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Social Networks of Homeless Youth in Emerging Adulthood

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Abstract

Little is known about the social networks of homeless youth in emerging adulthood despite the importance of this information for interventions to reduce health risks. This study examined the composition of social networks, and the risks and supports present within them, in a random sample of 349 homeless youth (33.4% female, 23.9% African American, 17.7% Hispanic) between the ages of 18 and 24. Social network members who were met on the street were among the most likely to be perceived as engaging in risky sex, as well as to engage in substance use with the youth. Youth were more likely to count on relatives and sex partners for support compared to other network members, but they also were more likely to use substances with sex partners and perceived them as engaging in risky sex. Interventions may need to recognize the importance of intimate relationships during the developmental stage of emerging adulthood by enhancing supportive bonds and reducing substance use and risky sex in these relationships.

Keywords

homeless; personal networks; emerging adulthood

Youth who experience homelessness and who are living on their own are among the most marginalized individuals in the United States. These youth face multiple risks to their health, including substance use and sexual behaviors that may expose them to HIV and other sexually transmitted infections (Fernandes 2007, Kral et al. 1997, Rice et al. 2005, Wenzel et al. 2010). Homeless youth have received increasing attention in the scientific literature. Studies involving homeless youth, however, have rarely differentiated those between the ages of 18 and 24 from their younger counterparts (Halcon and Lifson 2004, McMorris et al. 2002, Thrane et al. 2006).

Homeless youth between the ages of 18 and 24 are of special interest within the larger population of homeless youth, both because they comprise the majority who are living on their own (Tucker 2007) and because of the unique features of this developmental period. Although definitions of developmental stages vary (Committee on the Science of Adolescence 2011, Naranbhai et al. 2011), a growing body of research describes the ages spanning 18 to 24 as comprising a distinct developmental stage termed “emerging adulthood” that is neither adolescence nor young adulthood (Arnett 2001, 2004, Committee on the Science of Adolescence 2011). Emerging adulthood is a period characterized by numerous life changes such as leaving adolescent support networks, obtaining employment, and deepening relationships with intimate partners (Arnett 2001, 2004). Emerging adults are

typically assuming greater responsibility for themselves, while still maintaining family connections to help navigate this transition (Arnett 2001). It is also a period of instability and risk, with behaviors such as unprotected sex and substance use reaching their peak (Arnett 2001, Bachran et al. 1996).

For young people who are experiencing homelessness, the period of emerging adulthood is an especially precarious developmental stage, because these individuals may not have sufficient resources to navigate successfully the life challenges associated with emerging adulthood (Hagan and McCarthy 2005, Wenzel et al. 2006). Homeless youth in emerging adulthood face the stress of poverty, residential instability, potentially risky peer associations, disaffiliation from families, and dangers due to their environment (Braveman and Gruskin 2003, Osgood et al. 2005). Homelessness may indeed hinder the process of emerging adulthood (Hagan and McCarthy 2005). Homeless emerging adults also may have experienced, upon turning age 18, the cessation of benefits and support associated with the foster care system (Hagan and McCarthy 2005). Despite the specific challenges of homeless youth in the stage of emerging adulthood, there is a dearth of research specifically focused on this population. A closer examination of homeless emerging adults, particularly the social context of their lives, is the focus of the current study.

Social Networks and Risk Behavior

Ecological theories (Bronfenbrenner 1979, Sallis et al. 2006, Stokols 1992) highlight the importance of understanding individuals' behaviors and health as a function of their social environment, including their social networks. Social networks are groups in which members may influence each other's behaviors through social comparison, social sanctions and rewards, exchange of information, and socialization of new members (Fisher 1988, Latkin et al. 1995). Networks represent potentially diverse groups of people who may provide tangible or intangible resources to the individual, but may also encourage engagement in unhealthy or risky behavior (Ennett et al. 1999, Johnson et al. 2005, Latkin et al. 2003, Rice et al. 2008, Tucker et al. 2009, Wenzel et al. 2009).

