categories and made this variable dichotomous, measuring the presence or absence of a professional support tie.

3.2.2 Dependent Variables

Housing. The first dependent variable in this study measures where the youth reported sleeping the previous night. The majority of AYCNA youth, 97% (n=673), answered the open-ended question "Where did you sleep last night?" and researchers coded the responses into the following categories: 22.4% (n=151) "Hotel/motel"; 20.0% (n=135) "On the street/sidewalk/park/behind businesses/on a porch or stoop"; 13.2% (n=89) "Emergency

shelter/domestic violence shelter”; 13.8% (n=93) “With friends in their home”; 4.8% (n=32) “With biological family in their home”; 5.0% (n=34) “Transitional housing”; 4.2% (n=28) “Abandoned building or farm structure”; 2.7% (n=18) “Group home/personal care home”; 2.4% (n=16) “In a car, truck, or other vehicle”; 2.2% (n=15) “Under a bridge or overpass”; 2.2% (n=15) “My own house/apartment”; 1.9% (n=13) “Bus/train station/airport”; 1.3% (n=9) “In the woods/campsite”; 1.2% (n=8) “Medical facility/psychiatric hospital”; 1.0% (n=7) “With chosen family in their home”; 0.7% (n=5) “24-hour restaurant”; 0.4% (n=3) “Permanent supportive housing”; 0.3% (n=2) “Jail/prison”. I collapsed the responses into four categories: “Unsheltered” or staying in a place not meant for human habitation, “Sheltered” in a facility designed to house the homeless, “Hotel/motel”, and “Doubled up, etc.” This final category includes those in “couch-surfing” or “doubled-up” situations as well the few responses in less traditional categories, which include “Medical facility/psychiatric hospital”; “Permanent supportive housing”; “Jail/prison”; and “24-hour restaurant”.

Health Care. The second dependent variable in this study measures how youth use the health care system. Ninety-seven percent of the youth answered the question “Do you have a place you go (other than the ER) or a professional you see regularly for health care?” Seventy-five percent (n=500) said “No” and 25% (n=171) said “Yes”.

Education. The third dependent variable in this study measures whether or not the youth are enrolled in school. Ninety-seven percent of the youth answered the question “Are you currently attending school?” Eighty-six percent (n=577) said “No” and 14% (n=95) said “Yes”. The youth who said “No” were then asked, “Are you enrolled to attend school this fall?” Eighty percent (n=419) of respondents said “No” and 20% (n=105) said “Yes”. Because this survey was administered over the summer when school was not in session, I combined both variables into a

dichotomous variable where a “Yes” to either question qualifies the respondent as being in school.

3.2.3 *Control Variables*

Personal support ties. This control variable measures the youths’ personal support networks. The majority of AYCNA youth, 95% (n=659) answered the question “Do you have family members you can talk to about important matters or turn to for help when you have a problem? By family members, I mean people who are related to you by birth or marriage?” Forty percent (n=262), said “None”; 44% (n=290) were categorized into “1 to 3”; 16% (n=107) were categorized into “4 or more”. Ninety-five percent (n=659) of the youth answered the next question, “Do you have friends your age you can talk to about important matters or turn to for help when you have a problem?” Thirty five percent (n=228) said “None”; 44% (n=292) were categorized into “1 to 3”; 21% (n=139) were categorized into “4 or more”. Finally, 95% (n=658) answered the question “Do you have adult friends you can talk to about important matters or turn to for help when you have a problem? Here, I mean friends who are older than 25 years old?” Forty percent (n=260) said “None”; 35% (n=233) were categorized into “1 to 3”; 25% (n=165) were categorized into “4 or more”. For each of these three variables, I collapsed the latter two categories and made them dichotomous variables, measuring the presence or absence of a particular type of personal support tie.

Race. The demographic variable measuring race is a control variable. The majority of AYCNA youth, 99% (n=686) answered questions about their race and ethnicity. The majority of the sample, 71% (n=488), identified as “Black”. The remaining 29% are split between “White” (5%); “Native American” (.9%); “Asian” (.4%); “Hispanic” (4.1%); “Pacific Islander” (.2%); “Biracial” (4.4%); “Multiracial” (12%); “Other” (1.8%). Due to low frequencies in each category

and ambiguity in several of the categories, I collapsed them and made this a dichotomous variable measuring whether the respondent identifies as Black or not.

