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Sanna J. Thompson, Lynn Rew, Amanda Barczyk, Pepper McCoy and Ada Mi-Sedhi
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SOCIAL ESTRANGEMENT: FACTORS ASSOCIATED WITH ALCOHOL OR DRUG DEPENDENCY AMONG HOMELESS, STREET-INVOLVED YOUNG ADULTS

SANNA J. THOMPSON, LYNN REW, AMANDA BARCZYK, PEPPER MCCOY,
ADA MI-SEDHI

Substance use is highly prevalent among homeless, street-involved young people. Societal estrangement is often associated with substance use, particularly among this population. The current study utilized a descriptive correlational design to identify four domains of social estrangement: disaffiliation, human capital, identification with homeless culture, and psychological dysfunction. These domains were tested to determine their association with alcohol or drug dependence. Interviews utilizing self-report instruments were conducted with 185 young adults aged 18-23 years of age who were receiving homeless services from a community drop-in center. In this sample, the vast majority reported high levels of alcohol and drug use with more than half being identified as dependent on alcohol and/or drugs. Polysubstance use was highly prevalent and most reported marijuana as their drug of choice. Findings indicate that identification with homeless culture was the most highly predictive domain of social estrangement for both alcohol and drug dependency. Implications for services to this population are discussed.

Sanna J. Thompson, Ph.D., is an Associate Professor at the University of Texas at Austin, School of Social Work. Her area of research focuses on risk factors associated with runaway and homeless youth, most specifically related to substance abuse and trauma. She also has conducted research of family-based interventions that aim to increase engagement and retention of families and adolescents in treatment. **Lynn Rew**, Ed.D., is the Denton and Louise Cooley and Family Centennial Professor in Nursing at the University of Texas at Austin, School of Nursing. She has conducted extensive research with high-risk children and adolescents, including a longitudinal study of health-risk behaviors in youth and sexual health practices of homeless adolescents. **Amanda Barczyk**, M.S.W., is a social work doctoral student at The University of Texas in Austin. She received her Masters of Social Work at the University of Pennsylvania in 2006. Her research focus encompasses issues of mental health policy, with concentration on issues of stigma. **Pepper McCoy**, M.S.W., is a doctoral student at the University of Texas at Austin, School of Social Work. She received her Masters of Social Work at University of Houston in 2006. Her research interests focus on adolescent suicide, poverty and child witnesses of domestic violence. **Ada Mi-Sedhi** was an undergraduate research assistant at the University of Texas at Austin, School of Social Work and received her Bachelors of Social Work in 2008. She plans to pursue a dual degree Masters in Social Work and Public Health.

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INTRODUCTION

Substance abuse is highly prevalent among homeless young people. Estimates from empirical studies suggest that 39% to 70% of homeless youth abuse drugs or alcohol (Chen, Thrane, Whitbeck, & Johnson, 2006; Martijn & Sharpe, 2006). In nationally representative samples, marijuana is the most frequently used drug by homeless youth (Haley, Roy, Leclerc, Boudreau, & Boivin, 2004; Thompson, 2004), and its use has been reported as two to three times higher than among other young adults. Rates of cocaine use are four to five times higher and amphetamine use is three to four times higher among homeless adolescents compared to housed peers (Greene & Ringwalt, 1997). Whitbeck and colleagues (2004) compared a non-probability sample of homeless youth with a nationally representative sample of same-aged housed youth. They found that the prevalence of homeless youth meeting criteria for drug abuse was more than 10 times greater for males and 17 times greater for females than housed youth (Whitbeck, Chen, Hoyt, Tyler, & Johnson, 2004). Other research has shown varying rates of alcohol and drug abuse and dependency among this youth population. For example, Kipke and colleagues reported that 71% of their sample of homeless youth met criteria for alcohol and/or illicit drug use disorder (Kipke, Montgomery, Simon, & Iverson, 1997), while Mundy and colleagues found that 48% of homeless youth met DSM-IV criteria for alcohol abuse or dependence and 39% met criteria for drug abuse or dependence (Mundy, Robertson, Robertson, & Greenblatt, 1990). Substance abuse and dependency also appeared to increase the longer these young people remained homeless (Johnson, Whitbeck, & Hoyt, 2005; Rew, Taylor-Seehafer, & Fitzgerald, 2001), with drug overdose being highly prevalent as well (Sibthorpe, Drinkwater, Gardner, & Bammer, 1995).

Although society regards drug and alcohol use as the primary hindrance to homeless individual's successful transition off the street, homeless young people view drug and alcohol use as a valuable coping strategy. These young adults have more favorable attitudes toward drugs than their non-homeless peers (Fors & Rojek, 1991), and describe drug use as a common and useful approach to numbing the daily experiences of life on the street. Using drugs is perceived as a strategy to alleviate the stress of street life and the negative emotional effects of traumatic experiences. With housing that often includes sleeping in public places, homeless youth report using drugs and alcohol as a way to keep warm and suppress hunger (Ayerst, 1999). Some drugs are used to help them stay awake for extended periods in an effort to lessen the chances of victimization (Ayerst, 1999; Fest, 2003). Drugs also provide a means of escape from the physical and emotional pain associated with estrangement from social norms and resources (Zlotnick, Tam, & Robertson, 2003).

Recently, research on homeless adults has employed a conceptual framework of "societal estrangement" to understand individual characteristics, family systems,

and societal influences pivotal in the progressive accumulation of challenges experienced by homeless individuals (Grigsby, Baumann, Gregorich, & Roberts-Gray, 1990; Piliavin, Sosin, Westerfelt, & Matsueda, 1993). Noting that sustained homelessness reflects greater estrangement from societal institutions, Piliavin and colleagues developed a conceptual model that features four sources or domains of estrangement, including: (a) institutional/societal disaffiliation, (b) human capital, (c) identification with homeless culture, and (d) psychological dysfunction (Piliavin et al., 1993; Sosin & Bruni, 2000). Others have drawn upon this conceptualization to further develop the framework (Zlotnick et al., 2003) and examined the four domains of estrangement among runaway/homeless youth (Thompson & Pollio, 2006). These four domains will provide an organizing structure for examining societal estrangement as experienced by young homeless people and their alcohol and/or drug dependency.

Disaffiliation is defined as detachment from social institutions through weakening of associative bonds and relationships, social isolation, and unstable social networks (Castel, 2000). It is often measured in research studies in terms of lack of support from family/friends and limited utilization of formal services and providers (Zlotnick et al., 2003). Bahr theorized that disaffiliation may result from a person's voluntary withdrawal from their community, whereby they choose a deviant role (Bahr, 1973; Bahr & Caplow, 1973). Thus, drug addiction may lead to societal estrangement and disaffiliation from institutions and relationships. Vulnerable groups, such as homeless young people, exhibit disaffiliation through poor school performance or academic failure, conflict with the law, or isolation from supportive, pro-social relationships (Malloy, Christ, & Hohloch, 1990). These young people often report that their initial runaway episode (an experience that is truly disaffiliating from family) was perpetrated by stressful events in the home, such as family conflict, maltreatment by parents or other family members, and/or parental substance abuse (Rew, Fouladi, & Yockey, 2002; Thompson, 2004). Parental substance abuse has been shown to be a common experience among homeless young people. For example, one study found that 55% of homeless youth came from families where the father abused substances and 46% had mothers who abused substances (Ginzler, Cochran, Domenech-Rodriguez, Cauce, & Whitbeck, 2003). Growing up in these families may increase the child's risk of substance abuse and precocious departure from parental homes. Thus, those who have greater disaffiliation from family and friends, use substances, and have little contact with needed services are more likely to remain homeless and isolated from society (Piliavin et al., 1993).