Studies of homeless youth in general (i.e., without specific regard for emerging adults) have found that risk behaviors such as substance use and risky sex are more likely among those who have networks made up of people who are engaging in these risk behaviors (Rice et al. 2008, Tyler et al. 2000a, Tyler et al. 2000b, Wenzel et al. 2010). The street settings frequented by homeless youth may therefore expose them to risk through individuals who engage in deviant behaviors (Miethe and Meier 1990, Wenzel et al. 2000), a perspective that tempers a commonly held notion that youth on the street look after and support each other. Conversely, homeless youth are less likely to engage in risk behaviors when they maintain ties with supportive family members and school mates (Rice et al. 2007). There is some evidence from studies of homeless youth that risks and support from networks differ by gender (Halcon and Lifson 2004, Johnson et al. 2005, Thrane et al. 2006) and sexual orientation (Johnson et al. 2005, Rice et al. 2008, Salomonsen-Sautel et al. 2008). For example, homeless girls tend to have more family members in their network compared to homeless boys (Johnson et al. 2005), and gay/lesbian/bisexual (GLB) homeless youth have more street-based and riskier network members compared to heterosexual homeless youth (Johnson et al. 2005, Rice et al. 2008). No previous studies have specifically described the networks of homeless emerging adults in terms of network composition, the support received from network members, the risk behaviors in which network members engage, and how these characteristics might vary by gender and sexual orientation. Yet, such information may be critical to developing interventions for homeless emerging adults to decrease risks to their health.

There is thus far a lack of compelling evidence for the effectiveness of behavioral health and risk reduction interventions for homeless youth of any age (Altena et al. 2010). There are efficacious interventions for other youth (e.g., Jemmott et al. 2005, Jemmott et al. 1998), however, suggesting that structural barriers including homelessness may affect the efficacy of interventions for this population. To our knowledge, there are no studies that have been published specifically on the effectiveness of social network interventions for homeless youth; however, in light of the evidence that network characteristics are associated with risk behavior among homeless youth, network interventions may be a promising direction for prevention (Rice 2010, Young and Rice 2011). The scarcity of information on networks in the specific population of homeless emerging adults, however, hinders efforts to advance risk reduction and health promotion for that specific population.

Present Study

The goal of this study is to better understand the networks of homeless youth in emerging adulthood, including the risks and supports present in those networks, and whether these differ as a function of the youth's gender and sexual orientation. Because of the scarcity of research on the networks of homeless youth who are in the specific developmental stage of emerging adulthood, the literature provides insufficient guidance in hypothesis formulation. With the foundation of the existing literature, we instead pose three research questions to enhance understanding of a vulnerable population and a topic on which research is lacking. First, what is the composition and diversity of the networks of homeless emerging adults? Second, do street-based network ties of homeless emerging adults engage in more risky behaviors (risky sex and substance use) than other members of their networks, and do these street-based ties provide support to the homeless emerging adults? Third, and are relatives and other prosocial ties (e.g., school-based peers) less likely than other network members to engage in risky behaviors but more likely to provide support? Analyses are conducted at the respondent-level for the first question, and at the network member-level for the other two questions. Since previous studies have found some evidence for differences in risk behavior among homeless youth by gender and sexual orientation, we additionally explore whether networks differ by these two characteristics. This is the first study to our knowledge to report detailed information on social networks in a population of homeless youth in the developmental stage of emerging adulthood.

Methods

Study Design

We utilized a sample of homeless emerging adults ages 18 to 24 that been recruited from shelters, drop-in centers, and street venues in Los Angeles County for a larger study of homeless youth (ages 13-24). We used a multi-stage design in which we first selected sites where homeless youth are found (i.e., shelters, drop-in centers, and street venues) and then randomly sampled youth within the selected sites. Service sites were eligible for the larger study if located in the study area and the majority of their clientele were between the ages of 13 and 24 and English speaking. Service sites not limited to that age group were eligible if they had a specific program geared toward youth. For short-term transitional housing programs, average length of stay could be no more than one year. Our final list of service sites consisted of 15 shelters and 7 drop-in centers. All eligible service sites that agreed to participate were included. We identified and included 19 street venues in the study area where homeless youth congregate. All sites were investigated to obtain an estimate of the average number of youth served daily or the average number of youth congregating at street venues in a given day. A quota for the number of completed interviews to be achieved at each site was assigned that was almost proportional to the number of youth observed in each site.