Age. The demographic variable measuring age is a control variable. Due to eligibility being dependent on age, 100% of respondents answered the question “How old are you?” and responses ranged from 15-25 years of age.

Gender. The demographic variable measuring gender is a control variable. To achieve a broad understanding of the intersections between gender and homelessness, youth were asked about biological sex and gender identity. 99% (n=684) of respondents answered the question “What sex were you assigned at birth?” and 66% (n=454) answered “Male/man”; 33% (n=229) “Female/woman”; 0.1% (n=1) “Something else”. Next, respondents were asked “Do you consider yourself ____” and could select one or more of the choices: “Man/male; Woman/female; Part-time in both; Gender queer; Transgender; Intersex; Gender non-conforming; Something else”. The data set includes a collapsed sex and gender variable that is used in this study, which categorizes respondents as “Cisgender Men”; “Cisgender Women”; “Everything Else”. For simplicity, this study refers to respondents by the gender categories “Men, Women, Other.”

3.3 Statistical Analysis

This study uses a 2015 sample of homeless youth in Atlanta, Georgia and IBM SPSS Statistics Version 25.0 (IBM Corp. 2017) to perform binary and multinomial logistic regression to assess how homeless service providers act as part of a homeless youth’s social network that connects them to housing, health care, and education systems. According to Field (2009), logistic regression is appropriate when the dependent variable in a study is categorical and the independent variables are continuous or categorical. Because a categorical dependent variable violates the assumption of linearity, a logistic regression is necessary to transform the

relationship to a linear model. Logistic regression, however, is not without problems. Issues can result when there is incomplete information from the predictor variables, complete separation (a perfect prediction of the DV from one or more IVs), and overdispersion (a larger observed variance than expected) (2009:769-772). Still, logistic regression is appropriate for the purposes of this study. When the dependent variable consists of more than two categories, multivariate logistic regression is used. The equation is $\log \left[\frac{Py}{1-Py} \right] = a + b_1x_1 + b_2x_2 \dots$. In this equation, 'P' is the probability of event 'Y' occurring, 'a' is the coefficient on the constant term, $p/(1-p)$ is the odds ratio, and 'x' is the independent variable(s). According to Field, "each predictor variable in the logistic regression equation has its own parameter (b), which is estimated from the sample data" (2009:763).

After removing all missing and inapplicable responses from the survey variables under investigation, the total sample analyzed in this project is 565. I ran a multinomial logistic regression for the "Housing" variable and a binary logistic regression for the "Health Care" and "Education" variables. For each dependent variable, Model 1 includes only the control variables. To better explore the separate and combined effects of professional support, Model 2 adds only the variable measuring agency support, Model 3 adds only the variable measuring professional support, and Model 4 adds both agency and professional support. Finally, Model 5 adds an interaction between both types of professional support.¹

¹I'm presenting it this way for ease of interpretation. I tested the models putting the main IVs in first and it did not change the results. There is a good argument in the literature that all of these variables are important.

4 RESULTS

4.1 Descriptives

The mean age in this study is 21.44 years of age. Men comprise 60.4%, women 34.0%, and other identities 5.7% of the sample. Respondents who identify as Black are the majority at 71.3% of the sample while 28.7% have another racial identity. In terms of personal support networks, 60% of youth report support from family and adult friends, and 64.8% report support from friends their age. In terms of professional support networks, almost 39% report support from professionals and almost 46% from homeless-serving agencies. When used as a scale variable, the mean amount of agency support is .69 with a standard deviation of 1.04. Responses to the question “Where did you sleep last night?” show 32.4% as sleeping unsheltered, 21.2% as traditional shelter residents, 23.2% as hotel/motel residents and 23.2% of youth in the doubled up, etc. category. The majority of youth, 72.9%, do not have a place to go other than the ER for health care and 69.4% report not being enrolled in school. Additional descriptive statistics for this study are included in Table I.

