Multidimensional Social Support and the Health of Homeless Individuals

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ABSTRACT *Homeless individuals often suffer from serious health problems. It has been argued that the homeless are socially isolated, with low levels of social support and social functioning, and that this lack of social resources contributes to their ill health. These observations suggest the need to further explore the relationship between social networks, social support, and health among persons who are homeless. The purpose of this study was to examine the association between multidimensional (cognitive/perceived and behavioral/received) social support and health outcomes, including physical health status, mental health status, and recent victimization, among a representative sample of homeless individuals in Toronto, Canada. Multivariate regression analyses were performed on social support and health outcome data from a subsample of 544 homeless adults, recruited from shelters and meal programs through multistage cluster sampling procedures. Results indicated that participants perceived moderately high levels of access to financial, emotional, and instrumental social support in their social networks. These types of perceived social supports were related to better physical and mental health status and lower likelihood of victimization. These findings highlight a need for more services that encourage the integration of homeless individuals into social networks and the building of specific types of social support within networks, in addition to more research into social support and other social contextual factors (e.g., social capital) and their influence on the health of homeless individuals.*

KEYWORDS *Homelessness, Social support, Physical health, Mental health, Victimization, Canada*

INTRODUCTION

Homelessness is a growing problem in numerous urban centers around the world. Homeless individuals frequently suffer from serious health problems, including mental illness, substance abuse, and infectious and chronic diseases.¹ It has been argued that homeless individuals are often socially isolated, with low levels of social

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support and social functioning, and that this lack of social resources contributes to their ill health.²⁻⁵ These observations suggest the need to further explore the relationship between social networks, social support, and health among persons who are homeless in order to develop effective interventions with which to build these social resources related to health.

Social networks are commonly defined as “a set of nodes that are tied by one or more specific types of relations between them.”⁶ Embeddedness in social networks can influence health through processes of social influence and social engagement and the provision of access to social support and other resources.⁷ Social support derived from social networks is hypothesized to affect health in different ways. Social support can buffer the effects of stressful life events that otherwise would negatively affect physical and mental health. Furthermore, social support can create positive affective states, and supportive relationships can provide individuals with access to positive social influence that can encourage healthy behaviors.⁸ Numerous studies have found that social support has protective effects on physical health outcomes, such as cardiovascular disease and mortality, and mental health outcomes, such as depression and anxiety.⁷⁻⁹

Social support is a multidimensional concept that has typically been measured in three ways: (1) measures of social integration through the size of the social network; (2) measures of received support that assess the extent of support received from social network ties (received/behavioral social support); and (3) measures of perceived support that assess an individual’s perceptions of the availability of support from social network ties (perceived/cognitive social support).^{10,11} Received and perceived social support can each consist of different components, such as emotional support (the expression of positive affect and empathetic understanding), financial support (the provision of financial advice or aid), and instrumental support (tangible, material, or behavioral assistance).¹² There is increasing interest in the influence of social support on health outcomes among disadvantaged groups, and there is a modest body of research that has explored the effects of social support on health among people experiencing homelessness. This research has found that social support is associated with lower rates of mental health problems, such as depression and suicidal ideation, fewer physical illness symptoms, decreased substance abuse, and less risky drug and sexual behavior among homeless individuals.^{3,13-20} Other research has found that social support is related to higher levels of health and social service utilization among homeless persons,²¹ and a small body of research has found that social support is negatively related to victimization while homeless.²²⁻²⁴

Nevertheless, few studies have comprehensively examined the effects of perceived *and* received dimensions of emotional, financial, and instrumental social support, on mental health and physical health among homeless individuals. In addition, the relationship between social support and victimization, an indirect health outcome that is prevalent and highly interrelated with physical and mental health among homeless people, has not been well studied.²⁵ Given the multidimensional nature of social support, further comprehensive measurement of social support within the networks of homeless individuals and various health outcomes is needed in order to inform a population-specific understanding of the types of social support that are most beneficial to health among this population. The specific goals of this study were to examine the association between multidimensional social support, including perceived *and* received social supports, and health outcomes measuring physical health status, mental health status, and

recent victimization among a representative sample of homeless individuals in Toronto, Canada.