Human capital reflects individual's skills and knowledge that produce goods and services (Bullock, Stallybrass, & Trombley, 1988; Shinn et al., 2007). Often defined as the ability to create personal, social, and economic assets, human capital

has historically been measured by educational level, literacy and income (Shinn et al., 2007). Among homeless young people who lack occupational proficiency, developing the street smarts necessary to locate resources and adapt to the street economy are skills needed to survive (Lankenau, Clatts, Welle, Goldsamt, & Gwadz, 2005). Although some survival strategies may be antisocial in nature, such as drug trafficking or property crime, nontraditional resources are often essential for support and subsistence among homeless individuals who lack parental or familial assistance (Bender, Thompson, McManus, Lantry, & Flynn, 2007). Research suggests that adolescent's perceptions of peer's acceptance and the profitability of illicit drug dealing shapes their view of using and selling drugs (Johnson, Wish, Schmeidler, & Huizinga, 1991). Alienation from conventional sources of income generation and the belief that selling drugs is a viable means to make money are important reasons for choosing illegal activities to create human capital (Little & Steinberg, 2006). In addition, homeless adolescents who derive income from drug dealing typically live in contexts characterized by high physical and social disorder, low parental interaction or monitoring, and high levels of peer deviance (Kidd, 2003). Research shows that high-frequency drug users who are immersed with life on the streets are also heavily involved in property crimes and drug trafficking (Farabee, Shen, Hser, Grella, & Anglin, 2001). Therefore, given that successful drug dealing requires time and a certain degree of planning, homeless youth with little parental monitoring or supervision would have greater opportunity to participate in illicit drug sales (Little & Steinberg, 2006).

Identification with homeless culture suggests that homelessness is a type of cultural experience that is unique to this specific group of individuals. The greater the length of time away from family, the more likely they are to find similarly-situated peers and become drawn into street culture (Fest, 2003). Although no research to date identifies the trajectory or the length of time away from home required to acculturate to the homeless lifestyle, anecdotal evidence suggests youth who spend more than 30 days away from home are likely to shift in this direction (Fest, 2003). Additional indicators of acculturation may include survival strategies, such as engaging in survival sex for drugs, food, or shelter (Dembo, Pacheco, Schmeidler, Fisher, & Cooper, 1997; Whitbeck & Simons, 1990). Young people who become entrenched in street life through involvement in activities associated with surviving on the street become alienated from traditional community structures (Fest, 2003; Tyler & Johnson, 2006). They assimilate to a street economy where delinquent and/or criminal behaviors become common (Piliavin, Wright, & Mare, 1996). Status offenses such as dropping out of school may lead to more serious offenses of violent crime and theft as a means of survival (Lindsey, Kurtz, Jarvis, Williams, & Nackerud, 2000; Mallett, Rosenthal, Myers, Milburn, & Rotheram-Borus, 2004).

Acculturation to the streets and street economy progresses with the length of exposure to homelessness and other homeless peers (Auerswald & Eyre, 2002; Gaetz, 2004; Kidd, 2003; Kipke, Unger, O'Connor, Palmer, & LaFrance, 1997).

Research has suggested that similarly-situated, homeless peers provide an important learning environment for initiating drug use and provide opportunities and reinforcement for drug-using behaviors (Kipke et al., 1997). Affiliation with deviant peers is the strongest factor associated with substance abuse disorders (Johnson et al., 2005), as the street lifestyle encourages and rewards substance use (Tyler & Johnson, 2006). One study found that marijuana use rose from 24% in the month before running away to 39% after leaving home and that hallucinogen use increased from 5% to 11% after leaving home (Kipke et al., 1997). This is likely due to youth coming in contact with increased access to drugs and alcohol, seeking out drug-using friends after initiating drug use, and embedding themselves in social networks that reinforce drug-related choices, attitudes, and behaviors (Baron, 1999). Substance use becomes a central theme around which to organize activities and becomes a normative behavior. As the lure of drugs and alcohol becomes a strategy to fend off the myriad of detrimental experiences of street-involved young people (McMorris, Tyler, Whitbeck, & Hoyt, 2002), the result is further societal estrangement.

Psychological dysfunction is disproportionately high among homeless youth, particularly depression, suicidal thoughts or attempts (Mallett et al., 2004; Stewart et al., 2004). The process of running away, being kicked out of parental homes, or abandoned by families can be expected to induce complex and troubling emotional and behavioral responses. Previous research suggests that many homeless adolescents display depressive symptoms (Whitbeck, Hoyt, & Bao, 2000), have few adaptive skills for coping with stress (Dalton & Pakenham, 2002), experience suicidal ideation and behaviors (Noell & Ochs, 2001) and exhibit various trauma symptoms (Thompson, McManus, & Voss, 2006).

Research generally supports the relationship between the risk of mental health disorders and co-morbid substance abuse (Kilpatrick et al., 2003). Psychiatric disorders frequently seen in conjunction with substance abuse include mood, conduct, and anxiety disorders. One study found that over half of homeless youth respondents exhibited symptoms of clinical depression, had thoughts of suicide, and had an alcohol or drug disorder (Unger, Kipke, Simon, Montgomery, & Johnson, 1997); another study reported that of the homeless youth who met lifetime diagnostic criteria for at least one substance abuse disorder, more than 90% met criteria for a mental disorder (Johnson et al., 2005).

Although the relationships between substance use and each of the domains of societal estrangement have been studied separately among homeless populations, little research has been conducted to elucidate how the four theoretical domains might

predict homeless youths' alcohol and drug dependency. Thus, this exploratory study is aimed to measure and analyze the four domains of estrangement (i.e., disaffiliation, human capital, identification with homeless culture, and psychological dysfunction), and to understand how these domains predict alcohol and drug dependency among a group of highly vulnerable young people. A descriptive correlational design was used to address two research questions: (1) What are the differences between homeless young people who are alcohol or drug dependent and those who are not? (2) Which domains of estrangement significantly predict alcohol or drug dependency among homeless, street-involved young adults?

METHOD

SETTING

Participants were recruited from among homeless youth receiving services from a community drop-in center located in Central Texas from September 2006 to May 2007. The drop-in center, typical of others across the country, provides outreach and support services to homeless/runaway youth ranging in age from 16 to 23 years. The center provides a safe environment for young people during the day and offers case management services, hygiene supplies, laundry facilities, food, clothing, education/GED preparation, educational groups, transportation services, medical care, immunizations, HIV counseling and testing, and pregnancy testing. As drop-in centers are one of the most common sources of services accessed by street youth (Taylor-Seehafer, 2004), this service agency provided the most likely source for homeless young adults assembling in one location.