Table 1 Study Sample Characteristics

Table I					
Study Sample Characteristics, Atlanta Youth Count and Needs Assessment 2015.					
	% (N)				M (SD)
<i>Dependent Variables</i>					
Sleep last night:	Men	Women	Other	Total	
Unsheltered	72.1(132)	19.7(36)	8.2(15)	32.4 (183)	
Hotel/Motel	41.2(54)	53.4(70)	5.3(7)	23.2 (131)	
Traditional Shelter	58.3(70)	37.5(45)	4.2(5)	21.2 (120)	
Doubled up, etc.	64.9(85)	31.3(41)	3.8(5)	23.2 (131)	
Non-ER Physician					
No	63.6(262)	30.8(127)	5.6(23)	72.9 (412)	
Yes	50.3(75)	43.6(65)	6.0(9)	26.4 (149)	
In/Enrolled in School					
	No			69.4 (392)	
	Yes			30.6 (173)	
<i>Independent Variables</i>					
Age ¹					21.44 (2.563)
Gender					
	Men	60.4 (341)			
	Women	34.0 (192)			
	Other	5.7 (32)			
Race					
	Black	71.3 (403)			
	Other	28.7 (162)			
Family Support					
	No	40.0 (226)			
	Yes	60.0 (339)			
Friend Support					
	No	35.2 (199)			
	Yes	64.8 (366)			
Adult Support					
	No	40.0 (226)			
	Yes	60.0 (339)			
<i>Professional Support:</i>					
Agency Ties ²					
	No	54.2 (306)			.6920(1.04374)
	Yes	45.8 (259)			
Professional Ties					
	No	61.2 (346)			
	Yes	38.8 (219)			
Notes. N=565					
¹ Years (Range=15-25)					
² Providers (Range=0-10)					

4.2 Housing

Table II shows the results of regressing each of the predictor variables on the housing variable. Due to low variability in the Race variable and large confidence intervals leading to possible artificial significance, the results for races other than Black have been excluded from this discussion, even though they are significant throughout the Housing models. The full results are available in Table II in the Appendix section of this paper.

Model 1 shows a significant relationship between several control variables and where youth are sleeping. For every one-year increase in age, the odds of sleeping in a shelter decrease by almost 21% (OR .791, 95% CI .717-.871, $p \leq .001$) while the odds of sleeping doubled up decrease by 11.5% (OR .885, 95% CI .807-.970, $p \leq .01$) compared to sleeping unsheltered, holding all other variables constant. For women, the odds of sleeping in a motel decrease by almost 80% (OR .202, 95% CI .119-.342, $p \leq .001$), a traditional shelter almost 57% (OR .431, 95% CI .251-.743, $p \leq .01$), and doubled up 44% (OR .558, 95% CI .327-.953, $p \leq .05$) when compared to men, holding all other variables constant. For youth who report having ties to adults in their support networks, the odds of sleeping in a shelter decrease by 43% (OR .569, 95% CI .334-.971, $p \leq .05$) and the odds of sleeping doubled up decrease by just over 46% (OR .538, 95% CI .321-.903, $p \leq .05$) compared to sleeping unsheltered, holding all other variables constant. Youth with support from family have an almost 52% (OR .482, 95% CI .286-.813, $p \leq .01$) decrease in the odds of sleeping in a hotel/motel compared to sleeping unsheltered, holding all other variables constant.

Model 2 includes the addition of agency support and is statistically significantly related to sleeping in a hotel/motel or a homeless shelter. Specifically, for every one unit increase in agency contact, the odds of sleeping in a hotel/motel are reduced by 53% (OR .471, 95% CI

.325-.683, $p \leq .001$) compared to sleeping unsheltered, holding all other variables constant. For those in shelters, every one unit increase in agency contact increases the odds of sleeping in a shelter compared to sleeping unsheltered by 48.7% (OR 1.487, 95% CI 1.165-1.899, $p \leq .001$), holding all other variables constant.

Model 3 includes the addition of professional support ties and is statistically significantly related to sleeping in a homeless shelter. Specifically, for youth who report having professional support ties, the odds of sleeping in a shelter are reduced by 62% (OR .379, 95% CI .221-.649, $p \leq .001$) compared to sleeping unsheltered, holding all other variables constant.

