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Predictors of Posttraumatic Stress Symptoms Among Runaway Youth Utilizing Two Service Sectors

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Abstract

Youth who run away often experience situations that produce symptoms of traumatic distress. This exploratory study assessed predictors of trauma symptomatology among runaway youth who had been admitted to youth emergency shelter services or juvenile detention. Findings demonstrated high levels of trauma-related symptoms for both groups. Worry about family, greater runaway episodes, and living with a father who abused alcohol/drugs significantly predicted higher posttraumatic stress symptoms in detained youth, whereas only worry about family relationships predicted higher trauma symptom scores among youth in emergency shelter care. Findings suggest distressful family life may induce complex emotional responses in youth. Although services to runaway youth must continue to focus on safe, short-term residential care, trauma issues must be acknowledged.

Posttraumatic stress disorder (PTSD) has been documented among children and adolescents exposed to traumas such as wars, natural disasters, sexual abuse, and violence (Perrin, Smith, & Yule, 2000). However, few studies have examined this phenomenon among young people exposed to prolonged and repeated traumatic events. Even less is known about a particularly high-risk group of youth—those who have separated from parents at an early age due to running away or being forced out of parental homes. Although symptoms related to traumatic experiences have been found remarkably prevalent among the few studies focusing on PTSD among runaway youth (Cauce et al., 2000; Whitbeck, Hoyt, & Ackley, 1997a), few investigations have focused on the antecedents to trauma symptoms, particularly those that originate with the youths' families. To address this gap, this study investigated family and youth factors associated with developing trauma-related symptomatology among runaway youth.

RUNAWAY YOUTH AND POSTTRAUMATIC STRESS DISORDER

The number of adolescents who run away from familial homes continues to grow, with approximately 2 million youth leaving home each year (Ringwalt, Greene, Robertson, & McPheeters, 1998). Previous research has confirmed that these young people comprise a

population at greater risk of developing trauma symptoms than their nonrunaway counterparts. In community samples of adolescents, lifetime rates of PTSD diagnoses range from 6.3% to 7.8% (Giaconia, Reinherz, Silverman, & Pakiz, 1995), although some studies of runaway youth indicate that approximately 36% of participants met diagnostic criteria for PTSD (Tyler, Whitbeck, Hoyt, & Johnson, 2003). These studies provide evidence concerning the vulnerability of runaway youth for developing PTSD symptoms and suggest that precocious departure from familial homes, even abusive and dysfunctional ones, is a traumatizing event that may lead to developing trauma-related symptoms.

Previous research has confirmed that families of runaway youth are often highly chaotic and dysfunctional. The youth report that their family problems are the primary explanation for actively making the decision to leave, being removed, or being pushed out/forced to leave by their parents (Mundy, Robertson, Robertson, & Greenblatt, 1990). These youth often suffer from exposure to high levels of family disorganization, ineffective parenting, and intolerable levels of maltreatment (Whitbeck, Hoyt, & Ackley, 1997b). Characteristics of these families, such as interfamily conflict, poor communication, dysfunctional relationships, physical/sexual abuse and/or neglect, may precede or heighten the youth's sense of vulnerability, anxiety, anger, and fear (Whitbeck, Hoyt, & Bao, 2000). These family characteristics have been shown to predict greater problems for the youth, including increased runaway episodes (Baker, McKay, Hans, Schlange, & Auville, 2003), and symptoms of anxiety, depression, and posttraumatic stress (Whitbeck et al., 2000).

Runaway adolescents often report family histories of alcohol and drug problems, an area that highlights particular dysfunction in these families. In one large-scale study of runaway/homeless youth, researchers found that over half of runaway youth reported at least one parent had an alcohol problem and nearly 20% had two parents who were problem drinkers. In addition, over one third of the adolescents believed that at least one of their parents had a problem with hard drugs (Whitbeck et al., 1997b). Parental alcohol/drug use contributes to family conflict, arguments, even violent confrontations. The consequences of parental use debilitate positive family functioning and may create an inability or desire by the parent to meet the needs of their adolescent child. The result is heightened adolescent mental health problems, such as youth substance abuse, relationship difficulties, and continued runaway behavior (Kurtz, Jarvis, & Kurtz, 1991). Taken together these findings suggest that the combination of difficult family environmental factors and the act of precocious independence may produce symptoms of acute distress, anxiety reactions, aggression, withdrawal, dissociative reactions, and posttraumatic stress (Cauce et al., 2000; Thompson, 2005).