We drew a random sample of homeless youth ages 13 to 24 from the 41 study sites for the larger study. The adopted sampling design deviates from a proportionate-to-size random sample for various reasons: sampling rates for some sites were changed during the period of data collection; response rates, or the rate at which youth agreed to be interviewed, differed slightly across sites; and some youth visited different sites more frequently than other youth. Changes in sampling rates, differing response rates, and differential use of sites by youth were accounted for in our analyses so that our study findings are an unbiased representation of the entire population of homeless youth in those sites who meet study eligibility criteria. We accounted for the differential frequency of site use by asking respondents how often they had gone to a shelter, drop-in or street venue in the study area during the past 30 days and used this information to analytically correct the respondents' probability of being included into the study. We used sampling weights in all analyses to correct for the small departures from a proportionate-to-size sample and hence the potential bias due to the differential probabilities of including respondents into the study. With the application of these weights in all analyses, findings reflect those of the entire population of homeless youth across the 41 sites who met the eligibility criteria described in the next section.

Study Respondents

Youth were eligible for the larger study if they: (a) were between the ages of 13-24; (b) were not currently living with a parent or guardian; (c) were not getting most of their support for food and housing from family or a guardian; (d) spent the previous night in a shelter, outdoor or public place, hotel or motel room rented with friends (because of no place else to go), or other place not intended as a domicile; and (e) were English speaking. Interviews were conducted between October 2008 and August 2009. We approached 582 youths and, of those approached, 7 refused to be screened and 128 screened ineligible. The principal reasons for ineligibility were that youth approached were not between the ages of 13 and 24 (N=55) and that youth did not meet the study screening definition of homelessness (N=52). Of the 446 youth that screened eligible, 437 completed the interview (4 refused the interview, and 5 began the interview but decided not to complete it). Of the 437 youth who completed interviews, 18 were later found to not meet the eligibility criteria and these cases were dropped from all analyses. This resulted in a final study sample size of 419 and a final response rate of 97.89%. The present study focuses on the 349 of these youth between the ages of 18 to 24. Individual, computer-assisted face-to-face structured interviews were conducted by trained interviewers and lasted an average of 60 minutes. Youth were paid \$25 for their participation. The research protocol was approved by the Institutional Review Board of RAND and a Certificate of Confidentiality was obtained from the U.S. Department of Health and Human Services.

Measures

In the structured interviews, we asked respondents about their own characteristics and behaviors. Using established procedures (McCarty 2002, McCarty et al. 1997) and our experiences in prior studies (Tucker et al. 2009, Wenzel et al. 2009), we then asked respondents about the characteristics and behaviors of the members of their social networks. To gather information about networks, we asked respondents to provide the first names of 20 individuals ages 13 or older that they knew, who knew them, and that they had contact with sometime during the past three months. Contact could be face-to-face, by phone, mail or through the internet (e.g., e-mail). We constrained network size to be the same (20) across respondents to maximize comparability of network structure measures across respondents (Mehra et al. 2001). Twenty members has been shown to capture structural and compositional variability present in networks (McCarty et al. 2007). Ego-centric, or personal, networks are the focus of this study and encompass the ties surrounding a single focal individual (Campbell and Lee 1991, McCarty et al. 1997).

Socio-demographic characteristics of respondents—We assessed age, race and ethnicity (African American, non-Hispanic White, Hispanic, and all others), biological sex, sexual orientation (heterosexual vs. gay, lesbian or bisexual (GLB), education level (less than high school education vs. high school graduate vs. higher education) and employment status (currently employed vs. unemployed). The “other” category for race and ethnicity combined persons who self-identified as Native Americans, Alaska natives, native Hawaiians or multiracial as there were too few cases in each separate category for analyses.

Where respondents met network members—For each name generated, we asked respondents to identify whether the individual was a relative, or lifetime or recent (past 3 month) sex partner. With the exception of network members who were identified as relatives, we asked how the respondent met each of the persons named in the network. Respondents’ answers were coded by interviewers using existing response categories including on the street; in school; in a shelter or temporary housing; through a drop-in center; at a party, club, or bar; at work/employment; as a neighbor; in church; in jail; in foster care; or through another person. Responses other than these were recorded in an open-ended manner and were subsequently coded by three members of the study team. These other responses were either collapsed into pre-existing categories or new categories were formed to capture unique information. A total of 23 mutually exclusive categories completely accounted for all of the persons named by the respondents, including relatives (i.e., 20 per 349 respondents = 6,980 network members).

Tangible and emotional support from network members—Tangible support was operationalized by asking youth which of the 20 people in their networks they could count on to lend them money, give them food, or give them a place to stay without asking for anything in return. Emotional support was operationalized by asking youth which people they could count on to really care about them no matter what is happening to them. These items have been used in previous studies of homeless youth (Johnson et al. 2005). Due to the high correlation between these two support indicators, we created a composite support outcome variable that combines these two dichotomous indicators such that each network member was considered to provide support to the respondent if he or she was classified as providing tangible or emotional support.