Model 4 includes both measures of professional support ties. For every one unit increase in agency contact, the odds of sleeping in a hotel/motel are reduced by almost 53% (OR .473, 95% CI .327-.684, $p \leq .001$) compared to sleeping unsheltered, holding all other variables constant. Both measures of professional support are statistically significantly related to sleeping in a shelter in this model. Specifically, for youth who report having professional support ties, the odds of sleeping in a shelter are reduced by almost 62% (OR .384, 95% CI .222-.664, $p \leq .001$) while every one unit increase in agency contact increases the odds by 46% (OR 1.459, 95% CI 1.150-1.852, $p \leq .01$) compared to sleeping unsheltered, holding all other variables constant.

Model 5 includes an interaction term but it does not reach statistical significance for any of the sleeping locations, indicating that the effect of having professional support ties does not impact housing at different values of agency contact. This model has the highest Nagelkerke R^2 at .278.

Table 2 Housing

Table II										
Multinomial logistic regression for the housing of homeless youth, Atlanta Youth Count 2015.										
	Model 1		Model 2		Model 3		Model 4		Model 5	
Dependent variable: Sleeping location	<i>e^B</i>	95% CI	<i>e^B</i>	95% CI	<i>e^B</i>	95% CI	<i>e^B</i>	95% CI	<i>e^B</i>	95% CI
Hotel/Motel										
Independent variables:										
Age	.915	.831, 1.007	.902*	.819, .994	.917	.833, 1.009	.904*	.821, .996	.904*	.821, .996
Women	.202***	.119, .342	.198***	.116, .338	.203***	.120, .344	.200***	.117, .341	.200***	.117, .341
Other gender	.714	.265, 1.919	.622	.226, 1.713	.727	.270, 1.957	.638	.232, 1.757	.640	.232, 1.767
Other race	2.181**	1.233, 3.858	2.134**	1.195, 3.813	2.162**	1.222, 3.824	2.124*	1.189, 3.793	2.090*	1.168, 3.738
Family support	.482**	.286, .813	.511*	.301, .870	.488**	.289, .824	.520*	.305, .886	.521*	.306, .889
Friend support	1.079	.627, 1.857	1.095	.631, 1.901	1.105	.637, 1.916	1.134	.647, 1.987	1.129	.645, 1.979
Other adult support	.635	.374, 1.007	.630	.368, 1.079	.645	.377, 1.104	.650	.376, 1.121	.654	.379, 1.128
Agency ties			.471***	.325, .683			.473***	.327, .684	.476**	.320, .705
Professional ties					.888	.519, 1.519	.824	.476, 1.427	.684	.353, 1.323
Agency ties * Professional ties									1.420	.655, 3.077
Traditional Shelter										
Independent variables:										
Age	.791***	.717, .871	.797***	.721, .882	.798***	.723, .880	.805***	.727, .891	.805***	.727, .891
Women	.431**	.251, .743	.401***	.231, .697	.451**	.260, .782	.421**	.240, .737	.419**	.239, .735
Other gender	1.714	.581, 5.058	1.721	.570, 5.191	1.843	.616, 5.511	1.860	.610, 5.676	1.863	.610, 5.693
Other race	.782	.470, 1.304	.827	.492, 1.391	.800	.476, 1.344	.850	.501, 1.443	.852	.501, 1.451
Family support	.629	.374, 1.058	.617	.364, 1.048	.673	.396, 1.146	.661	.385, 1.135	.656	.382, 1.128
Friend support	1.157	.670, 1.997	1.176	.675, 2.048	1.419	.804, 2.504	1.446	.811, 2.578	1.426	.798, 2.548
Other adult support	.569*	.334, .971	.570*	.330, .985	.704	.404, 1.226	.700	.397, 1.234	.701	.397, 1.238
Agency ties			1.487***	1.165, 1.899			1.459**	1.150, 1.852	1.450	.969, 2.171
Professional ties					.379***	.221, .649	.384***	.222, .664	.410*	.198, .848
Agency ties * Professional ties									.988	.602, 1.622
Doubled up, etc.										
Independent variables:										
Age	.885**	.807, .970	.881**	.803, .966	.886**	.808, .972	.882**	.804, .967	.882**	.803, .967
Women	.558*	.327, .953	.559*	.327, .954	.561*	.329, .959	.563*	.329, .961	.562*	.328, .960
Other gender	1.839	.631, 5.356	1.803	.619, 5.255	1.878	.644, 5.475	1.849	.634, 5.393	1.834	.627, 5.370
Other race	1.513	.898, 2.549	1.491	.885, 2.514	1.506	.894, 2.538	1.488	.883, 2.508	1.438	.851, 2.429
Family support	.745	.454, 1.223	.759	.462, 1.246	.759	.462, 1.248	.774	.470, 1.274	.778	.472, 1.282
Friend support	1.075	.635, 1.821	1.080	.638, 1.828	1.113	.651, 1.901	1.121	.656, 1.916	1.123	.657, 1.921
Other adult support	.538*	.321, .903	.530*	.315, .890	.556*	.328, .940	.547	.323, .925	.552*	.326, .934
Agency ties			.867	.656, 1.146			.865	.657, 1.139	.604	.362, 1.009
Professional ties					.828	.492, 1.394	.817	.484, 1.381	.586	.305, 1.128
Agency ties * Professional ties									1.675	.922, 3.043
Nagelkerke R ²	.176		.254		.200		.273		.278	
Notes. N=565										
Dependent variable: Where youth slept the night before with "unsheltered" as the reference category.										
Control reference categories: Men, Black										
*p<.05; **p<.01; ***p<.001										

