Factors Associated With Trauma and Posttraumatic Stress Disorder Among Homeless Youth in Three U.S. Cities: The Importance of Transience

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Homeless youth experience disproportionately high rates of trauma and posttraumatic stress disorder (PTSD). This study examined correlates of trauma and PTSD among homeless youth with a focus on the impact of homeless culture, substance addiction, and mental health challenges. Homeless youth (*N* = 146) from Los Angeles, California, Denver, Colorado, and St. Louis, Missouri, were recruited from organizations providing services to homeless youth using comparable methods. Results indicate that 57% of respondents had experienced a traumatic event and 24% met criteria for PTSD. A multinomial logistic regression model revealed greater transience, alcohol addiction, mania, and lower self-efficacy predicted PTSD whereas trauma exposure was associated with alcohol addiction only. Findings have implications for screening and intervening with traumatized homeless youth across service settings.

Victimization and trauma are often part of the daily life of homeless youth. In comparison to their housed peers, homeless youth experience disproportionately high rates of sexual assault, robbery, physical beating, and assault with a weapon (Tyler, Hoyt, Whitbeck, & Cauce, 2001). Previous research has shown that approximately 75% of homeless youth report being emotionally, physically, or sexually abused by their families and note these issues are key reasons for running away (Whitbeck & Simons, 1990). Once on the street, approximately 83% of homeless youth report exposure to at least one form of victimization (Stewart et al., 2004), which often compound previous trauma symptoms developed before leaving home (Safyer, Thompson, Maccio, Zittel, & Forehand, 2000).

Vulnerability from previous abuse or victimization intensifies subsequent effects of trauma exposure (Thompson, 2005). Continual exposure to traumatizing events results in an inability to adequately recover from these experiences (Foy, Eriksson, & Trice, 2000). Youth who fail to seek treatment or remove themselves from dangerous street life are then at risk for developing posttraumatic stress disorder (PTSD; Becker et al., 2004; McCarthy & Thompson, in press), which is characterized by reexperiencing the event, numbness of feelings/emotions, avoidance of stimuli...
associated with the event and increased arousal (American Psychiatric Association, 2000). In turn, hypervigilance and emotional deregulation may prevent connections to service providers or prosocial individuals offering informal assistance (Thompson, 2005). Thus, the dangerous nature of street life creates an environment in which trauma incidents and related PTSD symptoms are perpetuated. In an effort to identify malleable factors, the current study examines correlates of trauma and PTSD among a multi-city sample of homeless youth.

Research has identified possible risk factors associated with trauma symptomatology. Substance abuse and dependence have been clearly associated with trauma and PTSD (Ginzler, Garrett, Baer, & Peterson, 2007; Thompson, 2005). One study of homeless youth reports that nearly 40% of youth who meet diagnostic criteria for substance abuse also meet criteria for PTSD (Johnson, Whitbeck, & Hoyt, 2005). However, explanations for the relationship between addiction and PTSD are complex. Some researchers have suggested substance abuse may be an antecedent to trauma exposure. From a risk-amplification perspective, alcohol abuse and other deviant behaviors amplify the effects of childhood abuse on subsequent victimization and depressive symptoms (Whitbeck, Hoyt, & Yoder, 1999). Other research suggests youth may use alcohol to self-medicate or cope with symptoms associated with trauma exposure (Auerswald & Eyre, 2002). Although maladaptive, homeless youth may use substances to repress or numb negative emotions (Kilpatrick et al., 2003), allowing them to escape the psychological stress associated with dangers of street life.

In addition to addiction, other mental health disorders may be related to trauma and PTSD. General population studies indicate that individuals with mood disorders are particularly likely to experience exposure to violence (Simon & Tardiff, 2008). Other research, utilizing national samples of adolescents, indicates that trauma during childhood is associated with increased risk of PTSD and elevated levels of depression (Kilpatrick et al., 2003). The co-occurrence of PTSD and mood disorders has also been documented in homeless youth studies where youths’ depression is predictive of PTSD (McCarthy & Thompson, in press) and youth often report depressive or manic symptoms when lacking adequate skills to manage their distress (Whitbeck, Hoyt, & Bao, 2000).