Perceived risky sex by network members—We asked respondents a yes/no question for each non-relative member of the network they named: “Who do you think has done any of the following kinds of things during the past 3 months: had multiple sex partners, had sex with someone they didn’t know, or didn’t use a condom with a new partner?” We used this dichotomous, network member level variable to represent whether these members were perceived to engage in risky sex.

Substance use by network members—We asked respondents to tell us with whom, among the people in their networks, they ever used alcohol and drugs during the past 3 months. Given the high correlation between the drinking and drug use outcomes, we created one dichotomous network member level variable to represent whether network members engaged in either of these two behaviors with respondents.

Data Analysis

To address the first research question about the composition and diversity of the networks of homeless emerging adults, both overall and by gender and sexual orientation, we calculated the average percentage of network members according to where network members were met (e.g., street-based, sex partners), as well as whether they provided support to the respondent, were perceived to engage in risky sex, and engaged in substance use with the respondent.

These summary measures were calculated at the respondent level from the network member level data. We calculated percentages for each respondent such that the numerator was the sum of network members in a particular category and the denominator was 20, the total number of network members for each respondent. We conducted t-tests to test for differences in the mean percentage of network members between gender (male or female) and sexual orientation (heterosexual or GLB) groups. For these respondent-level analyses, we deemed a finding statistically significant if $p < .05$.

To address research questions 2 and 3, about which types of network members provide support or engage in risky behaviors, we conducted a series of multi-level logistic regressions. Network members are nested within respondents, so all logistic regression models included a random effect for the respondent. All the outcomes used for answering research questions 2 and 3 were measured at the network member level.

To evaluate the overall differences in support and engagement in risky behaviors of the network members in a particular category versus all other categories of network members, we conducted multi-level bivariate logistic regression models. These models included a network member level outcome (e.g. perceived to provide support to the respondent), one network member level predictor (e.g. met on the street), and a random effect for the respondent. For the analyses in which we wanted to assess whether, for example, the relationship between support and met on the street varied by the respondent's gender, we fitted the same model as above where we added the interaction between met on the street (network member level characteristic) and gender (respondent level characteristic). In summary, the three outcomes analyzed for answering research questions 2 and 3 were at the network member level and all regression models were clustered within respondent. Our models included a network member level predictor (e.g. met on the street), a respondent level predictor (e.g. gender) and an interaction term that consisted of the network member level predictor (met on the street) and the respondent level predictor (gender). P-values were adjusted using the Bonferroni correction within outcome given the large number of tests conducted. As adjusted by the Bonferroni correction, results were considered statistically significant if the p -value for the interaction term was $p < .004$. All analyses for this study were weighted as described in the Study Design section and STATA 10.1 was used to conduct all regression models (StataCorp, 2007).

Results

In terms of the sociodemographic characteristics of emerging adults in this study, the mean age was 20.9 years ($sd = 2.1$). Most of the emerging adults were male ($n = 231$; weighted percentage = 66.62%). The majority of youth ($n = 230$; weighted percentage = 65.4%) identified themselves as heterosexual. The most frequent racial/ethnic status was white, non-Hispanic (37.7%), followed by African American (23.9%), and Hispanic (17.7%). Other racial/ethnic groups (e.g., Native Americans, Asian Americans, Pacific Islanders) made up the remaining 20.7%. More than half (54.7%) had graduated from high school or had received a GED; a minority of emerging adults were employed either full-or part-time (16.8%).

Table 1 shows the average percentage of all network members named who were met in various ways. On average 26.38% of network members were met on the street, 17.91% were relatives, 15.15% were met through somebody else (e.g., friends of friends), and 7.08% were met through school. Relatively few network members were met in drop-in centers (4.80%), shelters (3.81%), venues such as parties, clubs or bars (3.20%), work (2.86%), transitional housing (2.80%), and online or phone line (1.82%). Among those network members who were not relatives, an average of 9.0% were lifetime sexual partners and 5.54% were recent

sexual partners. Table 1 also shows that 42.82% of network members provided the youth with tangible or emotional support. In terms of risk behavior, 24.18% of network members were perceived to engage in risky sex behaviors, and 37.18% drank or used drugs with the respondent in the past 3 months. Network characteristics differed significantly by respondent gender in one respect: males met a greater percentage of their network members on the street than did females (29.01% vs. 21.13%). Heterosexuals met a significantly greater percentage of persons in their networks through transitional living programs than did respondents who were GLB (3.40% vs. 1.68%).