4.3 Health Care

Table III shows the results of regressing each of the predictor variables on the health care variable. The full results are available in Table III in the Appendix section of this paper.

Model 1 shows a significant relationship between several control variables and whether youth have a place to go other than the ER when they need health care. The odds of women having an alternative to the ER are 46% (OR .538, 95% CI .360-.806, $p \leq .01$) less than for men, holding all other variables constant. For those who report having personal support from family, the odds of having an alternative to the ER are reduced by 36% (OR .638, 95% CI .416-.978, $p \leq .05$) and for those who report having personal support from other adults, the odds of having an alternative to the ER are reduced by almost 48% (OR .524, 95% CI .337-.814, $p \leq .01$), holding all other variables constant.

In Model 2, the addition of support from homeless serving agencies was in the predicted direction but did not reach statistical significance.

Model 3 includes the addition of professional support and is statistically significantly related to having a place to go other than the ER for health care services. However, it is not in the predicted direction. For those who report having professional support ties, the odds of having an alternative to the ER are reduced by 62% (OR .373, 95% CI .245-.569, $p \leq .001$), holding all other variables constant.

Model 4 includes both measures of professional support ties and only non-agency professional support reaches statistical significance, but not in the predicted direction. For those who report having professional support ties, the odds of having an alternative to the ER are reduced by 62% (OR .377, 95% CI .248-.575, $p \leq .001$), holding all other variables constant.

Model 5 includes an interaction term but it did not reach statistical significance for the health care variable, indicating that the effect of having professional support ties does not impact having an alternative to the ER at different values of agency contact. Agency contact reaches statistical significance in this model, and in the predicted direction. For every one unit increase in agency contact, the odds of having a place to go for health care other than the ER are increased by almost 39% (OR 1.387, 95% CI 1.019-1.888, $p \leq .05$), holding all other variables constant. This model has the highest Nagelkerke R^2 at .129.