METHODS

Sampling

This study enrolled homeless individuals in Toronto, Canada. Homelessness was defined as living within the last 7 days in a shelter, public place, vehicle, abandoned building, or someone else's place and not having a place of one's own. A pilot study determined that approximately 90% of homeless individuals in Toronto slept at shelters, whereas 10% did not use shelters but ate at meal programs.²⁶ As a result, 90% of the study participants were recruited at shelters and 10% at meal programs.

Every homeless shelter in Toronto was contacted and permission to enroll participants at 50 (89%) of 56 shelters was obtained. Of these 50 shelters, 20 were for men; 12 were for women; six were for men and women; and 12 were for youths 16 to 25 years old. The number of beds at each shelter ranged from 20 to 406. Recruitment at meal programs took place at 18 sites selected at random from 62 meal programs in Toronto that served homeless people. The meal programs varied in their gender composition with some sites exclusively serving males or females, while others served a varied proportion of males and females. The goal of recruiting at meal programs was to enroll homeless people who did not use shelters, in order to establish a most representative sample including those who were living in public or other people's places. For this reason, individuals at meal programs who had used a shelter within the last 7 days were excluded.

Recruitment took place over 12 consecutive months in 2004 and 2005. Enrollment was stratified to achieve a male-to-female ratio of 2:1 at both shelters and meal programs. The sex ratio at each shelter and meal program was heterogeneous. The number of participants recruited at each site was proportionate to the number of homeless individuals served monthly. Individuals were selected at random from bed lists or meal lines (using a random number generator) and then screened for eligibility.

Since adult members of homeless families differ substantially from single homeless persons,²⁷ all data related to homeless persons accompanied by dependent children were excluded from these analyses. Of 1,679 individuals screened, 489 (29%) were ineligible: 222 (13%) did not meet our definition of homelessness; 61 (4%) were unable to communicate in English; 54 (3%) were homeless shelter users encountered at meal programs; and 51 (3%) were unable to give informed consent. As this study was part of a larger study of homeless people's health care utilization, 101 individuals (6%) were excluded because they did not have an Ontario Health Insurance Plan number, which was required to allow tracking of health care use subsequent to the recruitment interview. Most of these 101 individuals were refugees, refugee claimants, or recent migrants to Ontario. Of 1,190 eligible individuals, 283 declined to participate and 907 (76% of those eligible) were enrolled in the study. A total of 217 youth were also excluded from the analyses, as youth may have different levels of social support and health status than adults, requiring separate analyses. Furthermore, 146 individuals were enrolled into the study prior to the introduction of the social support questions into the survey. This paper thus presents results on a subsample of 544 homeless adults who answered questions on social support. All participants provided written informed consent.

Participants received \$15 for completing the survey. This study was approved by the St. Michael's Hospital Research Ethics Board.

Measures of Multidimensional Social Support

Four items were used to assess each participant's levels of multidimensional social support. Three questions, developed by Lam and Rosenheck²¹ for use in research with homeless populations, concerned perceived social support by measuring perceived access to three types of social support, instrumental, financial, and emotional support, through friends, family, neighbors, service providers, and clergy. For example, the question regarding financial support asked: "Suppose you needed a short-term loan of \$100. Who on this list (e.g., spouse or significant other, adult child, parent, brother or sister, other family member, friend or neighbor, service provider, clergy, other), in the past 3 months, could you have counted on to give you the money (regardless of whether you would have accepted the loan)?"