Runaway youth often come into contact with two public service sectors: juvenile detention centers and youth emergency shelters. Detention and shelter facilities have the common characteristic of being short-term, temporary placements for youth and offer a range of basic services aimed at supporting youths' physical, emotional, and social development (National Juvenile Detention Association, 2003). However, these facilities' missions and goals differ.

Juvenile detention facilities are characterized by physically restrictive structures that serve as temporary holding facilities for youth who have committed an offense and are awaiting adjudication, disposition, or placement. Admission is typically involuntary and court-ordered (Snyder & Sickmund, 2006). Recent data indicate that one third of all youth held in juvenile detention centers are detained for status offenses and technical violations of probation (Arthur, 2001). Detention centers responding to a special investigation initiated by the U.S. House of Representatives reported that two thirds of them were holding youth not requiring detention due to criminal offenses, but simply due to a lack of alternative placements (House Committee on Government Reform, 2004).

Emergency youth shelters have been developed to address the needs of runaway/homeless youth by offering voluntary crisis services on a short-term basis (typically less than 30 days). Shelters have a stated mission to reunify youths with their families or to teach the youth the skills to live independently (Greene, Ringwalt, & Iachan, 1997). They provide basic services to address primary needs, such as food, clothing, shelter and education. Although admission is voluntary, shelters aim to provide a structured environment where regimented time schedules, rules, and boundaries serve to encourage safety and growth while the youth transitions back to the home or elsewhere (Williams, Lindsey, Kurtz, & Jarvis, 2001).

Because many youth who run away do not seek emergency shelter services, comparison studies are needed that examine issues of runaway youth served in other settings as well (Kingree, Braithwaite, & Woodring, 2001). Previous research evaluating differences among runaway youth accessing various service sectors is extraordinarily limited; research focusing on risks associated with trauma among these youth is nearly nonexistent. To address this paucity of research, this study (a) investigated the level of trauma symptoms among youth who ran away and were admitted to juvenile detention or youth shelter services, (b) examined and compared youth and family factors associated with trauma symptoms among youth admitted to one of these service agencies, and (c) evaluated the influence of youth and family factors on trauma symptoms among runaway youth admitted to juvenile detention compared to emergency shelter services. Understanding trauma among this particularly vulnerable population is needed. Left untreated, trauma symptoms may become chronic, resulting in enormous personal and societal costs (Kessler, 2000).

METHOD

Participants

Between September 1999 and August 2001, runaway youths from an emergency youth shelter and a juvenile detention center were recruited for participation in the study. These agencies were located in a mid-sized urban city in Western New York and served similarly aged youth.

Juvenile detention center participants were drawn from among youth admitted for noncriminal offenses, typically through family court mandate. This agency, similar to other juvenile detention centers nationwide (Dembo, Williams, Fagan, & Schmeidler, 1993), provided residential and custodial care for youth 11–18 years of age. The parents of these youth had given temporary custodial rights to the detention center to act as the youth's guardian; thus, the detention center provided consent to seek youth's participation in the study. To be included in the study, youth had to be 12–17 years of age, admitted due to a status offense, and report a runaway episode during the previous 6 months. Of the 171 youth admitted during the study period, 121 (71%) met inclusion criteria; all agreed to participate.

The emergency youth shelter involved in this study was similar to other basic shelters offering services to runaway youth across the country (Greene et al., 1997). Ten adolescent boys and 10 adolescent girls aged 12 to 18 were concurrently housed and provided basic services. Within 48 hours of admission, the shelter contacted each youth's parent/guardian to seek consent. Upon consent, youth were approached and recruited for participation. Of the 261 youth admitted to the shelter during the data collection period, 102 (39%) were not approached due to extremely short admissions (often only a few hours). Of the 162 youth approached for participation, 6 adolescents refused and 156 agreed to participate.

Measures

The self-report questionnaire included questions concerning youths' demographics, such as current age (years), gender (1 = *male*, 2 = *female*), self-identified ethnicity (1 = *White*, 2 =

Black, 3 = *Latino/a*, 4 = *American Indian*, 5 = *Asian*, 6 = *Mixed or other*), last living situation before admission to the emergency shelter or detention center (1 = *with parent(s)*; 2 = *with an adult friend, relative, or foster parent*; 3 = any institutional setting, such as correctional facility, drug treatment agency, or other residential facility; 4 = *on the street or temporary shelter*), the number of runaway episodes, and the number of days the youth had been away from home during the current/most recent episode.