The perception of control over one’s circumstances and a sense of self-efficacy may be intricately connected to adequately coping with trauma exposure. Adolescents with PTSD report lower self-efficacy ratings compared to both nontraumatized and traumatized youth without PTSD (Saigh, Mrough, Zimmerman, & Fairbank, 1995). This suggests that the impact of serious trauma exposure affects youths’ perceptions concerning their ability to affect their circumstances. Further evidence documents that, after experiencing a sequence of traumatic events, PTSD and distress are predicted by decreased perceptions of self-efficacy (Benight & Harper, 2002). Therefore, homeless youths’ chances of recovery are significantly diminished when they feel they cannot maintain emotional control after experiencing a traumatic event.

Due to disproportionately high rates of PTSD and other related mental health disorders among homeless youth, many service providers offer mental health services in the form of referral and psychoeducation. Yet, homeless youth demonstrate low rates of service utilization (De Rosa et al., 1999). With only 18% of homeless youth reporting use of psychological services, underutilization has been attributed to mistrust of adults and confusion regarding irregular hours of service (Toro & Goldstein, 2000). Ironically, individuals suffering from anxiety or comorbid affective disorders use services even less often and outcomes are poorer than found among individuals without mood disorders (Ouimette, Ahrens, Moos, & Finney, 1998).

Although associations between trauma/PTSD and substance abuse, mood disorders, and perceptions of self-efficacy have been reported in previous research, other factors—unique to homeless youth culture—have received little empirical attention. For example, youths’ level of transience or mobility may be related to trauma exposure and PTSD. Previous research documents that some homeless youth travel across several geographic areas, often moving between key cities that appear responsive to their needs (Bender, Thompson, McManus, Lantry, & Flynn, 2007). Such high levels of transience have been shown, in adult homeless samples, to be associated with elevated depression (Davey-Rothwell, German, & Latkin, 2008), but no known studies have examined the effects of transience on homeless youths’ trauma and PTSD levels. In addition, related constructs of homeless culture such as type of transportation used (i.e., hopping trains, long bus rides, or hitchhiking), sleeping arrangements, and length of time homeless could impact their vulnerability to trauma experiences and consequent PTSD levels (Johnson et al., 2005; Yoder, Whitbeck, & Hoyt, 2003).

Understanding how critical aspects of homeless youth culture relate to trauma exposure and PTSD may offer novel perspectives on how to prevent trauma and intervene with homeless youth postexposure. Consequently, this study aims to (a) determine the prevalence of trauma and PTSD among homeless youth across multiple U.S. cities, (b) identify differences between homeless youth who have experienced trauma and/or PTSD and those who have not, and (c) examine factors associated with trauma and PTSD among homeless youth.

METHODOLOGY

Researchers from Los Angeles, California, Denver, Colorado, and St. Louis, Missouri, recruited participants from host agencies providing services to homeless/runaway youth for this cross-sectional study. Agencies were selected based on their existing relationships with researchers and their commitment to host the study. Efforts were made to recruit participants from comparable services across research settings. The participating agencies consisted of multiservice, nonprofit organizations that offer comprehensive systems of care including street outreach, shelter services, health care,
mental health counseling, spiritual ministry, educational and employment services, and basic subsistence items to homeless and runaway young people. Human subjects’ approval was received in each city from the principal investigator’s respective university.

Participants

Recruitment of participants took place from August through December 2005 in St. Louis, January through February 2008 in Los Angeles, and September through December 2008 in Denver. Los Angeles and Denver were added as additional study sites after data collection in St. Louis to expand the study scope and collect data from cities in different regions. Using purposive sampling, 146 street youth from Los Angeles (n = 50), Denver (n = 50), and St. Louis (n = 46) were recruited using similar research methods.