Table 3 Health Care

Table III										
Binary logistic regression for the health care of homeless youth, Atlanta Youth Count 2015.										
	Model 1		Model 2		Model 3		Model 4		Model 5	
	e^B	95% CI	e^B	95% CI	e^B	95% CI	e^B	95% CI	e^B	95% CI
Independent variables:										
Age	.990	.917, 1.068	.996	.923, 1.076	1.002	.927, 1.083	1.009	.932, 1.091	1.009	.933, 1.092
Women	.538**	.360, .806	.522**	.347, .783	.543**	.359, .820	.528**	.349, .800	.528**	.349, .801
Other gender	.685	.298, 1.577	.678	.294, 1.565	.711	.304, 1.663	.706	.301, 1.654	.710	.301, 1.675
Other race	.957	.623, 1.470	.980	.637, 1.508	.987	.637, 1.531	1.012	.651, 1.573	1.058	.676, 1.654
Family support	.638*	.416, .978	.630*	.411, .967	.703	.453, 1.093	.694	.446, 1.079	.681	.436, 1.062
Friend support	1.045	.673, 1.620	1.052	.677, 1.633	1.288	.812, 2.044	1.290	.813, 2.048	1.270	.799, 2.019
Other adult support	.524**	.337, .814	.525**	.337, .816	.632*	.400, 1.001	.633	.399, 1.002	.631*	.397, 1.001
Agency ties			1.153	.968, 1.374			1.142	.955, 1.366	1.387*	1.019, 1.888
Professional ties					.373***	.245, .569	.377***	.248, .575	.479**	.285, .805
Agency ties * Professional ties									.736	.496, 1.093
Nagelkerke R^2	.066		.073		.119		.124		.129	
Notes. N=565										
Dependent variable: Whether or not homeless youth have a place to go other than the emergency room for health care services.										
Reference categories: Men, Black										
* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$										

4.4 Education

Table IV shows the results of regressing each of the predictor variables on the education variable. The full results are available in Table IV in the Appendix section of this paper.

Model 1 shows a significant relationship between age and whether or not youth are enrolled in school. For every one-year increase in age, the odds of being enrolled in school are reduced by 17% (OR .830, 95% CI .771-.894, $p \leq .001$), holding all other variables constant. The addition of having contact with homeless serving agencies did not reach statistical significance in any of the education models. However, in Models 3 and 4, for youth who report having professional support ties, the odds of being enrolled in school are reduced by 49% (OR .508,

95% CI .339-.762, $p \leq .001$), holding all other variables constant. Model 5 includes an interaction term but it did not reach statistical significance for the education variable, indicating that the effect of having professional support ties does not impact being in school at different values of agency contact. This model has the highest Nagelkerke R^2 at .112.

Table 4 Education

Table IV										
Binary logistic regression for the education of homeless youth, Atlanta Youth Count and Needs Assessment 2015.										
	Model 1		Model 2		Model 3		Model 4		Model 5	
	e^B	95% CI	e^B	95% CI	e^B	95% CI	e^B	95% CI	e^B	95% CI
Independent variables:										
Age	.830***	.771, .894	.831***	.771, .895	.834***	.774, .898	.834***	.774, .899	.835***	.774, .900
Women	.696	.471, 1.028	.691	.467, 1.022	.713	.480, 1.059	.710	.478, 1.056	.709	.477, 1.055
Other gender	.622	.287, 1.351	.622	.286, 1.349	.646	.296, 1.410	.645	.295, 1.409	.647	.295, 1.417
Other race	.930	.618, 1.401	.936	.621, 1.412	.956	.631, 1.450	.961	.633, 1.458	1.000	.656, 1.525
Family support	.803	.536, 1.203	.801	.535, 1.200	.846	.561, 1.276	.844	.560, 1.274	.833	.551, 1.259
Friend support	1.172	.773, 1.777	1.174	.774, 1.780	1.348	.876, 2.074	1.348	.876, 2.074	1.326	.860, 2.044
Other adult support	.860	.572, 1.293	.861	.572, 1.295	.995	.651, 1.519	.995	.652, 1.519	.993	.650, 1.519
Agency ties			1.037	.873, 1.232			1.023	.857, 1.222	1.270	.932, 1.731
Professional ties					.508***	.339, .762	.509***	.340, .764	.659	.398, 1.090
Agency ties * Professional ties									.713	.480, 1.061
Nagelkerke R^2	.080		.080		.105		.106		.112	
Notes. N=565										
Dependent variable: Whether or not homeless youth are enrolled in school.										
Reference categories: Men, Black										
*** $p \leq .001$										