SAMPLE

Youth recruited for participation in the study included those identified by drop-in center staff as being 18 to 23 years of age and known to use alcohol and/or drugs. Case managers approached youth who, from their experience working with the individual, met inclusion criteria. As a standard practice by the drop-in center, youth who enter the facility are subjectively evaluated for intoxication or being under the influence of drugs. Those who come to the drop-in center in this condition are asked to leave until they are sober and no longer high. Thus, case managers made the determination whether a particular individual was eligible for recruitment into the study based on their knowledge of that person and their current level of sobriety. For those who did meet the inclusion criteria, each had the study described to them and were invited to speak with research assistants. Young people who agreed to learn more about the research study were taken to a private room at the drop-in center where the study was fully explained and consent forms for participation were signed. The explanation included information about who was conducting the study, the voluntary nature of participation, the confidentiality of the data collected,

and the option of stopping the interview at any time. Youth were informed that the interview would require approximately one hour and that they would receive \$10 for their participation. After providing informed consent, eligible youth completed self-report questionnaires that addressed issues of societal estrangement and substance dependency. Questionnaires were read to each participant to control for literacy problems often found among this youth population.

One hundred eighty-five youth, ranging in age from 18 to 23 years (mean = 20.8, $SD \pm 1.6$), agreed to participate. Participants were predominantly White/not Latino ($n = 125$, 67.6%), with the remainder identifying themselves as Black/not Latino ($N = 3$, 1.6%), Latino ($n = 8$, 4.3%), American Indian ($n = 4$, 2.2%) or other/mixed ethnicity ($n = 44$, 23.8%). Most reported living "on the streets" or outdoors ($n = 102$, 55.1%) and "panhandled" ($n = 138$, 74.6%) or performed temporary work ($n = 98$, 53.0%) to earn money. Less than half had graduated from high school ($n = 86$, 46.5%) and most had been arrested at least once during their lifetime ($n = 167$, 90.3%).

The majority of these young people reported drinking alcohol ($N = 149$, 80.6%) and 61% ($n = 113$) were identified as alcohol dependent. Of the 84.9% ($n = 157$) who reported using drugs, more than half (54.6%, $n = 101$) were drug dependent. Although youth reported using a wide variety of substances, the predominant drug of choice was marijuana (71.9%, $n = 133$) or heroin/morphine/opiates (13.5%, $n = 25$).

MEASURES

The dependent variable for the current study was alcohol and drug dependency and was measured by the Mini International Neuropsychiatric Interview (MINI). The MINI is a widely-used, brief, structured diagnostic interview developed by psychiatrists in the United States and Europe for assessing DSM-IV psychiatric disorders (Lecrubier et al., 1997; Sheehan et al., 1998). With an administration time of approximately 15 to 20 minutes for the full MINI, this structured psychiatric interview allows screening for substance abuse and dependency and Axis I psychiatric disorders. For this study, only the alcohol (8 items) and drug (10 items) dependency modules were administered. Alcohol and drug dependency were each coded as yes = 1 or no = 0. Drug dependency was based on the drug the individual self-identified as the one they used most frequently. Cronbach's alpha for the alcohol dependency items in this sample was moderately high ($alpha = .78$), as was the alpha for drug dependency ($alpha = .73$).

Variables that measured basic demographics and the four domains of estrangement were collected through a combination of researcher-generated questions and standardized instruments. Demographic variables included gender (1 = male, 2 = female), ethnicity (minority = 1, white = 2), and age.

Disaffiliation was measured by the following variables: (1) respondent primarily lived on the street, including public places such as parks and abandoned buildings

(1=yes, 0=no), (2) carried a weapon as a means of keeping themselves safe (yes = 1, no = 0), (3) total number of arrests for violent offenses, (4) parental assistance and support in the previous six months (1= almost never to 4 = a lot of the time), (5) number of days parent used alcohol in the 30 days before the youth left home, and (6) number of days parent used marijuana in the 30 days before the youth left home.

Human capital variables included single-items querying how the youth obtained money, such as (1) panhandling, (2) working full-time, (3) working part-time or doing temporary work, (4) selling drugs or making money from other illegal activities, (5) selling blood/plasma, and (6) other street friends or family friends giving the respondent money (all coded yes = 1, no = 0).

Culture of homelessness variables included: (1) the number of drugs the respondent used during the past 6 months, (2) marijuana identified as the drug used most frequently, (3) heroin/opiates identified as the drug used most frequently, (4) methamphetamines identified as the drug used most frequently, (5) the number of days in the past month that street friends drank alcohol, (6) length of time the youth spent engaged in street life each day (coded very little = 1, to most all day = 4), and (7) the Future Time Perspective Scale (FTP) (Heimberg, 1963; Mahon & Yarcheski, 1994). The FTP Scale is a 25-item 7-point summated rating scale that defines future time perspective as the degree to which an individual views the future as predictable, structured, and controllable. Higher scores indicate an extended and hopeful perspective regarding the future with a positive view of successful attainment of goals and dreams (Heimberg, 1963). In studies with other homeless youth, Rew and colleagues (Rew, Fouladi, Land, & Wong, 2007) reported strong reliability with alpha = .90 for females and .89 for males. For this sample, the Cronbach alpha = .70

Psychological dysfunction was measured by assessing positive affect. This six-item scale was adapted from the K6 scale (Kessler et al., 2002) that was developed to evaluate psychological distress. Questions were revised, as requested by the drop-in center, to query positive mood rather than distress. This revision aimed to diminish the likelihood of participants experiencing psychological distress due to negatively-worded questions related to their mental health. The revised questions included: "During the past month, . . . I felt tranquil, serene, and calm," "I felt hopeful," "I felt relaxed and not easily agitated," "I felt cheerful, like nothing could get me down," "I felt everything was easy and effortless," and "I felt valued." Reliability was calculated for the revised items with fairly strong results (alpha = .84).

DATA ANALYSIS

To answer the research questions, the sample was divided into two subgroups: alcohol dependent/not dependent and drug dependent/not dependent. To determine the differences between homeless youth who were identified as alcohol or drug dependent compared to those who were not, t-tests and chi square analyses

were conducted. Bivariate relationships were established between each societal estrangement domain (disaffiliation, human capital, culture of homelessness, psychological dysfunction) and the dichotomous alcohol or drug dependency outcome variables. As none of the demographic variables were significantly related to alcohol or drug dependency, they were not included as control variables in subsequent analyses. All variables in each estrangement domain that were statistically significant at the .05 level in the bivariate analyses were entered into multivariate logistic regression models. Separate logistic regression models were calculated for alcohol and drug dependency to examine the effect of indicators of the four estrangement domains on the likelihood of youth being dependent on alcohol or not and dependent on drugs or not.

RESULTS

GROUP DIFFERENCES

ALCOHOL DEPENDENT VS. NON-DEPENDENT.

Results of the chi-square and t-tests indicated some significant differences between homeless young people who were alcohol dependent and those who were not (See Table 1). Among disaffiliation variables, significantly more alcohol dependent young adults reported living on the street ($\chi^2 = 89.73, p \leq .01$) and carrying a weapon to keep themselves safe ($\chi^2 = 8.89, p \leq .001$) than young adults who were not alcohol dependent. Dependent youth reported their parents drank more often ($\chi^2 = -1.79, p \leq .05$), but smoked marijuana less often ($\chi^2 = 1.35, p \leq .05$) than did the parents of their non-dependent counterparts.