To participate in the study, youth had to meet three inclusion criteria: (a) be 18–24 years of age, (b) have spent at least 2 weeks away from home in the month before the interview, and (c) provide written informed consent. Youth were excluded if they were incapable of comprehending the consent form because of cognitive limitations (psychotic symptoms or developmental delays) or if they were noticeably intoxicated or high at the time of the interview. In the latter case, youth were asked to return for an interview at a time when they were not intoxicated. Agency case managers made the determination whether a particular individual was eligible for recruitment into the study based on their knowledge of each individual and their current level of sobriety. Recruitment also occurred at street locations identified by key informants, such as drop-in center staff and other street youth.

Agency staff facilitated introductions between youth and interviewers; research staff explained the study procedures and secured written consent. Recruitment procedures were nearly identical across the three cities with minor variations due to services emphasized in each location (e.g., more crisis-shelter users in Los Angeles, more drop-in service users in Denver, and more outreach-service users in St. Louis). Research staff administered the 45- to 90-minute semistructured retrospective interview that sought information on history of homelessness, transience level, mental health status, substance use, and service involvement. Youth were compensated $10.00 for their time.

Measures

Interviews consisted of two parts: (a) a quantitative survey using standardized measures to assess psychiatric and substance use disorders as well as background information, and (b) an event history interview to qualitatively assess youths’ experiences since leaving home and integration into homeless culture.

Demographics and background variables. The quantitative part of the interview involved data collected through standardized self-report instruments and researcher-developed items. Basic demographics were collected, including age, gender (1 = male, 0 = female), ethnicity (1 = White, 2 = Black, 3 = Hispanic, 4 = other), and location of data collection (1 = Los Angeles, 2 = Denver, 3 = St. Louis). Criminal behaviors were measured as “Ever arrested” (1 = yes, 0 = no), “Ever in juvenile detention” (1 = yes, 0 = no), and “Ever in jail” (1 = yes, 0 = no).

Homeless culture variables. Data pertaining to homeless culture were collected using an event-history instrument. A calendar-based recall method was used to visually aid the youth in recalling detailed qualitative information about each city they had lived in since leaving home as well as the length of time they remained in each location, mode of transportation between cities, and current living situation. Qualitative descriptions were employed to create quantitative variables by assigning numerical codes to the youths’ most common responses. For the current analysis, transience was calculated as the total number of times the youth had moved to a new city since leaving home for the first time. Youths’ length of time homeless was calculated from the number of months since the youth had originally left home. Method of transportation was dichotomized (1 = hitchhiking/public transportation, 0 = family/friends). Lastly, youths’ current living arrangements were coded as 1 = currently living on the street (in public places such as parks and abandoned buildings) and 0 = living with friends, families, or in shelters.

Self-esteem and self-efficacy. The psychological functioning short scale of the Client Evaluation of Self & Treatment measure was used to assess self-efficacy and self-esteem (Joe, Broome, Rowan-Szal, & Simpson, 2002). The subscale includes 22 items that measure self-esteem (e.g., “You have much to be proud of”), and self-efficacy (“What happens to you in the future mostly depends on you”) by asking youth how much they agree or disagree with a series of statements (1 = strongly disagree to 5 = strongly agree). Examination of the psychometric properties the self-esteem subscale (α = .91) and the self-efficacy subscale (α = .80), each showed good reliability and good construct validity.

Substance use and other mental health diagnoses. Alcohol and drug addiction were assessed by the Mini International Neuropsychiatry Interview (MINI; Sheehan et al., 1998). The MINI is a widely used, brief, structured diagnostic interview that facilitates screening for substance abuse and dependency and Axis I psychiatric disorders according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 1994). The MINI has been shown to have very good interrater and test-retest reliability (κ = .88–1.0) and good to very good validity (κ = .81–.97).