In order to explore the effects of perceived social support from social network ties on the health outcomes, the variables indicating access to each dimension of social support from family members, friends, and neighbors were summed and then dichotomized, with 1 indicating perceived access to instrumental support, financial support, and/or emotional support through one or more of these types of network ties and 0 indicating no perceived access. The analyses focused on perceived social support from friends, family, and neighbors, to the exclusion of ties with service providers and clergy. We chose to focus on social support derived from informal social networks because a large body of the social support literature has focused on emotional, financial, and/or instrumental supports derived from relationships with friends, family, and neighbors.^{11,28} Embeddedness in informal social relationships has been found to have positive benefits for health through the provision of social support, a sense of meaning, fulfillment of social roles, and processes of informal social control.^{7,10} Both perceived and received forms of social support from informal social network relationships can have greater meaning, significance, and benefit for health and well-being because there is greater reciprocity in the perception and receipt of support than tends to exist through relationships with service providers,²⁹ who may be more obligated to provide support to clients as part of their job. Thus, social support derived from family, friends, and neighbors may be more meaningful to homeless individuals and subsequently may have a greater impact on health.

The fourth social support measure assessed received social support and was measured by a yes/no response to a question asking whether participants were usually accompanied to health care appointments by family or friends. The inclusion in these analyses of this measure as a form of received instrumental social support, similar to the perceived form assessed by one of the questions developed by Lam and Rosenheck,²¹ is exploratory as it has yet to be validated in research with homeless individuals.

Measures of Health Status and Victimization

The SF-12, a well-validated generic measure of health status, was used to generate a physical component subscale score and mental component subscale score.³⁰ These scores are standardized to a mean score of 50 and a standard deviation of 10 in the general US population.²⁹ The other dependent variable explored in this paper concerns victimization. Victimization was measured by a yes/no response to the question "Have you been physically assaulted or beat up in the past 12 months."

Other Characteristics

Various individual characteristics were examined as control variables in the analysis. Sociodemographic characteristics included age, sex, education, marital status, income, and lifetime duration of homelessness in years. Health care utilization was quantified as the number of sources of health care used in the last 12 months, categorized as zero, one to two, or three or more sources.

Alcohol and drug problems in the past month were assessed using the Addiction Severity Index (ASI).^{31,32} Alcohol and drug problems were dichotomized as present or absent based on cutoff scores for each subscale that have been established for homeless populations (ASI alcohol score ≥ 0.17 and ASI drug score ≥ 0.10).^{33,34}

Statistical Analyses

Univariate and multivariate regression analyses were performed to examine the relationship between measures of multidimensional social support and the dependent variables of physical health status, mental health status, and recent victimization. Linear regression was performed on the continuous SF-12 physical and mental health scores. Logistic regression was used for analysis of victimization, which was dichotomized according to whether the individual had experienced any physical assault in the last 12 months. Independent variables were assessed for multicollinearity, and no problems were detected. Only those variables that were significant at the $p < 0.05$ level in the univariate regression analyses were included into the multivariate regression models. For the logistic regression model, the outcome of physical assault consisted of 155 events. Using the ten events per indicator variable rule permits 15 predictors in the multivariate model,³⁵ and the model satisfied this restriction. All data analyses were performed using SPSS version 15.0.

RESULTS

Sample Characteristics

As shown in Table 1, 67% of the sample of homeless adults were male, and 33% were female. The mean age of the sample was approximately 42 years, and 62% had never been married. Forty-seven percent of the sample had some high school education or less, and almost 50% of participants reported income of less than \$500 in the last 30 days. The average lifetime duration of homelessness among the sample was approximately 5 years. Eighty-nine percent of the sample was currently living in a shelter, and 11% lived in a public place, vehicle, abandoned building, or someone else's place.