Table 2 shows the support and risk characteristics of each category of network members overall. Tangible or emotional support was primarily provided to the emerging adults by relatives (67.36%) and sexual partners (recent: 65.61%; lifetime: 57.21%). The following types of people were perceived to be engaged in the highest levels of risky sexual behavior: persons met online (44.03%), sex partners (recent: 36.04%; lifetime: 37.09%) and persons met on the street (31.56%). High percentages of sex partners drank or used drugs with respondents (recent: 63.08%; lifetime: 51.36%). After recent sex partners, persons met on the street used substances with respondents (55.46%) more than any other network category. In our multi-level, fully interacted logistic regression models there was one significant gender difference (not depicted): A greater percentage of females than males drank or used drugs with their recent sex partners (78.00% vs. 56.30%). There were no significant differences by sexual orientation.

Our final set of analyses sought to compare support and risk outcomes by network members in a particular “where met” category versus all other network members. These results are shown in Table 3. We used multi-level bivariate logistic regression analyses, clustered within respondent, to determine whether the odds that persons in a particular group provided support and engaged in risk behavior compared to all others. In general, persons met through relatives were more likely than others to provide support to respondents, less likely to be perceived as engaging in risky sex, and less likely to engage in substance use with the respondent. Conversely, network members met on the street were less likely than others to be counted on for support, and more likely to engage in risk behaviors than persons met through other contexts. For example, respondents were more than three times as likely to receive support ($OR = 3.44$; 95% $CI = 2.68, 4.42$) from a relative or family member. Members of the network who were met on the street were 1.85 times (95% $CI = 1.19, 2.85$) as likely to be perceived engaging in risky sex and 2.82 times (95% $CI = 2.09, 3.80$) as likely to drink or use drugs with the respondent compared to those not met on the street. Persons met through drop-in centers ($OR = 0.48$; 95% $CI = 0.31, 0.75$) were approximately half as likely to provide support.

Recent and lifetime sexual partners were significantly different than non-sex partners in terms of both support provision and risk behavior. Sex partners were more likely to provide support (recent partners: $OR = 2.69$, 95% $CI = 1.80, 4.02$; lifetime partners: $OR = 2.47$, 95% $CI = 1.85, 3.28$) to respondents than non-sex partners. However, both recent and lifetime sexual partners had a higher likelihood of engaging in risk behaviors than non-sex partners. Compared to non-sex partners in the network, recent and lifetime partners were twice as likely to be perceived as engaging in risky sexual behavior (recent partners: $OR = 1.97$, 95% $CI = 1.11, 3.49$; lifetime partners: $OR = 2.13$, 95% $CI = 1.36, 3.34$), and were more likely to drink or use drugs with the respondent (recent partners: $OR = 3.08$, 95% $CI = 2.22, 4.28$; lifetime partners: $OR = 1.52$, 95% $CI = 1.19, 1.94$).

Discussion

There is considerable diversity in the social networks of emerging adults who are homeless, as has been found in studies of homeless youth in general (Rice et al. 2007) and homeless women (Tucker et al. 2009). Network members are concentrated, however, in two contrasting categories: street-based ties and relatives. The homeless emerging adults in this study met the single largest proportion of network members on the street, and this was true regardless of gender or sexual orientation. Street settings and ties may expose one to individuals who are resource poor and who engage in the most deviant behaviors (Miethe and Meier 1990, Wenzel et al. 2000). Indeed, we found that persons met on the street were more likely than other network members to be perceived as engaging in risky sex and to be using substances with the homeless emerging adults compared to network members met through other channels. A large proportion of the networks of homeless youth in the period of emerging adulthood (i.e., network members met on the street) may pose significant risk to the well-being of this population.

Relatives comprised the second largest category of individuals in the networks of homeless emerging adults; again, this was true across gender and sexual orientation. In contrast to street ties, relatives were less likely than other network members to engage in risky behaviors but more likely to provide support. Studies of homeless youth have shown that those who get along with their families engage in more healthful behaviors (Rice et al. 2005). Although the current study cannot demonstrate a health benefit due to ties with relatives, literature on emerging adulthood notes the importance of ongoing ties with family even as young people transition to greater self-sufficiency (Arnett 2004). Contacts with persons in school have also been associated with more healthful behaviors among homeless youth (Rice et al. 2007). However, in our older sample of homeless youth in emerging adulthood, school-based ties made up only 7% of the networks and were no more or less likely than other network members to engage in risk behaviors or to provide support to the respondent. This finding is consistent with the literature on emerging adulthood in that youth in this developmental stage are in the process of leaving adolescent support structures, such as school (Arnett 2001, 2004).