The MINI asks a series of dichotomous (yes/no) screening and symptom questions, screening for alcohol abuse and addiction and for drug abuse and addiction. Affirmative answers to screening questions and a sufficient number of positive responses
to symptom questions, resulted in meeting criteria for addiction to alcohol and drugs (Sheehan et al., 1998). Addiction, for the purpose of this study, was conceptualized as meeting criteria for abuse or dependence. Each participant received a score on the MINI that identified alcohol and drug addiction separately and coded as 1 = addicted or 0 = not addicted. An additional self-report measure assessed youths’ use of a variety of substances (alcohol, amphetamines, cocaine, prescription pills, heroin, methamphetamine, LSD, ecstasy, PCP, marijuana, and inhalants) that was summed to create a variable “number of substances used” ranging from 0 to 11.

The MINI was also utilized to assess whether youth met criteria for a current major depressive episode, mania, and hypomania (1 = yes, 0 = no). Using similar dichotomous screening and symptom questions as described above, youth responded to questions based on the DSM-IV diagnoses criteria.

**Trauma and PTSD.** The dependent variables for the current study were trauma experiences and PTSD as measured by the MINI. Respondents were first asked a prompting question regarding whether or not they had “ever experienced or witnessed or had to deal with an extremely traumatic event that included actual or threatened death or serious injury to you or someone else?” This answer determined whether youth had ever had a traumatic experience. Those who answered affirmatively then answered 13 additional questions that identified symptoms of avoidance, re-experiencing the trauma, poor concentration, and anxiousness. Those who identified symptoms as significantly interfering with their lives within the past month are categorized as positive for PTSD (Sheehan et al., 1998). This variable was combined into one 3-category dependent variable (0 = no trauma, 1 = trauma no PTSD, 2 = PTSD) for use in all analyses.

**Data Analysis**

Raw data from the interviews were entered in each city into a database created in SPSS (version 16.0), then combined. Due to distributional problems, the transience variable (number of moves) was transformed using a square root transformation to achieve normality.

Descriptive analyses were conducted to illustrate youth demographics and characteristics. These descriptive statistics were conducted in conjunction with bivariate analyses (chi-square and one-way ANOVAs) to identify differences in characteristics among nontraumatized youth, traumatized youth, and youth who met criteria for PTSD. A multinomial logistic regression model was computed to examine the level of association between factors and experience of trauma and PTSD. The dependent variable in this model included three categories (0 = no trauma, 1 = trauma, no PTSD, 2 = PTSD). The regression model examined the likelihood of being in the trauma group or the PTSD group compared to the no trauma group in relation to independent variables. All independent variables significantly related to trauma/PTSD status at the bivariate level were entered into the regression model.

**RESULTS**

**Sample Characteristics**

As shown in Table 1, homeless street-involved youth in this study (N = 146) ranged in age from 18 to 24 years of age. Participants identified as Black (39.7%), White (21.9%), Hispanic (9.9%), or other race/ethnicity (8.5%). Most respondents were male (67%) and the majority had been arrested at least once during their lifetime (73.3%). Youth averaged nearly 5 years homeless, but few lived primarily on the streets (19.9%).

Among the sample of 146 youth, 63 (43%) experienced no trauma, and 83 (57%) had experienced a traumatic event. More specifically, 48 (32.9%) reported having experienced a traumatic event but did not meet criteria for PTSD, and 35 (24.0%) experienced trauma and met criteria for PTSD. The proportion of youth experiencing trauma and PTSD was consistent across the three study sites: 25–33 youth experienced trauma, 11–13 youth met criteria for PTSD, and 17–25 reported no trauma symptoms.

**Group Differences**

Results of chi-square and ANOVA analyses indicated the three-category trauma variable (progressing from no trauma, to trauma without PTSD, to PTSD) was associated with more transience, lower self-efficacy, higher rates of depression, meeting criteria for manic disorder, and addiction to alcohol (see Table 1 for all bivariate analyses).