Concerning health status, participants appeared to be in poor health, with 67% reporting having one or more chronic health conditions. The mean SF-12 physical health score was 44.6, and the mean mental health score was 40.9, indicating that physical and mental health status was poorer among the sample than in the general population. According to the Addiction Severity Index cutoff scores, 36% of the sample had an alcohol problem in the past month, and 46% had a drug problem in the past month. Almost 30% of the sample had been physically assaulted in the last 12 months. Not surprisingly, 50% of the sample had accessed one to two health care sources, and 42% had accessed three or more health care services in the last 12 months.

TABLE 1 Sample characteristics (*N* = 544)

Sociodemographics	
Age—mean (SD)	42.1 (9.6)
Gender	
Male	363 (67%)
Female	181 (33%)
Marital status	
Single/never married	336 (62%)
Divorced/separated/widowed	183 (34%)
Married/partnered/common law	25 (4%)
Education	
Some high school or less	253 (47%)
High school or equivalent	121 (22%)
Vocational training/college or above	169 (31%)
Income from all sources in last 30 days	
<\$500	261 (49%)
\$500 to \$999	153 (29%)
≥\$1,000	117 (22%)
History of homelessness	
Lifetime duration of homelessness in years—mean (SD)	5.0 (6.4)
Currently living at a homeless shelter	486 (89%)
Currently living in a public place, vehicle, abandoned building, or someone else's place	58 (11%)
Health and healthcare	
SF-12 physical health score—mean (SD)	44.6 (11.5)
SF-12 mental health score—mean (SD)	40.9 (13.1)
Health care service utilization in last 12 months	
No health care services used	42 (8%)
1 to 2 health care services used	272 (50%)
3 or more health care services used	228 (42%)
Has a chronic health condition	363 (67%)
Alcohol problem in the past month	194 (36%)
Drug problem in the past month	249 (46%)
Physically assaulted in last 12 months	155 (29%)
Multidimensional social support	
Perceived access to financial support (short-term loan) through social network	338 (62%)
Perceived access to instrumental support (a ride) through social network	275 (51%)
Perceived access to emotional support (help with suicidal or depressive feelings) through social network	321 (60%)
Accompanied to health care by family or a friend	39 (7%)

Sixty-two percent of participants reported perceived access to financial support, in the form of a small loan, through their social network ties. Fifty-one percent perceived access to instrumental support, in the form of a ride, and 60% perceived access to emotional support from their social network, in the form of help with an emotional crisis. However, only 7% of participants reported being accompanied to health care appointments by informal social network ties. The rates of perceived social support for all four dimensions did not differ significantly by sex. The rates of perceived social support reported among the sample are moderately high, thus

confirming that perceived social support is present in the lives of marginalized populations such as homeless individuals.^{19,20}

Social Support and Physical Health Status

Table 2 illustrates the results of the univariate and multivariate regressions of SF-12 physical health score on social support and sociodemographic variables. Of the perceived social support variables, only the financial support variable was significantly related to the SF-12 physical health score in the univariate analyses. Several sociodemographic variables were also found to be independently related to the SF-12 physical health score. As a result, the financial support variable as well as the gender, age, divorced or widowed, health care service utilization, and chronic health condition variables were entered into the multivariate regression model. The financial support variable remained significant in the multivariate model ($p < 0.05$), indicating that perceived access to financial support from network ties was related to better physical health status. Furthermore, having a chronic health condition ($p < 0.001$), having used one to two health care services in the last 12 months ($p < 0.01$), use of three or more health care services in the last 12 months ($p < 0.001$), and older age ($p < 0.01$) were predictive of poorer physical health status.