5 DISCUSSION

5.1 Housing

As outlined in Hypothesis 1, I predicted that youth with more ties to professional supports are less likely to report sleeping in an unsheltered location, and this hypothesis was partially supported. For each increase in contact with a homeless-serving agency, youth are more likely to sleep in a shelter than unsheltered. The majority of homeless service providers in Atlanta are centrally located downtown where there is more unsheltered homelessness, and according to these data, they are helping youth they come in contact with move into a shelter where they are more likely to be exposed to other services. However, each increase in contact with a homeless-serving agency reduces the likelihood of youth sleeping in one sheltered location, hotels/motels. Because agency contact is related to a 53% decreased likelihood of

sleeping in a motel versus unsheltered, it is possible that agencies are leading youth away from motels or at least not providing vouchers or assistance procuring them. It is also possible that homeless-serving agencies do not deliver outreach services to the non-central locations where most of the motels are located. This is problematic because hotels and motels can provide a valuable alternative to sleeping unsheltered, especially for youth who have a car. Despite the well-documented downsides to residing in budget motels, they can provide amenities and access to support networks that might not be available on the streets (Lewinson 2011).

Youth who report having at least one professional tie in their support network have a reduced likelihood of sleeping in a shelter compared to unsheltered. This is an unexpected finding which does not support H1. Support from professionals is not statistically significantly related to any other sleeping locations and more research is needed to understand the types of professionals that homeless youth have access to and what their role is in helping youth avoid sleeping on the street.

There are several control variables that are statistically significantly related to where youth sleep. As youth increase in age, they are less likely to sleep in a shelter or doubled up compared to unsheltered. This is consistent with previous studies that show that younger youth have larger support networks which can provide an alternative to sleeping in a homeless shelter or on the street (Low et al. 2017; Wright et al. 2017). Because many youth shelters only accept youth ages 21 and under, it is important that homeless serving agencies locate these vulnerable older youth and place them in facilities appropriate for their age and needs. Additionally, women are more likely to sleep unsheltered than in any of the other sleeping categories.² There are fewer homeless women in general than men and there could be a bias where they are overlooked by

² I ran the model four different ways with a different reference category each time and the results did not change.

providers and/or perceived to have more options when homeless. It is also possible that women in shelters were missed during data collection, especially if they reside in a shelter that is closed to men and other visitors due to inhabitants having prior experience with domestic violence. More research should look at the experiences of homeless young women, especially those who are not mothers or fleeing domestic violence and might not have access to specialty shelters. It is also noteworthy that having an adult in one's personal support network decreases the likelihood of sleeping doubled up or in a shelter compared to unsheltered. We know that youth often report having "fictive kinship" networks including people they consider part of their "street family" (Wright et al. 2016). It is possible that the adults that youth can depend on most are similarly situated others rather than adults who can facilitate an exit to homelessness.

Finally, the housing models have the highest Nagelkerke R^2 out of all the models in this research. Because the primary function of housing providers is to connect the homeless to housing, it makes sense that professional support ties have a greater impact on housing systems versus health care and education.

5.2 Health Care

With regard to the health care findings, I predicted in Hypothesis 2 that youth with more ties to professional supports are more likely to have a place to go other than the emergency room when in need of health care, and this hypothesis was partially supported. In the final model, for each increase in contact with a homeless-serving agency, youth are more likely to have an alternative to the ER when in need of health care services. However, in all of the models that measure the relationship between having a professional in one's support network and having an alternative to the ER, the relationship was statistically significantly related, but in the unexpected direction. Professional support ties decrease the likelihood that youth have an alternative to the

ER when in need of health care services. Similar to the relationship between professional support and sleeping location, this is a surprising finding and more research is needed to understand the types of professionals that homeless youth have access to and what their role is in providing youth with health care practitioners outside of the costly system of emergency care. Almost 73% of this sample report not having a place to go other than the ER for health services. It is possible that due to some youth having easy access to Grady Hospital, a large non-profit hospital in downtown Atlanta that serves low-income residents, they are not seeking out alternatives, which can be costly and require assessments and waiting lists for non-emergent care (Narendorf 2017). The low Nagelkerke R^2 for these models could also reflect that young people are generally more healthy than older people regardless of housing status.

There are several control variables that are statistically significantly related to having an alternative to the ER for health care services. Women are less likely to have an alternative to the ER than men. In addition, youth who report having family and adults in their personal support network have a decreased likelihood of having an alternative to the ER for health care services. It is possible youth seek advice and assistance from their personal support networks when their health is ailing (Kennedy et al. 2017; Perry and Pescosolido 2015) and are then instructed to visit the emergency room in lieu of an alternative. Directions for future research might look for other patterns to see how youth are using the emergency room compared to the high rates of the adult homeless (Fazel et al. 2014; Mackelprang et al. 2014) and how this varies by gender.