Regarding sources of income as indicators of human capital, engaging in panhandling was reported more often as a means of making money among alcohol dependent youth ($\chi^2 = 7.98, p \leq .001$), but fewer alcohol dependent youth reported selling their blood or plasma for money compared to non-dependent youth ($\chi^2 = 9.59, p \leq .001$). Significantly more alcohol dependent young adults reported selling drugs ($\chi^2 = .64, p \leq .05$) than did those who were not alcohol dependent.

Among indicators of immersion in the homeless culture, alcohol dependent young people reported using a greater number of drugs ($\chi^2 = -3.38, p \leq .01$), used marijuana more frequently ($\chi^2 = 4.38, p \leq .01$), and had friends who drank alcohol more days each month ($\chi^2 = -3.79, p \leq .001$) than did those not dependent on alcohol. In addition, alcohol dependent youth spent the majority of their time hanging out on the street ($\chi^2 = 1.77, p \leq .05$) and had lower scores on the scale measuring perspectives of the future ($\chi^2 = 3.2, p \leq .001$) than their non-dependent counterparts. However, the indicator of psychological dysfunction, positive affect, was not significantly different between these groups.

DRUG DEPENDENT VS. NON-DEPENDENT

Similar to results of alcohol dependency, Table 2 shows bivariate analyses of disaffiliation variables that indicated significantly more drug-dependent young adults carried a weapon for safety ($\chi^2 = 7.81, p \leq .01$). These drug dependent youth also reported having a greater number of violent offense charges ($\chi^2 = -2.10, p \leq .01$) and used marijuana more days each month ($\chi^2 = 1.35, p \leq .05$) than did their non-dependent counterparts.

Indicators of human capital showed that drug dependent young people were significantly more likely than non-dependent youth to sell drugs ($\chi^2 = 7.19, p \leq .001$) or get money from friends ($\chi^2 = 4.0, p \leq .05$), while more non-dependent youth reported working full time than did their drug dependent counterparts ($\chi^2 = 3.80, p \leq .05$).

In terms of the culture of homelessness domain, drug-dependent young adults used a greater number of drugs ($\chi^2 = -2.34, p \leq .05$), used less marijuana ($\chi^2 = 6.25, p \leq .01$), but used more heroin/morphine/opiates ($\chi^2 = 16.32, p \leq .001$) than did non-dependent young adults. As with alcohol dependent youth, drug dependent youth scored lower on the Future Time Perspective scale ($\chi^2 = 89.73, p \leq .01$) than those not drug dependent. Fewer drug-dependent youth reported working full time ($\chi^2 = 3.80, p \leq .05$), but reported dealing drugs as a source of income than did non-dependent youth ($\chi^2 = 7.19, p \leq .001$). According to the indicator of psychological dysfunction, drug dependent young people scored significantly lower on positive mood ($\chi^2 = 1.78, p \leq .05$) than their non-dependent counterparts.

PREDICTORS OF ALCOHOL DEPENDENCE

Table 3 displays the odds ratios for reporting alcohol dependency or no dependency according to indicators of the four estrangement domains. For the disaffiliation domain, the odds of alcohol dependency were higher for those who carried a weapon to ensure their safety ($OR=2.58$) and whose parents used less marijuana in the month before the youth left home ($OR = .96$). The only significant predictor of the human capital domain indicated that the likelihood of alcohol dependency decreased for those who reported selling their blood or plasma for money ($OR=.08$). Indicators of the culture of homelessness domain showed that the greater number of drugs used ($OR=1.24$), spending more time each day on the street with other homeless youth ($OR=3.68$), and having more friends who drank alcohol ($OR=1.05$) significantly increased the likelihood of alcohol dependency. However, for every unit increase in the scale measuring future plans and dreams, youth had a 5% reduction in the odds of alcohol dependence ($OR=.95$). The final estrangement domain, psychological dysfunction, was not a significant predictor of alcohol dependence (model $\chi^2=63.47$ ($df=13$), $p<.001$).

**TABLE 1: SOCIAL ESTRANGEMENT DIFFERENCES BETWEEN ALCOHOL DEPENDENT/
NON-DEPENDENT HOMELESS YOUTH**

Characteristics	Dependent	Not Dependent	<i>t/χ²</i>
	<i>N (%)</i> Mean ± <i>SD</i>	<i>N (%)</i> Mean ± <i>SD</i>	
Disaffiliation			
Primarily live on street	72 (62.7)	30 (19.6)	9.73**
Carry a weapon	81 (43.8)	36 (19.4)	8.89**
Total violent offenses	.44 ± 1.7	.37 ± 1.1	-.34
No parental assistance	50 (27.0)	23 (12.4)	4.03
Parent alcohol use	14.6 ± 14.1	11.0 ± 12.5	-1.7*
Parent marijuana use	7.4 ± 12.1	9.9 ± 13.3	1.35*
Ever arrested	103 (55.7)	64 (34.6)	.26
Ever juvenile detention	45 (24.3)	38 (20.5)	2.98
Ever in jail	47 (25.4)	51 (27.6)	.88
Human capital			
Panhandling	93 (84.9)	46 (54.1)	7.98***
Work full time	33 (34.8)	24 (22.2)	.35
Temporary work	63 (61.1)	37 (38.9)	.34
Dealing drugs	41 (38.5)	22 (24.5)	.64*
Selling blood/plasma	4 (9.8)	12 (6.2)	9.59***
Friends give money	58 (56.2)	34 (35.8)	.30
Homeless culture			
# drugs used	5.1 ± 2.5	3.9 ± 2.2	-3.38**
Use Marijuana	75 (81.2)	58 (51.8)	4.38*
Use Heroin/opiates	19 (15.3)	6 (9.7)	2.71
Use Methamphetamines	5 (3.7)	1 (2.3)	1.29
# days friends drank/month	26.6 ± 8.1	20.9 ± 12.2	-3.7***
Spent most of day on street	52 (47.6)	26 (30.4)	1.77*
Future Time Perspective	86.7 ± 18.9	95.7 ± 17.3	3.2**
Psychological dysfunction			
Positive affect score	19.8 ± 6.2	20.8 ± 6.9	.93