Social Support and Mental Health Status

The results of the univariate and multivariate regression of SF-12 mental health score on social support and sociodemographic variables are presented in Table 2. In these analyses, perceived emotional support from social network ties was positively associated with the SF-12 mental health score. Interestingly, having been accompanied to health care appointments by social network members was negatively related to SF-12 mental health score in the univariate regression analyses. These two social support variables were entered into the multivariate regression model, along with several independently related sociodemographic variables, including gender, age, living in a shelter, health care service utilization, and alcohol and drug problems in the last month. The multivariate model indicates that perceived access to emotional support in the form of help with an emotional crisis from social network members was positively related to the SF-12 mental health score ($p < 0.001$). This shows that perceived access to emotional support within networks was associated with better mental health status. Also, in this model, being female ($p < 0.001$), having used one to two ($p < 0.05$) or three or more ($p < 0.001$) health care services in the last 12 months, and having alcohol and drug problems in the last month ($p < 0.01$) were predictive of poorer mental health status. Furthermore, age and currently living in a homeless shelter were positively associated with SF-12 mental health score ($p < 0.01$). The accompaniment to health care appointments by a social network member variable did not retain significance in the multivariate regression model.

Social Support and Victimization

Table 3 presents the results of the univariate and multivariate logistic regression of victimization in the last 12 months on social support and sociodemographic variables. In the univariate analyses, instrumental and emotional supports from social network members were both independently predictive of no victimization in the last 12 months. Similar to the mental health status univariate analyses, having accompaniment to health care appointments was independently predictive of having been victimized in the last 12 months. These social support variables and those sociodemographic variables that were independently related to physical assault,

TABLE 2 Univariate and multivariate linear regression coefficients (B) and confidence intervals for SF-12 physical and mental health scores in relation to sociodemographic and social support variables

Independent variable	SF-12 physical health score		SF-12 mental health score	
	Univariate B (95% CI)	Multivariate B (95% CI)	Univariate B (95% CI)	Multivariate B (95% CI)
Female	-2.3 (-4.4, -0.3)*	-1.8 (-3.6, 0.1)	-5.1 (-7.4, -2.8)***	-4.7 (-7.0, -2.4)***
Age (in years)	-0.2 (-0.3, -0.1)***	-0.1 (-2.4, -0.1)**	0.2 (0.1, 0.3)***	0.1 (0.1, 0.2)*
Marital status (ref. category = single)				
Divorced/widowed (1)	-3.5 (-5.6, -1.4)***	-1.3 (-3.2, 0.7)	1.7 (-0.6, 4.1)	
Married/partnered (1)	-1.6 (-5.5, 2.2)		-1.8 (-6.2, 2.5)	
Education (ref. category = some high school or less)				
High school or equivalent (1)	1.8 (-0.6, 4.1)		-0.7 (-3.4, 1.9)	
Vocational training, college or above (1)	-1.1 (-3.2, 1.0)		-1.3 (-3.7, 1.1)	
Currently living at a homeless shelter	2.7 (-0.5, 5.8)		4.6 (1.0, 8.2)*	4.4 (1.0, 7.8)**
Health care service utilization in last 12 months (ref. category = no health care used)				
1 to 2 health care services used (1)	3.1 (1.8, 5.1)**	-6.1 (-9.5, -2.9)***	2.3 (0.1, 4.5)*	-4.3 (-8.3, -0.3)*
3 or more health care services used (1)	-6.4 (-8.3, -4.5)***	-10.3 (-13.7, -6.9)***	-4.4 (-6.6, -2.2)***	-7.2 (-11.2, -3.1)***
Alcohol problem in last month	0.5 (-1.5, 2.5)		-2.0 (-4.8, -0.2)*	-2.5 (-4.8, -0.3)*
Drug problem in last month	0.8 (-1.1, 2.8)		-4.8 (-7.0, -2.7)***	-3.1 (-5.2, -1.0)**
Chronic health condition	-10.0 (-11.7, -8.3)***	-7.7 (-9.6, -5.8)***	-2.1 (-4.5, 0.2)	
Lifetime duration of homelessness in years (continuous)	-0.1 (-0.2, 0.1)		0.1 (-0.1, 0.3)	
Perceived access to financial support	2.4 (0.4, 4.4)**	1.9 (0.1, 3.6)*	1.9 (-0.3, 4.2)	
Perceived access to instrumental support	1.4 (-0.5, 3.4)		1.2 (-1., 3.4)	
Perceived access to emotional support	-0.3 (-2.3, 1.7)		3.9 (1.7, 6.1)***	4.2 (2.1, 6.4)***
Accompanied to health care by family/friend	-2.9 (-6.3, 0.5)		-5.6 (-9.6, -1.7)**	-3.6 (-7.7, 0.5)
R ²		0.255		0.147