5.3 Education

With regard to the education findings, as outlined in Hypothesis 3, I predicted that youth with more ties to professional supports are more likely to be enrolled in school, and this hypothesis was not supported. Having professional support from a homeless-serving agency is

not significantly related to being in school and youth who report having at least one professional support tie in their network have a reduced likelihood of being in school. Age, a control variable, is statistically significantly related to being in school and each year increase in age reduces the likelihood that youth are enrolled in school. The mean age in this sample is 21 and 69% report not being enrolled in school, which makes sense as the mean age is out of the typical K-12 range associated with school. However, there is a significant strong negative correlation between age and professional support ($r = -.086, p = < .05$). It is possible that youth who are enrolled in K-12 education are more likely to be part of a homeless family and receiving professional support through the McKinney-Vento Homeless Assistance Act (U.S. Department of Education 2016). The AYCNA only includes unaccompanied youth and more research is necessary to determine the most effective aspects of professional support networks for keeping homeless children and youth enrolled in school. For older youth, it is possible that negative interactions with youth dissuade service providers from suggesting that youth go to college or get their GED as they might not be seen as capable. It is also possible that older youth are less achieving due to having more severe issues that necessitate a stronger relationship to professionals/stronger dependency on the service system. More research is needed to know not only whom youth consider to be professionals, but how they are being motivated by them in positive and negative ways.

This study has several limitations. The race variable has low variability and any significant relationships could be a result of overfitting the model. A more racially varied sample might provide insights into how race factors into the types and availability of professional supports for homeless youth. For the housing variable, the survey instrument only asked youth where they slept the previous night and there is no way to know how long they had been sleeping in that location, which could also affect results. The fact that this is a cross-sectional study of

data collected in the summer also limits generalizability and results could vary in winter months. Finally, prior research in mental illness by Pescosolido et al. (1995) and Wright et al. (2006) indicate that the relationships between vulnerable populations and professional support ties might have a curvilinear effect where increases in the size of the case management team lead to better outcomes until teams become too large and positive outcomes start to drop. It is possible that too many professional support ties can pull the person in too many directions and create internal tension (Simmel 1964) and leave one feeling overregulated and unintegrated into society (Durkheim 1951). However, these data are limited because the professional support ties are not necessarily case managers and we do not know how much time the youth spent with each agency tie they encountered, making it impossible to tell where the curvilinear bend is without knowing the quality of the ties. Future research should look at how much is too much engagement for homeless youth to achieve positive outcomes.

Despite the limitations, this study reveals important insights into the broader processes of the role of integration into the service system, and that while professional support ties are important for homeless youth on multiple levels, their relationships are very varied and multifaceted.

6 CONCLUSIONS

The support provided to homeless youth by service providers and other professionals is an important and understudied aspect of a youth's social network. This research shows that particular types of professional support ties can assist youth in finding alternatives to sleeping on the street and other outside locations that increase their vulnerability. They can also help youth find sources of primary care when in need of health services. Despite the integral role that professional supports play in the lives of homeless youth, the fragmentation and heterogeneity of the service system make these relationships complex. There are many social factors that determine whether and how one engages in treatment and outreach services. And while outreach services and drop in centers can meet many tangible needs, such as food, clothing, hygiene products, and transportation assistance, the quality of the professional support ties is likely most important for meeting some of the other substantive needs of homeless youth, including their access to housing and health care, and education systems. Previous research on homeless youth found that the quality of the help and type of setting impacted their substance use, involvement in school, job training, work, and involvement in the street economy (Gwadz et al. 2017).

Future research should explore how youth are participating in the service system as well as the best ways to effectively engage them. This study suggests the need for qualitative research to understand the types of professional ties that youth have in their social network and how these ties positively and negatively impact their homeless experiences. In addition, homeless serving agencies should structure their outreach to ensure that youth who are not centrally located, as well as youth of all ages, races, and gender identities have access to the important services they provide. Finally, more research is necessary to determine the most effective aspects of

professional support networks in keeping younger youth in school and helping older youth enroll in further education.

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