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

**TABLE 2: SOCIAL ESTRANGEMENT DIFFERENCES BETWEEN DRUG DEPENDENT/
NON-DEPENDENT HOMELESS YOUTH**

Characteristics	Dependent <i>N (%)</i> Mean \pm <i>SD</i>	Not Dependent <i>N (%)</i> Mean \pm <i>SD</i>	<i>t/χ²</i>
Disaffiliation			
Primarily live on street	61 (55.8)	41 (46.2)	2.97
Carry a weapon	73 (39.5)	44 (23.8)	7.81**
Total violent offenses	.61 \pm 1.9	.17 \pm .56	-2.1*
No parental assistance	38 (20.5)	35 (18.9)	3.11
Parent alcohol use	12.3 \pm 13.6	14.3 \pm 13.5	1.0
Parent marijuana use	9.92 \pm 13.7	6.59 \pm 11.0	-1.8*
Ever arrested	94 (50.8)	73 (39.5)	1.98
Ever juvenile detention	47 (25.4)	36 (19.5)	.25
Ever in jail	80 (43.2)	58 (31.4)	2.50
Human capital			
Panhandling	76 (41.1)	63 (34.1)	.01
Work full time	25 (13.5)	32 (17.3)	3.80*
Temporary work	60 (32.4)	40 (21.6)	2.56
Dealing drugs	43 (23.2)	20 (10.8)	7.19***
Selling blood/plasma	6 (3.2)	10 (5.4)	2.06
Friends give money	57 (30.8)	35 (18.9)	4.0*
Homeless culture			
# drugs used	5.0 \pm 2.3	4.2 \pm 2.6	-2.34*
Use Marijuana	65 (35.1)	68 (36.8)	6.25**
Use Heroin/opiates	23 (12.4)	2 (1.1)	16.32***
Use Methamphetamines	5 (2.7)	1 (.5)	2.07
# days friends drank/month	25.2 \pm 9.6	23.8 \pm 10.7	-.93
Spent most of day on street	42 (22.7)	36 (19.5)	.03
Future Time Perspective	87.9 \pm 18.5	92.9 \pm 18.7	1.76*
Psychological dysfunction			
Positive affect score	19.4 \pm 6.3	21.1 \pm 6.7	1.78*

p* \leq .05, ** *p* \leq .01, * *p* \leq .001

**TABLE 3: LOGISTIC REGRESSION TO PREDICT ALCOHOL DEPENDENCY
BY DOMAINS OF ESTRANGEMENT**

Estrangement domains/variables	<i>B (SE)</i>	<i>OR</i>	<i>95% C.I.</i>
Disaffiliation			
Primarily live on street	.43 (.45)	1.53	.35–3.6
Carry weapon	.95 (.44)	2.58*	1.1–6.1
# days parent alcohol use	.03 (.02)	1.03	.99–1.1
# days parent marijuana use	-.03 (.02)	.96*	.93–.99
Human capital			
Panhandling	.03 (.51)	1.03	.38–2.8
Dealing drugs	-.31 (.47)	.65	.26–1.64
Selling blood/plasma	-2.5 (.78)	.08**	.02–.37
Homeless culture			
# drugs used	.22 (.10)	1.24*	1.0–1.5
Use Marijuana	-.47 (.48)	.63	.34–1.6
# days friends drank	.05 (.02)	1.05*	1.0–1.1
Spent most of day on street	1.3 (.57)	3.68*	1.2–11.2
Future Time Perspective	-.05 (.01)	.95**	.93–.99
Psychological dysfunction			
Positive affect score	.001 (.03)	1.00	.94–1.07
Model χ^2	63.47 (<i>df</i> =13), <i>p</i> ≤ .001		

* *p* ≤ .05, ** *p* ≤ .01

PREDICTORS OF DRUG DEPENDENCE

As shown in Table 4, indicators of disaffiliation revealed that the odds of being drug dependent increased for those who carried a weapon (*OR*=2.52). The only human capital domain variable that significantly predicted drug dependency was measured by youth who reported they received money from friends and increased the likelihood of drug dependency (*OR*=1.93). Indicators of the culture of homelessness domain showed that for every unit increase in use of heroin/opiates, these young adults were 38 times more likely to meet criteria for drug dependency (*OR*=38.37). The psychological dysfunction domain did not change the odds of drug dependence (model $\chi^2=42.80$ (*df*=10), *p*<.001).

**TABLE 4: LOGISTIC REGRESSION TO PREDICT DRUG DEPENDENCY
BY DOMAINS OF ESTRANGEMENT**

Estrangement domains/variables	<i>B (SE)</i>	<i>OR</i>	<i>95% C.I.</i>
Disaffiliation			
Total violent offenses	.36 (.26)	1.44	.85–2.4
Carry weapon	.93 (.39)	2.52*	1.2–5.5
# days parent marijuana use	.02 (.02)	1.02	.99–1.0
Human capital			
Dealing drugs	.24 (.43)	1.27	.54–2.9
Money from friends	.66 (.40)	1.93*	.88–4.2
Homeless culture			
# drugs used	.04 (.08)	1.04	.89–1.2
Use Marijuana	.38 (.51)	1.47	.54–4.0
Use Heroin/opiates	3.65 (1.16)	38.37**	30.9–75.6
Future Time Perspective	-.02 (.01)	.98	.96–1.0
Psychological dysfunction			
Positive affect score	-.03 (.03)	.97	.91–1.04
Model χ^2	42.80 (<i>df</i> =10), <i>p</i> ≤.001		

* *p* ≤ .05, ** *p* ≤ .01

DISCUSSION

Results of this study confirm previous findings that a large percentage of homeless youth not only use substances, but are dependent on them as well (Chen et al., 2006; Martijn & Sharpe, 2006). In this sample, the vast majority reported high levels of alcohol and drug use, with more than half being identified as dependent. Polysubstance use was also highly prevalent, consistent with previous reports of the normative nature of this behavior among this young adult population (Peterson, Baer, Wells, Ginzler, & Garrett, 2006). Previous studies have suggested that these young people typically use the substances most readily available in the region of the country in which they travel (McManus & Thompson, in press). Nearly 75% of youth reported their drug of choice was marijuana while smaller percentages preferred heroin, methamphetamines, or other hard drugs. The popularity of marijuana has been cited in previous studies of homeless youth (Haley et al., 2004), and consistently reported as being nearly universal among this population of young adults.

ALCOHOL DEPENDENCY

Findings suggested several differences between those who reported alcohol dependence and those who did not. Among alcohol dependent homeless young adults, disaffiliation appeared greater as they carried weapons, lived predominately on the street, and reported their parents drank more alcohol (but used less marijuana) than young adults who were not alcohol dependent. Although those who were alcohol dependent used few harder drugs than marijuana, they reported using a greater variety of drugs than did those who were not alcohol dependent. It is likely that the prominence of alcohol use in their daily lives is encouraged by other street peers who also abuse alcohol. Among this sample, street friends appeared to drink nearly every day and they spent most of each day hanging out with other street-involved young people. Not surprisingly, those who were not alcohol dependent were more likely than those who were dependent to earn most of their money from selling their blood or plasma, presumably because their blood was “clean,” while alcohol dependent young adults depended on dealing drugs or panhandling to earn money. This combination of characteristics suggests that those dependent on alcohol have truly disaffiliated themselves from parents and other societal institutions, such as regular employment and education, to become entrenched in street culture.

Findings suggest varying support for the predictive power of the four estrangement domains. Specifically, youth’s disaffiliation from societal norms as indicated by carrying a weapon, predicted dependency. However, parents’ marijuana use predicted non-dependence on alcohol. In this group of homeless young people, many had left parental homes years earlier. Thus, they had been living on the streets for extended periods of time and parental substance use had little effect on their own use or dependency. Carrying a weapon suggests societal disaffiliation that goes beyond merely living on the streets, but engaging in activities required to remain safe while living rough.