p*<0.05; *p*<0.01; ****p*<0.001

TABLE 3 Univariate and multivariate logistic regression odds ratios (OR) and confidence intervals for physical assault in the last 12 months outcome in relation to sociodemographic and social support variables

Independent variable	Univariate OR (95% CI)	Multivariate OR (95% CI)
Female	1.4 (0.9, 2.2)*	1.2 (0.8, 1.9)
Age (in years)	0.9 (0.9, 1.0)***	0.9 (0.9, 1.0)***
Marital status (reference category: single)		
Divorced/widowed	0.9 (0.6, 1.4)	
Married/partnered	0.8 (0.4, 1.8)	
Education (reference category: some high school or less)		
High school or equivalent	1.3 (0.8, 2.0)	
Vocational training, college or above	1.2 (0.8, 1.7)	
Health care access in last 12 months (ref. category = no health care accessed)		
1 health care source accessed (1)	0.9 (0.6, 1.2)	
2 or more healthcare sources accessed (1)	1.6 (1.2, 2.4)**	1.2 (0.8, 1.9)
Currently living at a homeless shelter	1.1 (0.6, 2.1)	
Alcohol problem in last month	1.5 (1.0, 2.2)**	1.5 (0.9, 2.3)
Drug problem in the last month	1.6 (1.1, 2.3)***	1.2 (0.8, 1.8)
Chronic health condition	1.3 (0.8, 1.9)	
Lifetime duration of homelessness in years (continuous)	1.0 (0.9, 1.0)	
SF-12 physical health score	0.9 (0.9, 1.0)*	0.9 (0.9, 1.0)*
SF-12 mental health score	0.9 (0.9, 1.0)***	0.9 (0.9, 1.0)**
Perceived access to financial support	0.8 (0.6, 1.2)	
Perceived access to instrumental support	0.6 (0.4, 0.8)**	0.6 (0.4, 0.9)*
Perceived access to emotional support	0.6 (0.4, 0.9)*	0.8 (0.5, 1.2)
Accompanied to health care by family/friend	2.1 (1.1, 4.2)**	1.6 (0.8, 3.2)
Nagelkerke R ²		0.136

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

including gender, age, health care service utilization, alcohol and drug problems, and SF-12 physical and mental health scores, were entered into the multivariate logistic regression model. The multivariate model results illustrate that participants who perceived having access to instrumental support, in the form of assistance with a ride by social network members, were less likely to have been physically assaulted in the last 12 months (OR=0.6; CI 95%=0.4, 0.9). The measure of received social support did not retain significance in the multivariate regression model. Older participants and those with higher SF-12 physical and mental health scores were less likely to have been physically assaulted in the last 12 months.

DISCUSSION

These analyses suggest that perceived access to specific types of social support derived from social networks of friends, family, and/or neighbors can have a protective influence on multiple health outcomes among homeless individuals. Specifically, perceived financial support was related to better physical health status; perceived emotional support was related to better mental health status, and perceived instrumental support was associated with lower likelihood of victim-

ization. These findings suggest potentially contextual effects of social support among homeless individuals, in the sense that different types of social support (e.g., instrumental vs. emotional) were related to different health outcomes. These results generally confirm findings of previous research studies that have explored the influence of elements of social support on the health of homeless individuals. They corroborate findings by La Gory et al.,³ who found that emotional support from close friends reduced health problems and depressive symptoms among a sample of homeless individuals. The findings regarding victimization support those of two other studies^{22,23} that have shown that social support is related to a reduced likelihood of victimization among homeless individuals.