**Correlates of Trauma and PTSD in a Multivariate Model**

The multinomial logistic regression model indicated that trauma and PTSD were accurately predicted by the group of factors in the model. The classification accuracy rate of the model (53.8%) was better than the accuracy rate achievable by chance alone (35.1%). Likelihood ratios tests indicated that all significant independent variables from Table 1 contributed significantly to the model except the depression factor, which was removed from the multinomial model. The final model fit was good, $\chi^2(8) = 40.49$, $p < .001$.

As shown in Table 2, one risk factor significantly predicted being in the trauma group. Youth who reported alcohol abuse or dependence were three times more likely to be in the trauma group than in the no trauma group. However, several factors were significantly related to being in the PTSD group. Specifically, youth who met criteria for alcohol abuse or dependence were over five times more likely to be in the PTSD group than in the no trauma group. In addition, youth who met criteria for mania were six times more likely to be in the PTSD group than in the no trauma group. Youth who reported higher levels of self-efficacy were significantly
Table 1. Sample Characteristics and Differences Between No Trauma, Trauma, and Posttraumatic Stress Disorder (PTSD) Groups

<table>
<thead>
<tr>
<th></th>
<th>Total sample (N = 146)</th>
<th>No trauma experience (n = 63)</th>
<th>Trauma experience (n = 48)</th>
<th>PTSD (n = 35)</th>
<th>F or $\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td></td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age ($M, SD$)</td>
<td>20.3 (2.0)</td>
<td>20.5 (1.8)</td>
<td>20.1 (2.0)</td>
<td>20.1 (2.3)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>98 (67.1)</td>
<td>42 (66.7)</td>
<td>34 (70.8)</td>
<td>22 (62.9)</td>
<td>3.63 (2)</td>
</tr>
<tr>
<td>Female</td>
<td>47 (32.2)</td>
<td>21 (33.3)</td>
<td>14 (29.2)</td>
<td>12 (34.3)</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.46 (6)</td>
</tr>
<tr>
<td>White</td>
<td>32 (21.9)</td>
<td>13 (20.6)</td>
<td>12 (25.0)</td>
<td>7 (20.0)</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>58 (39.7)</td>
<td>24 (38.1)</td>
<td>20 (41.7)</td>
<td>14 (40.0)</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>29 (19.9)</td>
<td>14 (22.2)</td>
<td>7 (14.6)</td>
<td>8 (22.9)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>27 (8.5)</td>
<td>12 (19.0)</td>
<td>9 (18.8)</td>
<td>6 (17.1)</td>
<td></td>
</tr>
<tr>
<td>City located</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.96 (4)</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>50 (34.2)</td>
<td>17 (27.0)</td>
<td>20 (66.7)</td>
<td>13 (37.1)</td>
<td></td>
</tr>
<tr>
<td>Denver</td>
<td>50 (34.2)</td>
<td>25 (39.7)</td>
<td>14 (29.2)</td>
<td>11 (31.4)</td>
<td></td>
</tr>
<tr>
<td>St. Louis</td>
<td>46 (31.5)</td>
<td>21 (33.3)</td>
<td>14 (29.2)</td>
<td>11 (31.4)</td>
<td></td>
</tr>
<tr>
<td>Criminal behaviors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever arrested</td>
<td>107 (73.3)</td>
<td>48 (76.2)</td>
<td>32 (66.7)</td>
<td>27 (77.1)</td>
<td>1.61 (2)</td>
</tr>
<tr>
<td>Ever in juvenile detention</td>
<td>54 (37.0)</td>
<td>28 (45.2)</td>
<td>17 (35.4)</td>
<td>9 (25.7)</td>
<td>3.72 (2)</td>
</tr>
<tr>
<td>Ever in jail</td>
<td>86 (58.9)</td>
<td>37 (59.7)</td>
<td>27 (57.4)</td>