Although dealing drugs and panhandling were human capital indicators related to alcohol dependency, only selling one’s blood or plasma for money predicted not being dependent on alcohol. However, indicators of homeless cultural identity were highly predictive of alcohol dependency as homeless young adults appeared to be greatly influenced by street peers, as evidenced by the increased time they spent on the street each day, their poly-substance use, having street friends who drank alcohol nearly every day, and perceiving few hopes and dreams for their future.

This combination of predictors suggests that alcohol dependent young people may find it more difficult to live with others in traditional settings. They prefer living outdoors or in public spaces, but recognize the safety issues involved in living on the street and carry weapons in order to keep themselves and their belongings safe. The combination of alcohol abuse as a social activity and the need for safety often

results in groups of homeless young people clustering together in loose associations in order to diminish victimization and provide emotional support to one another (Bender et al., 2007). A lack of hope and motivation concerning leaving the streets also leads homeless youth to form ties with similarly situated others and develop loose connections aimed at improving their survival strategies (Raleigh-DuRoff, 2004). They construct quasi-families that provide emotional and financial support, as well as safety (Bender et al., 2007). Although mutually supportive, these “family units” may further entrench these young people in the street economy and culture (Thompson, Kim, Flynn, & Kim, 2007; Unger et al., 1998). Abusing alcohol, then, becomes a common and normative daily activity that provides not only respite from the daily stress of living on the street, but is an activity around which social and emotionally supportive interactions occur.

DRUG DEPENDENCY

Similar to alcohol dependent youth, differences between those who were dependent on drugs and those who were not were noted. Those identified as drug dependent were more likely to report carrying a weapon, experiencing more violent offender charges, and engaging in drug distribution. These dependent young people more frequently listed their drug of choice as heroin or other opiates; whereas, rates of marijuana use were less among these young adults. Not surprisingly, a greater proportion of drug-dependent youth admitted to dealing or selling drugs as a way to earn money. Nearly all of the respondents in this sample had been arrested, spent some time in jail and/or had been admitted to juvenile detention facilities. Past research suggests this population is heavily involved in criminal/illegal activity and these activities are influenced by various factors related to peer involvement and the street economy (Baron, 2003). Many of these young adults reported carrying a weapon to keep safe. As the street lifestyle is overwhelmingly dominated by criminal behaviors and substance abuse, being under the influence while committing a crime appears likely for those heavily involved in this subculture (Baron, 1997).

Predictors of drug dependency highlighted issues of the combination of drug and street culture. Specifically, carrying a weapon, relying on other street friends for money, and using ‘hard’ drugs increased the likelihood of drug dependency. Previous research has suggested that economically disadvantaged groups are also socially isolated, which may create an atmosphere of constant physical threat and victimization (Baron, 1997). These living conditions, compounded with the need for monetary and material resources, may lead to criminal and violent activities (Baron, 2003). Young homeless males who engage in this high-risk lifestyle are more likely to become involved in violent altercations due to their association with other homeless males who are involved in violent or criminal behaviors (Gaetz,

2004). As a drug dependent lifestyle requires continuous infusions of money, heavy involvement in property crime and drug distribution are common.

Peer influences also play a major role in youths' immersion in the street environment and peers have been identified as one of the most important risk factors for use of illegal drugs (Inciardi & Surratt, 1998). Homeless young people often seek out similarly situated peers who provide opportunities and reinforcement for drug-using attitudes and behavior (Johnson et al., 2005), even drawing upon one another for money and other material support. In this study, features of the homeless subculture, especially regarding extensive use of hard drugs such as heroin, methamphetamines, or other opiates was associated with drug dependency. Previous research indicates that the homeless experience itself encourages the use of hard-core, illegal drugs (Baron, 1999; Bender et al., 2007). Street involvement provides opportunities to sample various substances, especially as young adults travel from one region of the country to the other and become increasingly isolated from conventional society.

In general, factors that predicted alcohol and drug dependence were dissimilar. Overall, the conceptual variables measuring the domains of estrangement predicted more of the variance in alcohol-dependence than drug-dependence with the largest group of predictors in the culture of homelessness domain. This is likely due to these young adults' extensive experience in street-involved activities and entrenchment in the homeless lifestyle. As Auerswald and Eyre (2002) have shown, becoming acculturated to the street economy, drugs, and the homeless lifestyle contribute to survival in this harsh environment. Therefore, results support the notion that being engaged in activities that center on the homeless lifestyle is highly associated with other behaviors common to street living, such as alcohol and drug abuse.

LIMITATIONS

It is important to consider methodological limitations of this study when interpreting the results. First, the study included a convenience sample of youth accessing drop-in services. This service is historically frequented by various subgroups of homeless and traveling young people, including those who do not utilize other homeless services. Although, the characteristics of the young people in this study appear similar to other studies of street-involved youth (Bousman et al., 2005; Rew, 2002), future research would be needed to determine whether this sample of street-involved homeless youth have comparable experiences to those accessing services in other areas of the country.

In addition, caseworkers at the drop-in center did not collect information on the number of individuals who refused to participate. Although this creates difficulty in assessing possible selection bias, the caseworkers only sought participation from youth they knew used substances and were not currently intoxicated or under the

influence of drugs. As caseworkers were very familiar with the participants due to their frequent utilization of drop-in services, the caseworker's reported that few youth who were approached refused to participate. This level of participation by the young people increases the likelihood that this sample characterizes the youth population sought for this study.

The present study also relied on retrospective self-reports for data collection. While some concern for youth diminishing their reports of alcohol and drug misuse exists, interviewers found them remarkably forthcoming and open in discussions of their use, similar to others who note that self-reports of drug use are reasonably valid (Babor, Stephens, & Marlatt, 1987). Although these self-reports are uncorroborated by external sources, interviewers found youth willing, even anxious, to describe their drug/alcohol use behaviors beyond the quantitative data reported here. The qualitative responses of these youth are described in a separate publication. Other studies have noted similar accuracy and willingness to disclose risky behaviors among this population (Anglin, Hser, & Chou, 1993), further supporting the findings associated with youth reports in this study.

Finally, the cross-sectional design of this study precludes drawing causal inferences concerning the conceptual domains of societal estrangement and substance dependency. Although bivariate analyses confirm the usefulness of the societal estrangement domains related to alcohol and drug dependency, there is a potential for bidirectional associations and time ordering cannot be determined. To address this limitation, multivariate logistic regression models were utilized to increase the ability to control alternative hypotheses and the credibility of inferences drawn from these data. These findings point to the need for further research that incorporates use of longitudinal or other time-series designs to examine societal estrangement predictors of substance dependency over time.

CONCLUSIONS

While recognizing the limitations of this study, findings confirm the magnitude of alcohol/drug dependence among homeless young adults and demonstrate the societal estrangement domains related to substance dependence. Results highlight the need for agencies providing care to these youth to assess alcohol and drug use and develop referral mechanisms and brief interventions that target alcohol/drug issues. Service providers that identify, understand, and facilitate social processes that result in reduced harm without judgment or condemnation will likely find greater success in assisting these young people. Conveying genuine concern, while recognizing their unique perspectives, lifestyles and culture is more likely to help youth find solutions to their concerns and difficulties than prescriptive approaches.