In addition to the analyses presented here, analyses were performed with modified perceived social support variables (emotional, financial, and instrumental) which included perceived supports from family, friends, neighbors, as well as service providers and clergy. Interestingly, in these analyses, these versions of the perceived social support variables were not significantly related to the outcomes. Thus, the findings presented here, regarding the effects of perceived social support derived from social networks comprised of family, friends, and neighbors (and not including supports from service providers and clergy), confirm the findings of other studies which indicate that it is supports from informal social networks that can be more meaningful for health outcomes.³⁰

In contrast, received social support, specifically in the form of accompaniment to health care appointments by family or friends, was uncommon among these homeless individuals and had no effect on health outcomes. This finding is not entirely surprising considering that there is evidence among the general population that perceived social support is even more important and relevant to health than received social support.^{36,37} The presence of low amounts of received social support among homeless populations could be a negative consequence of a high demand for support that may be placed on the friends and family of homeless individuals given their marginalized status. However, the measure of received social support used in this study was exploratory and does not consider negative social demands on homeless individuals' social networks or account for participants who may have received types of social support other than health care appointment accompaniment. Furthermore, the need for accompaniment to health care appointments may be reflective of severe illness or disability among the sample, as opposed to the receipt of instrumental social support. These limitations point to the need for further research that explores the impact of received social support on the health of homeless individuals.

Other limitations of this study should be considered when interpreting the results. Homeless families and homeless persons who do not use shelters or meal programs were not included; these subgroups of homeless people may have different perceptions of availability of social support in their social networks and with different subsequent effects on health. The questions on perceived financial, emotional, and instrumental support were added to the questionnaire later on in the study, and thus data on these questions were only collected from a subset of the study participants. We did note some slight differences between these groups; participants who were asked about perceived social support were slightly younger and more likely to be female than those for whom we do not have data on social support.

A time discrepancy in data collection affects the victimization regression model, in that the perceived social support measures capture perceptions of social support

in the last 3 months, while the victimization outcome relates to victimization experienced in the last 12 months. Nevertheless, perceived social support can be viewed as a cognitive resource that accrues over time, thus possibly diminishing the likelihood that perceptions of social support among the sample would be different in the last 3 months than over the course of a year. The cross-sectional nature of the data collected limits the ability to draw causal inference from the relationships that were observed. More longitudinal research that explores the influence of social relationships on the health of homeless populations is needed in order to factor in whether a high demand for social support among these marginalized individuals may erode their relationships and subsequently lead to poorer mental and physical health and victimization over time.

With its focus on social support, these analyses explore the effects of only one of many complex elements of social relationships on health. A growing body of research is examining the effects of social capital on the health of marginalized populations, including individuals experiencing homelessness. Social capital is a complex concept that goes beyond measures of individual resources of social support and social integration in its consideration of individual- *and* group-level social resources.³⁸ Social capital is conceptualized as a stock of resources and networks, such as personal and community networks, social support, sense of belonging, civic engagement, norms of reciprocity and trust, that facilitate actions and provide returns in the form of individual- and/or group-level benefits.^{39–43} Interesting findings have emerged with respect to the specific composition of the social networks from which homeless populations draw their social capital. Two studies with homeless populations have noted positive health effects of elements of social capital derived specifically from relationships with nonmarginalized individuals.^{15,44} Future research in this area should explore how composition, access, *and* mobilization of social networks and related social capital affect housing status improvement and other health-related outcomes among homeless individuals over time.

Overall, the findings of this study suggest that homeless individuals perceive moderately high levels of access to social support within their informal social networks and that this is an important resource that may lead to improved health among this population. The results illustrate specific types of social support that should be harnessed and built within the social networks of individuals experiencing homelessness and thus highlight a need for more services that encourage the integration of homeless individuals into social networks and the building of these types of social supports within networks.

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