<td>22 (62.9)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Homeless culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public transport/hitchhike/bus</td>
<td>76 (52.1)</td>
<td>31 (50.8)</td>
<td>24 (50.0)</td>
<td>21 (61.8)</td>
<td>1.34 (2)</td>
</tr>
<tr>
<td>Primary living on the street</td>
<td>29 (19.9)</td>
<td>10 (15.9)</td>
<td>12 (25.0)</td>
<td>7 (20.2)</td>
<td>1.43 (2)</td>
</tr>
<tr>
<td>Months homeless ($M, SD$)</td>
<td>55.5 (43.9)</td>
<td>54.9 (46.7)</td>
<td>58.9 (45.3)</td>
<td>52.1 (37.2)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Transience ($M, SD$)</td>
<td>1.86 (0.88)</td>
<td>1.69 (0.82)</td>
<td>1.83 (0.82)</td>
<td>2.18 (0.99)</td>
<td>3.57* (2)</td>
</tr>
<tr>
<td>Mental health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem ($M, SD$)</td>
<td>23.1 (4.9)</td>
<td>22.9 (4.9)</td>
<td>24.1 (4.3)</td>
<td>22.2 (5.6)</td>
<td>1.73 (2)</td>
</tr>
<tr>
<td>Self-efficacy ($M, SD$)</td>
<td>26.7 (4.7)</td>
<td>26.0 (4.7)</td>
<td>26.7 (4.3)</td>
<td>23.7 (5)</td>
<td>4.52* (2)</td>
</tr>
<tr>
<td>Depression</td>
<td>41 (28.1)</td>
<td>17 (27.0)</td>
<td>8 (17.0)</td>
<td>16 (47.1)</td>
<td>8.86* (2)</td>
</tr>
<tr>
<td>Hypomanic</td>
<td>44 (30.1)</td>
<td>18 (28.6)</td>
<td>17 (63.2)</td>
<td>9 (25.7)</td>
<td>1.20 (2)</td>
</tr>
<tr>
<td>Manic</td>
<td>31 (21.2)</td>
<td>7 (11.1)</td>
<td>9 (19.1)</td>
<td>15 (42.9)</td>
<td>13.70** (2)</td>
</tr>
<tr>
<td>Alcohol addiction</td>
<td>41 (28.1)</td>
<td>9 (14.3)</td>
<td>16 (33.3)</td>
<td>16 (45.7)</td>
<td>11.98** (2)</td>
</tr>
<tr>
<td>Drug addiction</td>
<td>53 (36.3)</td>
<td>20 (31.7)</td>
<td>17 (35.4)</td>
<td>16 (45.7)</td>
<td>1.92 (2)</td>
</tr>
<tr>
<td>Number of substances used ($M, SD$)</td>
<td>2.4 (2.4)</td>
<td>2.0 (2.0)</td>
<td>2.1 (2.5)</td>
<td>2.5 (3.1)</td>
<td>2.16 (2)</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.

less likely to be in the PTSD group compared to the no trauma group. Finally, youth who were more transient were significantly more likely to be in the PTSD group rather than the no trauma group.

DISCUSSION

Homeless youth are confronted with daily environmental and personal challenges that create a high risk for trauma exposure. This study found that approximately 57% of youth surveyed reported having experienced a traumatic event and 24% met DSM-IV criteria for PTSD. This rate of PTSD, consistent across the three U.S. cities sampled, is slightly higher than rates of PTSD documented in previous research of homeless youth (18%; Stewart et al., 2004) and much higher than rates among housed samples of adolescents with trauma histories (15%; Cuffe et al., 1998).

Findings from this study support the significance of previously studied correlates of trauma and PTSD while also identifying...
These youth often have few supports to rely upon and are victimized as they attempt to secure resources in new environments. Of great concern is the fact that transience was a significant correlate of PTSD even when controlling for other factors. Characteristics of the transient lifestyle, such as fewer stable relationships and limited time in one location to establish services, increase the likelihood of psychopathology following trauma exposure (Pine & Cohen, 2002). Thus, the challenge for transient homeless youth who must constantly reestablish support networks in new locations may slow recovery from victimization, elevating the risk for PTSD development.