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REFERENCES

- Anglin, D. M., Hser, Y., & Chou, C.
1993 Reliability and validity of retrospective behavioral self-report by narcotics addicts. *Evaluation Review*, 17, 91-108.
- Auerswald, C. L., & Eyre, S. L.
2002 Youth homelessness in San Francisco: A life cycle approach. *Social Science & Medicine*, 54(10), 1497-1512.
- Ayerst, S. L.
1999 Depression and stress in street youth. *Adolescence*, 34(135), 567-575.
- Babor, T. F., Stephens, R. S., & Marlatt, G. A.
1987 Verbal report methods in clinical research on alcoholism: Response bias and its minimization. *Journal of Studies on Alcohol*, 48(5), 410-424.
- Bahr, H. M., & Caplow, T.
1973 *Old men drunk and sober*. New York: New York University Press.
- Bahr, J.
1973 *Skid Row: An introduction to disaffiliation*. New York: Oxford University Press.
- Baron, S. W.
1997 Risky lifestyles and the link between offending and victimization. *Studies on Crime & Crime Prevention*, 6(1), 53-71.
- Baron, S. W.
1999 Street youths and substance use: The role of background, street lifestyle, and economic factors. *Youth & Society*, 31(1), 3-26.
- Baron, S. W.
2003 Street youth violence and victimization. *Trauma Violence Abuse*, 4(1), 22-44.
- Bender, K., Thompson, S. J., McManus, H. H., Lantry, J., & Flynn, P. M.
2007 Capacity for survival: Exploring strengths of homeless street youth. *Child and Youth Care Forum*, 36, 25-42.
- Bousman, C. A., Blumberg, E. J., Shillington, A. M., Hovell, M. F., Ji, M., Lehman, S., & Clapp, J.
2005 Predictors of substance use among homeless youth in San Diego. *Addictive Behaviors*, 30(6), 1100-1110.

- Bullock, A., Stallybrass, O., & Trombley, S. (Eds.)
 1988 *The Fontana dictionary of modern thought, 2nd Ed.* London: Fontana.
- Castel, R.
 2000 The roads to disaffiliation: Insecure work and vulnerable relationships. *International Journal of Urban and Regional Research, 24*(3), 519-535.
- Chen, X., Thrane, L., Whitbeck, L. B., & Johnson, K.
 2006 Mental disorders, comorbidity, and post-runaway arrests among homeless and runaway adolescents. *Journal of Research on Adolescence, 16*(3), 379-402.
- Dalton, M. M., & Pakenham, K. I.
 2002 Adjustment of homeless adolescents to a crisis shelter: Application of a stress and coping model. *Journal of Youth & Adolescence, 31*(1), 79-85.
- Dembo, R., Pacheco, K., Schmeidler, J., Fisher, L., & Cooper, S.
 1997 Drug use and delinquent behavior among high risk youths. *Journal of Child and Adolescent Substance Abuse, 6*(2), 1-25.
- Farabee, D., Shen, H., Hser, Y.I., Grella, C. E., & Anglin, M. D.
 2001 The effect of drug treatment on criminal behavior among adolescents in DATOS-A. *Journal of Adolescent Research, 16*(6), 679-690.
- Fest, J.
 2003 Understanding street culture: A prevention perspective. *School Nurse News, 20*(2), 16-18.
- Fors, S. W., & Rojek, D. G.
 1991 A comparison of drug involvement between runaways and school youths. *Journal of Drug Education, 21*(1), 13-25.
- Gaetz, S.
 2004 Safe streets for whom? Homeless youth, social exclusion, and criminal victimization. *Canadian Journal of Criminology and Criminal Justice, 46*(4), 423-455.
- Ginzler, J. A., Cochran, B. N., Domenech-Rodriguez, M., Cauce, A. M., & Whitbeck, L. B.
 2003 Sequential progression of substance use among homeless youth: an empirical investigation of the gateway theory. *Substance Use & Misuse, 38*(3-6), 725-758.
- Greene, J. M., & Ringwalt, C. L.
 1997 Substance use among runaway and homeless youth in three national samples. *American Journal of Public Health, 87*(2), 229-236.
- Grigsby, C., Baumann, D., Gregorich, S. E., & Roberts-Gray, C.
 1990 Dissaffiliation to entrenchment: A model for understanding homelessness. *Journal of Social Issues, 46*(4), 141-157.

- Haley, N., Roy, E., Leclerc, P., Boudreau, J. F., & Boivin, J. F.
2004 Characteristics of adolescent street youth with a history of pregnancy. *Journal of Pediatric and Adolescent Gynecology*, *17*(5), 313-320.
- Heimberg, L. K.
1963 *The measurement of future time perspective*. Unpublished Doctoral Dissertation, Vanderbilt University, Nashville.
- Inciardi, J. A., & Surratt, H. L.
1998 Children in the streets of Brazil: Drug use, crime, violence, and HIV risks. *Substance Use & Misuse*, *33*(7), 1461-1480.
- Johnson, B. D., Wish, E., Schmeidler, J., & Huizinga, D.
1991 Concentration of delinquent offending: Serious drug involvement and high delinquency rates. *Journal of Drug Issues*, *21*, 205-229.
- Johnson, K. D., Whitbeck, L. B., & Hoyt, D. R.
2005 Substance abuse disorders among homeless and runaway adolescents. *Journal of Drug Issues*, *35*(4), 799-816.
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L. T., Walters, E. E., & Zaslavsky, A. M.
2002 Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, *32*, 959-979.
- Kidd, S. A.
2003 Street Youth: Coping and interventions. *Child & Adolescent Social Work Journal*, *20*(4), 235-261.
- Kilpatrick, D. G., Ruggiero, K. J., Acierno, R., Saunders, B. E., Resnick, H. S., & Best, C. L.
2003 Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the National Survey of Adolescents. *Journal of Consulting And Clinical Psychology*, *71*(4), 692-700.
- Kipke, M. D., Montgomery, S. B., Simon, T. R., & Iverson, E. F.
1997 Substance abuse disorders among runaway and homeless youth. *Substance Use & Misuse*, *32*(7-8), 969-986.
- Kipke, M. D., Unger, J. B., O'Connor, S., Palmer, R. F., & LaFrance, S.
1997 Street youth, their peer group affiliation and differences according to residential status, subsistence patterns, and use of services. *Adolescence*, *32*(127), 655-669.
- Lankenau, S. E., Clatts, M. C., Welle, D., Goldsamt, L. A., & Gwadz, M. V.
2005 Street careers: Homelessness, drug use, and sex work among young men who have sex with men (YMSM). *International Journal of Drug Policy*, *16*(1), 10-18.