Family characteristics were evaluated using the Family Functioning Scale (FFS; Tavitian, Lubiner, Green, Grebstein, & Velicer, 1987). The FFS consists of 40 items that measure five dimensions of family functioning: positive family affect (e.g., “People in my family listen when I speak”), rituals (e.g., “We pay attention to traditions in my family”), worries (e.g., “I worry when I disagree with the opinions of other family members”), conflicts (e.g., “People in my family yell at each other”), and communication (e.g., “When I have questions about personal relationships, I talk with my family member”). Respondents rate items on a 7-point scale (1 = *never* to 7 = *always*) and items are summed for the five subscales and a total score. Internal consistency reliability ranges from $\alpha = .90$ for positive family affect to $\alpha = .74$ for family conflict (Tavitian et al., 1987).

Parents’ use of alcohol and other drugs was also queried. Youth were asked, “How often did your mother (and father) use alcohol or drugs?” (1 = *never used*, 2 = *used a few times*, 3 = *used almost every day*, 4 = *used every day*, 5 = *used more than once per day*).

The dependent variable was measured using one subscale from the 54-item Trauma Symptom Checklist for Children (TSCC; Briere, 1996), Posttraumatic Stress Symptoms (PTS). The TSCC defines posttraumatic stress as “intrusive thoughts, sensations, and memories of painful past events; nightmares; fears; and cognitive avoidance of painful feelings” (Briere, 1996, p. 2). The scale includes 10 items that are rated on a 4-point scale (0 = *never* to 3 = *almost all of the time*). Internal consistency reliability for this subscale is high ($\alpha = .86$). To interpret the PTS score, standardized transformations of the raw scores are derived to identify the mean as 50 and 10 as one standard deviation unit. Transformed scores of 60–65 are suggestive of difficulty with trauma symptoms; scores greater than 65 are considered clinically significant symptomatology (Briere, 1996).

Procedure

Youth admitted to both service agencies were similarly recruited into the study, as the research project, the voluntary nature and confidentiality of their responses, and consent procedures were explained to each participant. Once consents were signed, youth were taken to a private area of the agency where they completed the self-report questionnaires. Research assistants remained with the youth throughout the completion of the instruments to provide assistance with any questions or reading difficulties. Upon completion, they received a small food item as compensation for their time.

Data Analysis

Descriptive statistics were calculated for youth admitted to the detention center and emergency shelter separately. *t*-tests and correlation analyses tested significant relationships between standardized PTS scores and dichotomous and continuous variables, respectively. These bivariate analyses were conducted with the sample as a whole and with each group separately. Multivariate analyses using ordinary least squares regression were then conducted. Variables that were significantly associated with PTS symptoms scores in the entire sample were entered into separate regression models with detention center and emergency shelter youth to control for differences between groups. Variables significantly related to PTS scores for each of the groups were added to the separate regression models to determine which youth and family

variables contributed uniquely to symptom scores in youth admitted to juvenile detention and emergency shelter services separately. An alpha level of .05 was chosen a priori.

RESULTS

Sample Demographics and Group Differences

Youth demographics and family variables for youth admitted to the Detention Center (DC) and Emergency Shelter (ES) services are shown in Table 1. Youth admitted to juvenile detention averaged 14.5 years of age ($SD = 1.1$) and more than half were adolescent girls (56.2%). They were predominantly Black (40.5%) or White (37.2%), and had run away an average of 4.9 times ($SD = 9.8$). During their last runaway episode, these youth had stayed away from home an average of 14.4 days ($SD = 41$).

Among youth admitted to the ES, the average age of youth participants was 16 years ($SD = 1.5$) and the majority were adolescent girls (55.8%). The adolescents were predominantly Black (48.7%) or White (39.7%), and had run away 3.3 times ($SD = 3.1$). These youths averaged 3.3 days “on the run” ($SD = 2.4$) during the current episode.