The significant relationship between transience and PTSD is striking, considering no other aspects of homeless culture were found significantly related to trauma or PTSD. Although we hypothesized that youth who hitchhiked/utilized public transportation, who lived on the streets, and who had been homeless for longer periods would experience greater trauma, the data did not support these hypotheses.

Limitations should be noted when considering the findings of this study. First, recruitment strategies resulted in nonprobability samples, a common sampling method in studies of homeless youth (Clatts, Davis, & Atillasoy, 1995). It remains unclear whether similar prevalence rates and associations would be found in nonservice-using youth populations, all service users, or youth in other cities.

Second, all variables were measured using youth self-report. Youth may have been hesitant to share sensitive information, resulting in underreporting of mental health challenges. Furthermore, DSM-IV diagnosis of PTSD may not be well-suited for homeless youth who have more complex reactions to trauma (Stewart et al., 2004) and many of the symptoms (i.e., difficulty sleeping or being constantly on guard) may be characteristic of living on the streets rather than of having PTSD (McManus & Thompson, 2008). A final, unavoidable limitation of this cross-sectional research is the inability to determine causal relationships such that many of the correlates of trauma and PTSD reported here could be either causes or consequences. Future research should aim to address these limitations as well as examining two important topics in this area: the differential effects of various forms of trauma and how interactions among factors lead to cumulative risk among homeless youth.

Despite noted limitations, the implications of these results are manifold. Given the prevalence of trauma exposure and PTSD in homeless youth, service provision and referrals for addressing trauma is of paramount importance. Routine assessment of psychological functioning is a key first step in identifying symptoms of PTSD and related factors. Youth should be systematically screened for PTSD symptoms using standardized brief screening tools at shelter, drop-in, and outreach service points. With few tools normed to the homeless youth population, assessments such as the MINI may be the most helpful available tools to begin identifying youth with trauma experiences and related symptoms. In conducting more thorough assessments, clinicians should aim to understand the cumulative effects of the youths’ traumatic experiences as they repeatedly move to new locations, seek housing and food in unfamiliar environments, and interact with strangers.

### Table 2. Multinomial Logistic Regression to Predict Trauma and Posttraumatic Stress Disorder (PTSD) Compared to No Trauma

<table>
<thead>
<tr>
<th>Factors</th>
<th>Trauma OR (95% CI)</th>
<th>PTSD OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transience</td>
<td>1.22 (0.76–1.97)</td>
<td>1.97∗ (1.15–3.39)</td>
</tr>
<tr>
<td>Manic</td>
<td>2.00 (0.66–6.02)</td>
<td>6.16∗ (2.00–18.96)</td>
</tr>
<tr>
<td>Alcohol abuse/dependence</td>
<td>3.20∗∗ (1.25–8.19)</td>
<td>5.51∗∗ (1.90–15.97)</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>1.01 (0.95–1.13)</td>
<td>0.87∗ (0.79–0.97)</td>
</tr>
</tbody>
</table>

Note. Reference category = no trauma group; OR = Odds Ratio; 95% CI = 95% confidence interval.

∗p < .05. ∗∗p < .01.

Additional factors. For example, substance abuse is a known risk factor for PTSD (Johnson et al., 2005); however, in the current study alcohol addiction, but not drug addiction, was a strong correlate of trauma and PTSD. Previous studies have similarly found a bivariate association between drug addiction and PTSD that does not remain significant when controlling for co-occurring mood disorders (Thompson, 2005). It is possible that drug use is more ingrained in homeless youth lifestyles (i.e., more youth use drugs regardless of trauma histories; Fors & Rojek, 1991), whereas alcohol use is more specifically sought-after by traumatized youth for its sedative and numbing effects (Tyler & Johnson, 2006).