It deserves noting that fewer than 10% of homeless emerging adults met network members through shelters and drop-in centers, principal sites through which these individuals receive subsistence services. Further, network members who were met through drop-in centers were less likely to provide support than other network members. That so few network members were met in key service sites, and that persons met in drop-in centers provided relatively less support, raises a question about the feasibility of network-based risk reduction interventions that could be delivered at these sites with the participation of peers from individuals' networks. Further, interventions in which participants themselves play roles such as peer counselors or popular opinion leaders would need to take measures to prevent iatrogenic (i.e. unintended but harmful) effects. Although research specific to homeless emerging adults is lacking, research among high-risk adolescents indicates that a peer environment supportive of drug use, for example, may have the effect of encouraging drug use within the context of a drug prevention program (Valente et al. 2007).

Previous studies have found differences in the experiences of homelessness and in the networks of homeless youth based on gender and sexual orientation (Halcon and Lifson 2004, Johnson et al. 2005, Rice et al. 2008, Salomonsen-Sautel et al. 2008, Thrane et al. 2006, Whitbeck et al. 2004), but we found few such differences among homeless emerging adults. This is encouraging in that it suggests that available resources may be focused on the common needs of homeless emerging adults; nevertheless, gender and sexual orientation differences must be noted. Although both males and females met no fewer than one-fifth of

the persons within their networks in street settings, males met significantly more through the streets. A small proportion of all emerging adults met network members through transitional living settings, but youth who did not identify as heterosexual met significantly fewer such individuals at these settings than did heterosexuals. This may indicate that GLB youth in the stage of emerging adulthood have less access to relatively stable living situations that can provide a path out of homelessness and opportunities for prosocial connections. Given the persistent stigma associated with non-heterosexual orientations, this finding suggests the need for additional transitional housing services that provide an accepting, non-judgmental environment for youth who are gay, lesbian, bisexual, or questioning.

In terms of the support that homeless emerging adults receive from their networks and the risks that are present in these networks, the multi-faceted role of sex partners warrants highlighting. These are individuals from whom homeless emerging adults are likely to both receive tangible and emotional support and with whom they are more likely to engage in substance use. Females in particular were more likely than males to use substances with their recent sex partners. Sex partners also were perceived to be engaging in the highest levels of risky sex. Our data do not permit us to determine whether the sex partners are engaging in risky sex with the homeless respondents, but perceptions of others' risk behaviors may nevertheless be influential to one's own behavior whether or not they are matched with observed actions of others (Duan et al. 2009).

The findings of this study suggest several directions for the development of interventions. Studies involving homeless youth in general have suggested that enhancing prosocial ties, such as with family and school-based ties, may be helpful in reducing health risks to these youth (Stein et al. 2009). The re-building and repairing of ties with family may be a way to lessen future risk of homelessness among youth (Milburn et al. 2005). Although emerging adults are developmentally distinct from both younger and older age groups (Arnett 2001, 2004), results from this study suggest that ties with families may be beneficial even for this population as they navigate the period between adolescence and young adulthood (Arnett 2004). Multi-faceted interventions that help emerging adults explore reparations with family members and support intimate partnerships may be warranted, but any efforts at family reparation must be tempered by the possibility of abuse or neglect within the families (Kim et al. 2009). Given the increasing need for autonomy and its expression by emerging adults, homeless young people in this stage should be respected to make their own decisions regarding family with whom they might reconnect or enhance contact, and should be able to rely upon case managers or other supportive individuals for guidance if they choose to attempt reparations. Motivational interviewing, a non-directive and non-confrontational technique that helps individuals to consider and weigh different life choices and potential changes (Miller and Rollnick 2002), might help these young people make decisions about re-connecting with family.