Comparisons between these youth samples (see Table 1) indicated significant differences between the groups. Youth admitted to the DC were younger ($M = 14.5$ years, $SD = 1.1$) than youth admitted to the ES ($M = 16.0$ years, $SD = 1.5$), $t(275) = -9.27$, $p < .001$, and 33.9% of the DC youth had been living with their parents at admission, significantly less than youth admitted to the ES (50.6%), $\chi^2(1, N = 277) = 7.79$, $p < .005$. Significantly more DC youth (52.1%) reported living on the street or in a temporary shelter at the time of admission than the ES youth (5.1%), $\chi^2(1, N = 277) = 78.76$, $p < .001$. The DC youth had run away more often ($M = 4.9$, $SD = 9.8$ times) than had the ES youth ($M = 3.3$, $SD = 3.1$ times), $t(275) = 1.91$, $p = .057$, and had been away from home significantly more days ($M = 14.1$, $SD = 41.0$) than had the ES youth ($M = 3.3$, $SD = 2.4$), $t(275) = 3.25$, $p < .001$.

The ES youth consistently reported greater problems in family functioning than the DC youth. Emergency shelter youth had significantly lower family positive affect than DC youth, $t(275) = 4.23$, $p < .001$. The ES youth also reported poorer communication, $t(275) = 2.35$, $p < .01$, less importance attributed to rituals and traditions, $t(275) = 3.75$, $p < .001$, and greater family conflict, $t(275) = -3.61$, $p < .001$, than the DC youth. Mother’s and father’s alcohol/drug use was not significantly different for the DC and ES youth.

Standardized PTS symptom scores were lower among DC youth than ES youth, although only marginally significant, $t(275) = -2.01$, $p < .05$. When PTS scores were recoded to identify those in the clinically significant range, 23.1% of the DC youth and 31.4% of the ES youth had clinically significant PTS symptom scores; however, these differences were not statistically significant, $\chi^2(1, N = 275) = 2.32$, ns .

Bivariate Associations With Trauma Symptom Scores

Correlations were derived for the entire sample of runaway youth to determine significant associations with PTS symptom scores across all independent variables. The number of runaway episodes, $r(277) = .14$, $p < .05$, worry about family relationships, $r(277) = .41$, $p < .001$, and family conflict, $r(277) = .29$, $p < .001$, were positively related to PTS scores among these youth. Positive family affect, $r(277) = -.20$, $p < .001$, was negatively associated with PTS scores.

Among the subsample of youth admitted to juvenile detention, PTS symptom scores were positively associated with greater runaway episodes, $r(121) = .21$, $p < .05$, and a variety of family characteristics, including feelings of worry about family issues, $r(121) = .48$, $p < .001$,

higher levels of family conflict, $r(121) = .27, p < .001$, and father's alcohol/drug use, $r(112) = .29, p < .01$.

In the sample of youth admitted to the ES, higher PTS symptom scores were significantly associated with only family characteristics, including less open expression of emotions or affect, $r(156) = -.18, p < .05$, greater problems with worry about family relationships, $r(156) = .34, p < .001$, poorer communication in the family, $r(156) = -.15, p < .05$, greater family conflict, $r(156) = .27, p < .001$, and mother's alcohol/drug use, $r(156) = .19, p < .05$.

Predictors of Posttraumatic Stress Symptom Scores

In the sample of DC youth, when variables significantly related to PTS symptom scores on a bivariate level were simultaneously included in the model, findings indicated that a greater number of runaway episodes, feeling worried about family relationships, and father's greater alcohol/drug use significantly predicted higher PTS symptom scores, $F(5, 111) = 9.25, p < .001$. This model accounted for 30% of the variance in PTS symptom scores among youth in the detention center (see Table 2).

Similar analyses of the ES participants (see Table 3) indicated that only the family functioning subscale measuring feelings of worry about family relationships significantly predicted PTS symptom scores, demonstrating that youth who reported greater worry about relationships within their family had higher PTS symptom scores. Seventeen percent of the variance in PTS symptom scores was accounted for in this model, $F(6, 149) = 5.19, p < .001$.