Previous research also documents a relationship between mood disorders, particularly depression and PTSD (McCarthy & Thompson, in press). The current study is unique in that it introduces mania as a significant and strong correlate of PTSD among homeless adolescents. Although depression did not remain a significant correlate of trauma or PTSD in multivariate analyses, youth meeting criteria for mania were six times more likely to meet criteria for PTSD than youth with no trauma. Few studies have examined the separate effects of these particular mood disorders; therefore, there are few explanations for this study’s distinction. Future studies should examine these findings.

This study expanded on previously studied factors to examine aspects of homeless youth culture and trauma/PTSD. One major finding was that greater inter-city transience was related to both trauma exposure and PTSD. Although only demonstrating significance at the bivariate level, the highly transient lifestyle of homeless youth may expose them to frequent traumatizing experiences as they repeatedly move to new locations, seek housing and food in unfamiliar environments, and interact with strangers. These youth often have few supports to rely upon and are victimized as they attempt to secure resources in new environments.
experiences by determining the number of traumatic events experienced, the severity of symptoms and impairment, and the meaning of the traumatic exposure to the individual (Becker et al., 2004). This study indicates transient youth and youth displaying other mental health concerns such as mania or addictions are particularly important to assess for PTSD symptoms. When feasible, youth who screen positively for PTSD symptoms should be provided with empirically based interventions or referred to such interventions elsewhere. With few evidence-based studies investigating effective treatments for homeless youth, service providers should draw from existing models for other youth populations (Thompson & Pinder, in press). Trauma-focused cognitive–behavior therapy (TF-CBT), consisting of exposure, cognitive processing and reframing, stress management, and parental treatment, is one treatment with demonstrated efficacy treating traumatized adolescents (Cohen, Mannarino, Zhitova, & Capone, 2003; Green, 2004). Considering homeless youths’ distrust of formal counseling services and unique lifestyle challenges, implementation of TF-CBT models will have to be provided flexibly, by stressing rapport-building and having realistic expectations of youth (Thompson, McManus, Lantry, Windsor, & Flynn, 2006). Findings also suggest interventions that integrate trauma treatment with treatment for alcohol addiction are likely to have promising affects of reduction of PTSD symptoms. A final important implication of this study is a focus on transience as a key risk factor for PTSD. This suggests that creating stability by linking youth with transitional-housing opportunities is likely to reduce their PTSD symptoms. Such stability will also allow for developing social support through building rapport with service providers and creating informal ties with individuals in one location. A service aim, in increasing youth stability, is helping youth find employment opportunities that enhance accountability and responsibility while reducing the need for dangerous informal employment. Yet, despite service providers’ best efforts, some youth will not seek stable living environments, but will want to maintain their mobility. For these “traveling” youth, services need to be adapted to meet their unique needs. Innovative uses of technology, through Internet or other creative outlets, can help maintain connection and continuity of services for these youth. For example, e-mail correspondence and social networking software (e.g., Facebook, MySpace) could enable youth to access clinicians, assessment tools, or treatment modules from various locations. To address the high trauma risk of transient youth, such innovative technologies should be tested for their effectiveness.

In conclusion, several clear individual and contextual factors are related to homeless youths’ trauma exposure and development of PTSD symptoms. Efforts to directly help youth cope with trauma and avoid trauma should be supplemented by services to reduce risk factors. Substance abuse treatment and other mental health aimed at stabilization, when effective, are likely to be associated with reduced trauma exposure and PTSD rates. Without these supports, youth are likely to continue to experience repeated trauma and incomplete recovery. Such exposure to trauma during the critical developmental stages of adolescence can derail emotional growth and adversely affect youths’ self-esteem, while reducing their ability to relate to and trust others and avoid future victimization (Thompson, McManus, & Voss, 2006). With such clear and serious consequences, trauma prevention and intervention efforts need to be prioritized in homeless youth-serving agencies.

REFERENCES