- Lecrubier, Y., Sheehan, D., Weiller, E., Amorim, P., Bonora, I., Sheehan, K., Janavs, J., & Dunbar, G.
1997 The MINI International Neuropsychiatric Interview - A short diagnostic structured interview: Reliability and validity according to the CIDI. *European Psychiatry*, 12, 224-231.
- Lindsey, E. W., Kurtz, D., Jarvis, S., Williams, B., & Nackerud, L.
2000 How runaway and homeless youth navigate troubled waters: Personal strengths and resources. *Child & Adolescent Social Work Journal*, 17(2), 115-140.
- Little, M., & Steinberg, L.
2006 Psychosocial correlates of adolescent drug dealing in the inner city: Potential roles of opportunity, conventional commitments, and maturity. *Journal of Research in Crime and Delinquency*, 43(4), 357-386.
- Mahon, N. E., & Yarcheski, T. J.
1994 Future time perspective and positive health practices in adolescents. *Perceptual and Motor Skills*, 79, 395-398.
- Mallett, S., Rosenthal, D., Myers, P., Milburn, N., & Rotheram-Borus, M. J.
2004 Practising homelessness: A typology approach to young people's daily routines. *Journal of Adolescence*, 27(3), 337-349.
- Malloy, C., Christ, M. A., & Hohloch, F. J.
1990 The homeless: Social isolates. *Journal of Community Health Nursing*, 7(1), 25-36.
- Martijn, C., & Sharpe, L.
2006 Pathways to youth homelessness. *Social Science & Medicine*, 62(1), 1-12.
- McManus, H. H., & Thompson, S. J.
in press Trauma among unaccompanied homeless youth: The integration of street culture into a model of intervention. *Journal of Aggression, Maltreatment, and Trauma*.
- McMorris, B. J., Tyler, K. A., Whitbeck, L. B., & Hoyt, D. R.
2002 Familial and "on-the-street" risk factors associated with alcohol use among homeless and runaway adolescents. *Journal of Studies on Alcohol*, 63(1), 34-43.
- Mundy, P., Robertson, M., Robertson, J., & Greenblatt, M.
1990 The prevalence of psychotic symptoms in homeless adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29(5), 724-731.

Noell, J. W., & Ochs, L. M.

2001 Relationship of sexual orientation to substance use, suicidal ideation, suicide attempts, and other factors in a population of homeless adolescents. *Journal of Adolescent Health*, 29(1), 31-36.

Peterson, P. L., Baer, J. S., Wells, E. A., Ginzler, J. A., & Garrett, S. B.

2006 Short-term effects of a brief motivational intervention to reduce alcohol and drug risk among homeless adolescents. *Psychology of Addictive Behaviors*, 20(3), 254-264.

Piliavin, I., Sosin, M. R., Westerfelt, A. H., & Matsueda, R. L.

1993 The duration of homelessness careers: An exploratory study. *Social Service Review*, Dec. vol. 67.4, pp. 576-598.

Piliavin, I., Wright, B. R., & Mare, R. D.

1996 Exits from and returns to homelessness. *Social Service Review*, Mar, 32-57.

Raleigh-DuRoff, C.

2004 Factors that influence homeless adolescents to leave or stay living on the street. *Child & Adolescent Social Work Journal*, 21(6), 561-571.

Rew, L.

2002 Characteristics and health care needs of homeless adolescents. *Nursing Clinics of North America*, 37(3), 423-431.

Rew, L., Fouladi, R.T., Land, L., & Wong, Y. J.

2007 Outcomes of a brief sexual health intervention for homeless youth. *Journal of Health Psychology*, 12(5), 818-832.

Rew, L., Fouladi, R. T., & Yockey, R. D.

2002 Sexual health practices of homeless youth. *Journal of Nursing Scholarship*, 34(2), 139-145.

Rew, L., Taylor-Seehafer, M., & Fitzgerald, M.

2001 Sexual abuse, alcohol and other drug use, and suicidal behaviors in homeless adolescents. *Issues in Comprehensive Pediatric Nursing*, 24(4), 225-240.

Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Amorim, P., Janavs, J., Weiller, E., Hergueta, T., Baker, R., & Dunbar, G. C.

1998 The Mini-International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry*, 59(Suppl 20), 22-33.

- Shinn, M., Gottlieb, J., Wett, J. L., Bahl, A., Cohen, A., & Baron Ellis, D.
2007 Predictors of homelessness among older adults in New York City: Disability, economic, human and social capital and stressful events. *Journal of Health Psychology, 12*(5), 696-708.
- Sibthorpe, B., Drinkwater, J., Gardner, K., & Bammer, G.
1995 Drug use, binge drinking and attempted suicide among homeless and potentially homeless youth. *Australian & New Zealand Journal of Psychiatry, 29*(2), 248-256.
- Sosin, M. R., & Bruni, M.
2000 Personal and situational perspectives on rejection of a homeless and substance abuse program: An exploratory study. *Social Work Research, 24*(1), 16-27.
- Stewart, A. J., Steiman, M., Cauce, A. M., Cochran, B. N., Whitbeck, L. B., & Hoyt, D. R.
2004 Victimization and post-traumatic stress disorder among homeless adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 43*(3), 325-331.
- Taylor-Seehafer, M.
2004 Positive youth development: Reducing the health risks of homeless youth. *The American Journal of Maternal/Child Nursing, 29*(1), 36-40.
- Thompson, S. J.
2004 Risk/protective factors associated with substance use among runaway/homeless youth utilizing emergency shelter services nationwide. *Substance Abuse, 25*(3), 13-26.
- Thompson, S. J., Kim, J., Flynn, P., & Kim, H.
2007 Peer relationships: Comparison of homeless youth in the U.S. and South Korea. *International Social Work, 50*(6), pp. 783-795.
- Thompson, S. J., McManus, H. H., & Voss, T.
2006 PTSD and substance abuse among youth who are homeless: Treatment issues and implications. *Brief Treatment and Crisis Intervention, 6*(4), 1-12.
- Thompson, S. J., & Pollio, D.
2006 Identifying the role of disaffiliation, psychological dysfunction, identification of runaway culture, and human capital in the runaway history of adolescents. *Social Work Research, 30*(4), 245-251.
- Tyler, K. A., & Johnson, K. A.
2006 Pathways in and out of substance use among homeless-emerging adults. *Journal of Adolescent Research, 21*(2), 133-157.

- Unger, J. B., Kipke, M. D., Simon, T. R., Montgomery, S. B., & Johnson, C. J.
1997 Homeless youths and young adults in Los Angeles: Prevalence of mental health problems and the relationship between mental health and substance abuse disorders. *American Journal of Community Psychology*, 25(3), 371-394.
- Unger, J. B., Simon, T. R., Newman, T. L., Montgomery, S. B., Kipke, M. D., & Albornoz, M.
1998 Early adolescent street youth: An overlooked population with unique problems and service needs. *Journal of Early Adolescence*, 18(4), 325-348.
- Whitbeck, L. B., Chen, X., Hoyt, D. R., Tyler, K. A., & Johnson, K. D.
2004 Mental disorder, subsistence strategies, and victimization among gay, lesbian, and bisexual homeless and runaway adolescents. *Journal of Sex Research*, 41(4), 329-342.
- Whitbeck, L. B., Hoyt, D. R., & Bao, W.N.
2000 Depressive symptoms and co-occurring depressive symptoms, substance abuse, and conduct problems among runaway and homeless adolescents. *Child Development*, 71(3), 721-732.
- Whitbeck, L. B., & Simons, R. L.
1990 Life on the streets. The victimization of runaway and homeless adolescents. *Youth & Society*, 22(1), 108-125.
- Zlotnick, C., Tam, T., & Robertson, M. J.
2003 Disaffiliation, substance use, and exiting homelessness. *Substance Use & Misuse*, 38(3-6), 577-599.