DISCUSSION

This exploratory study is among the first to investigate predictors of trauma symptoms among runaway youth admitted to emergency shelter or juvenile detention services. Findings generally demonstrated that trauma symptoms among these highly vulnerable youth were only marginally greater than were scores of the normative samples of youth 11–16 years of age ($N = 3,008$) used in development of the TSCC instrument (Briere, 1996). However, in this study's samples, greater proportions experienced clinically significant PTS symptoms (23% of DC youth and 31% of ES youth) than has been reported in previous studies with youth at risk for posttraumatic stress. For example, in a study utilizing the TSCC with community high school students, researchers (Wolfe, Scott, Wekerle, & Pittman, 2001) found that among maltreated adolescents only 14% were identified in the clinically significant PTS symptom category. Another study using the TSCC to evaluate PTS symptoms demonstrated that abused youth scored higher than those without an abuse history and those with a credible disclosure of sexual abuse had PTS symptom scores in the "clinically significant" range (Elliott, & Briere, 1992). Although heterogeneity of survey methodologies and measurement prevents direct comparison of the current study's findings to those employing standardized clinical diagnoses of PTSD, this study confirms previous research (Cauffman, Feldman, Waterman, & Steiner, 1998) suggesting that runaway youth have higher levels of trauma-related symptoms than many other high-risk youth populations.

In this study, youths admitted to emergency shelter or juvenile detention were similar across some demographics. For example, the majority of youth participants from both service agencies were adolescent girls, which is consistent with previous reports of runaway shelters (Greene et al., 1997; Thompson, Maguin, & Pollio, 2003) and juvenile detention facilities where youth are detained for noncriminal offenses, such as running away, truancy, or curfew violations. There has been a marked increase in delinquency and runaway behaviors among young women (Kingree et al., 2001) and some believe this may be due to women's greater susceptibility to traumatic events and the increased violent environments to which they are exposed (Cauffman

et al., 1998). The result of this exposure leads them to respond in ways often viewed as more typical of men (Giaconia et al., 1995).

Similarities and differences in the predictors of trauma symptoms scores were also found between these two groups of runaway youth. For both groups, findings indicate that feelings associated with worrying about family relationships significantly predicted higher posttraumatic stress symptoms scores. Research has shown that children learn to regulate their behavior by anticipating their caregivers' responses to them. If trauma experiences occur, especially when the caregivers themselves are the sources of the distress, children attempt to regulate their own responses to be compatible with parental expectations (Van Der Kolk, 2003). The family functioning subscale measuring worry concerning family relationships includes items that reflect these types of cognitive and behavioral responses. For example, items such as feeling worried when someone is angry, worry about disagreeing with other's opinions, feeling sick when things are not going well in the family, and needing to monitor the mood of certain family members may indicate cognitive and behavioral responses the youth uses to monitor sensitive family relationships. Over time, the day-to-day stress of these types of interactions may create psychological symptoms or amplify existing trauma-related symptoms experienced by the adolescent (Whitbeck et al., 1997b).

Additional antecedents of trauma symptoms were found among youth admitted to juvenile detention. One predictor reflecting heightened disengagement from the family was the youths' numerous runaway episodes. Youth who run away typically lack strong attachments to parents due to their own deviant behaviors or the maltreatment of their parents (or both). However, youth who run away multiple times appear to have an even lower level of familial bonding and attachment (Thompson & Pillai, 2006). When traumatic events originate from within the family environment, adolescents' behavioral responses are organized around surviving the situation. Some respond with defiance, insolence, and rebelliousness (Pynoos, Steinberg, & Piacentini, 1999). It is possible that these adolescents reach a threshold at which they can no longer tolerate the family environment and run away. However, running away then returning to a dysfunctional family context that has not been altered since they left, results in little motivation to remain in the home (Hughes, 1999). Thus, deficient interactions between parents and adolescents may increase the youth's propensity for multiple runaway episodes (Stewart et al., 2004), leading to increased trauma-related symptoms.

Living with a substance-abusing father was also a significant predictor of higher PTS symptoms and adds further support for the family-related issues discussed above. Attachment and trust issues are often compromised when parent(s) abuse alcohol and/or drugs (Stein, Leslie, & Nyamathi, 2002). Parental drug or alcohol problems debilitate family processes, decrease effective parenting, and are more likely to be abusive and rejecting. They were less likely to be perceived as warm and supporting or interested in their children's well-being (Whitbeck & Hoyt, 1999). As trauma arises from an inescapable stressful event(s) that overwhelms coping mechanisms, some youth may respond to this traumatizing environment by running away and developing trauma-related symptoms (Stewart et al., 2004).