The potential importance of involving intimate partners in interventions for homeless youth in emerging adulthood has not been previously discussed. Support from sex partners in this study rivaled that of relatives, possibly suggesting some advantages in involving sex partners in health promotion efforts with this population. That sex partners also engage in risky sex and substance use with the homeless emerging adults (particularly females) highlights the potential importance of targeting the sex partners of homeless emerging adults in interventions. An approach inclusive of the sex partners would be consistent with the increasing importance of intimate relationships during the developmental stage of emerging adulthood (Arnett 2004). Further, in a recent study, homeless youth reported intimate partnerships lasting an average of 25 months (Tucker et al. In press). The feasibility of brief couples-based interventions that capitalize on support within intimate partnerships while reducing shared risk may deserve investigation among homeless emerging adults, since

couples-based interventions have been shown to be effective with high-risk adult populations (El-Bassel et al. 2010). An important consideration for future research is to determine in more detail the nature of the relationship with sex partners. Although homeless youth report relationships lasting an average of 25 months, it will be critical to understand the level of commitment and intentions to maintain the relationship, for example. Given the developmental stage of emerging adulthood, it is important to acknowledge the growing importance of intimate relationships, but partner-based intervention must be based in careful research.

Finally, in the vein of multi-faceted interventions and the importance of facilitating the growing independence and self-sufficiency among emerging adults, it is important for service providers and policy makers to recognize the importance of stable and safe housing and financial supports for this population. Although interventions such as “Housing First” have been proven effective for adults experiencing chronic homelessness and behavioral health problems (Stefancic and Tsemberis 2007), research must be conducted to determine housing models that are appropriate for homeless emerging adults. Affording additional educational opportunities, training for employment, and housing support may also have the effect of minimizing exposure to health risks through risky sex and substance use. Structural enhancements and resources such as education and housing supports for this population may facilitate a successful transition between adolescence and young adulthood by supporting self-sufficiency.

The present study has certain strengths and limitations. A significant strength of this study is the use of a probability sample of homeless youth ages 18 to 24 from shelters, drop-in centers, and street settings throughout Los Angeles County. However, results for this population may not generalize to other cities or regions. The cross-sectional nature of the study is also a limitation. The data give a one-time perspective on networks without taking into account that these relationships (or the homeless youths’ perceptions of them) may change over time. Additionally, further research using qualitative methods will be necessary to understand what is occurring socially and emotionally in the relationships that homeless youth have with the people in their networks.

Study findings illustrate the importance of focusing on homeless youth in the developmental stage of emerging adulthood. Intervention efforts should acknowledge the complex developmental period experienced by this population (Arnett 2001, 2004, Osgood et al. 2005). Although family members continue to play a supportive role in emerging adulthood, this fact must be balanced with the youth’s need to experience a greater level of independence and to build ties with intimate partners (Arnett 2001, 2004). Our findings highlight the unique and important role of intimate partners with regard to social support, sexual risk, and substance use. To date, research is lacking on interventions that involve intimate partners to promote health and well-being among homeless emerging adults. Future research may be warranted on couples-based intervention programs that can strengthen supportive bonds between homeless emerging adult intimate partners while reducing substance use and sexual risk in the dyad. Because non-supportive and risky street-based ties comprise a significant portion of homeless emerging adults’ social networks, the resource limitations that characterize homelessness and deprivation must ultimately be addressed through policies that support housing, education, and gainful employment.

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Biography

Suzanne L. Wenzel received her PhD in community psychology and is a professor at the University of Southern California School of Social Work and an adjunct senior behavioral scientist at the RAND Corporation. Her research has focused over the past 20 years on understanding and addressing behavioral health needs of homeless women, men, and youth.

Ian W. Holloway is a doctoral candidate in social work and a Los Angeles Basin-Center for Translational Science Institute Predoctoral Fellow at the University of Southern California. His research focuses on health, mental health and well-being among culturally diverse populations both domestically and internationally.

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Social Network Characteristics of Homeless Emerging Adult Respondents, By Respondent Gender and Sexual Orientation

Table 1

Network characteristic	Total (n = 349) %	Females (n = 118) %	Males (n = 231) %	Heterosexual (n = 230) %	GLB (n = 119) %
<u>Where met respondent¹</u>					
Street	26.38	21.13	29.01 [*]	28.08	23.18
Relative	17.91	19.65	17.04	17.55	18.60
Somebody else ²	15.15	17.94	13.75	14.51	16.34
School	7.08	7.24	7.00	7.39	6.50
Drop-in center	4.80	5.51	4.44	3.88	6.53
Shelter	3.81	3.52	3.96	3.45	4.51
Party/club/bar/concert/dance	3.20	3.62	2.98	3.23	3.13
Work	2.86	1.91	3.34	2.72	3.13
Transitional living	2.80	4.09	2.16	3.40	1.68 [*]
Online/Phone line	1.82	1.33	2.07	1.67	2.10
Recent sex partner ³	5.54	5.18	5.72	5.52	5.58
Lifetime sex partner	9.00	8.59	9.20	9.20	8.62
Provides support	42.82	45.87	41.3	41.85	44.67
Engages in risky sex	24.18	23.44	24.56	24.05	24.44
AOD use with respondent	37.18	35.91	37.82	39.03	33.69

^{*} Note. $p < 0.05$.

¹ Respondents were asked where they had met all network members other than relatives.

² Network members met through "somebody else" consisted of persons met through friends, service providers, co-workers, neighbors, and others.

³ Network categories are mutually exclusive with the exception of sex partners, who were not relatives, but could have been met in any of the other ways listed.

Table 2

Percent of Network Members Who Provide Support to Respondent, Engage in Risky Sex, and Use Substances With Respondent, By Where Met Respondent (N = 6,980 Network Members)

Where met respondent ¹	Provides Support to Respondent %	Engages in Risky Sex %	Uses Substances With Respondent %
Street	36.61	31.56	55.46
Relative	67.36	9.21	13.38
Somebody else ²	39.14	21.19	44.70
School	47.45	19.68	27.95
Drop in center	27.16	17.51	22.19
Shelter	33.72	27.43	26.39
Party/club/bar/concert/dance	46.77	28.54	46.97
Work	35.97	19.44	26.98
Transitional living	28.88	14.95	2.76
Online/Phone line	38.56	44.03	14.41
Recent sex partner ³	65.61	36.04	63.08
Lifetime sex partner	57.21	37.09	51.36

¹ Note. Respondents were asked where they had met all network members other than relatives.

² Network members met through "somebody else" consisted of persons met through friends, service providers, co-workers, neighbors, and others.

³ Network categories are mutually exclusive with the exception of sex partners, who were not relatives, but could have been met in any of the other ways listed.

Multi-level Bivariate Logistic Regressions Comparing Support and Risk Behaviors By Categories of Network Members (N = 6,980 Network Members)

Table 3

Where met respondent ¹	Provides Support to Respondent		Engages in Risky Sex		Uses Substances With Respondent	
	OR	(95% CI)	OR	(95% CI)	OR	(95% CI)
Street	0.70	(0.54, 0.92)	1.85 *	(1.19, 2.85)	2.82 *	(2.09, 3.80)
Relative	3.44 *	(2.68, 4.42)	0.29 *	(0.19, 0.44)	0.21 *	(0.15, 0.29)
Somebody else ²	0.84	(0.66, 1.07)	0.88	(0.53, 1.48)	1.45	(1.05, 1.99)
School	1.22	(0.81, 1.84)	0.81	(0.46, 1.40)	0.64	(0.37, 1.09)
Drop in center	0.48 *	(0.31, 0.75)	0.70	(0.44, 1.10)	0.47 *	(0.29, 0.74)
Shelter	0.67	(0.43, 1.05)	1.27	(0.64, 2.53)	0.59	(0.36, 0.97)
Party, club, bar, etc.	1.18	(0.72, 1.93)	1.35	(0.63, 2.90)	1.52	(0.86, 2.68)
Work	0.74	(0.51, 1.08)	0.80	(0.37, 1.72)	0.62	(0.35, 1.09)
Transitional living	0.53	(0.29, 0.97)	0.58	(0.25, 1.32)	0.43 *	(0.26, 0.74)
Online/Phone line	0.84	(0.51, 1.38)	2.69	(0.68, 10.62)	0.28 *	(0.12, 0.63)
Recent sex partner ³	2.69 *	(1.80, 4.02)	1.97 *	(1.11, 3.49)	3.08 *	(2.22, 4.28)
Lifetime sex partner	2.47 *	(1.85, 3.28)	2.13 *	(1.36, 3.34)	1.52 *	(1.19, 1.94)

* Note. $p < .004$ (alpha level adjusted within outcome using Bonferroni correction).

¹ Respondents were asked where they had met all network members other than relatives.

² Network members met through "somebody else" consisted of persons met through friends, service providers, co-workers, neighbors, and others.

³ Network categories are mutually exclusive with the exception of sex partners, who were not relatives, but could have been met in any of the other ways listed.