What remains unclear is why variables measuring family conflict and poor communication were not significant predictors of PTS symptom scores, given previous research suggesting that poor family environments, inconsistent parenting practices, and child-parent conflict increase children's risk for mental health challenges (Hawkins, Catalano, & Miller, 1992) and precipitate runaway behavior (Whitbeck et al., 1997a). One possible explanation is that positive communication between parents and their children has been shown to inhibit delinquency, but only if the communication is positively reinforced (Gullotta, Adams, & Montemayor, 1998). Parents with poor parenting, discipline, and supervision skills likely would also have poor communication skills. In families with a substance-abusing parent, the communication and

conflict can only be more problematic (Martinez, 2006). Given the seriousness of dysfunction and the high level of family disorganization and maltreatment experienced by many runaway adolescents, poor communication and interfamily conflict may become less important factors in the minds of these youth when problems in the family become intense enough to be traumatizing and reach the point where the youth responds by fleeing the environment.

Limitations

Recognizing the inherent limitations of cross-sectional data, the findings of this study must be viewed as suggestive rather than conclusive. These data cannot determine, for example, whether trauma-related symptoms predate problems in family functioning, are the result of a specific event that occurred in the family, or existed over a more protracted period of time. Longitudinal research would help facilitate disentangling causal sequencing to understand the pathways leading to trauma symptomatology among youth who run away (Whitbeck & Hoyt, 1999; Wolfe et al., 2001).

Although the two groups of youth were recruited to provide comparable samples, it should be noted that youth participants from both facilities could have previously been admitted to the other service agency. No standardized data were collected concerning this information; however, many juvenile detainees anecdotally reported previous admission to shelter services, whereas few shelter youth reported a detention center admission. However, the demographics of our samples are comparable to national data from federally funded shelters nationwide (Thompson et al., 2003) and other studies of detained runaway youth (Kingree et al., 2001), providing some support for the generalizability of the findings.

In addition, some of the information asked of youth participants was highly sensitive, such as questions related to trauma experiences. If a parent or another adult was the cause of this trauma, youth may be reluctant to disclose the information to another adult (Cohen, Mannarino, Zhitova, & Capone, 2003). Although the interviewers in this study were in their mid-20s, the youth may have felt uncomfortable answering questions associated with trauma symptoms, which influenced their reporting of PTS symptoms. Triangulation of data collected might have addressed this issue.

Finally, multivariate analyses accounted for a greater proportion of the variance in PTS symptoms scores among detained youth than for shelter youth, suggesting that the variables included in the analysis were more representative of detained youth than shelter youth. Including additional variables in future studies and analyses of these populations is warranted.

CONCLUSIONS

Although generalization of the results of this study must be made with caution, the findings address a gap in the research literature concerning trauma among runaway youth. As findings from this study suggest, distressful and dysfunctional family life may be associated with development of trauma symptoms. Thus, future research would benefit from further investigations of the extent to which these service sectors address family issues of runaway youth. In addition, there are few studies with this population of adolescents that incorporate longitudinal designs aimed at capturing trauma symptoms and their consequences. Although there are few studies of the long-term outcomes of traumatic events among adults, even fewer exist for children and adolescents; thus, future research is needed that evaluates outcomes of adolescents who have experienced traumatic events and the impact of these experiences on them over time.

The process of running away, being kicked-out or even abandoned by families induces complex emotional and behavioral responses. Although the current services offered by juvenile

detention facilities and emergency youth shelters must continue to focus on crisis intervention and offer safe, short-term residential care, trauma issues must be acknowledged. Providing in-depth treatment is an immense challenge for these agencies and not in accordance with their specified missions. However, they are in a prime position to facilitate screening, assessment, and referral for a variety of mental health problems, including PTSD (Abram, Teplin, McClelland, & Dulcan, 2003). Providers in juvenile justice and emergency shelter service sectors must recognize trauma symptomatology, collaborate with mental health professionals, and develop methods aimed at ameliorating the negative consequences of trauma.

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Sample Demographics and Characteristics of Youth in Detention Center and Emergency Shelter

Table 1

	Detention Center (N = 121)		Emergency Shelter (N = 156)		χ^2
	n	%	n	%	
Gender					
Female	68	56.2	87	55.8	<1
Ethnicity					
White/not Latino	45	37.2	62	39.7	<1
Black/not Latino	49	40.5	76	48.7	1.86
Latino	6	5.0	14	9.0	1.64**
Mixed/other	21	17.2	4	2.5	18.16**
Living situation at admission					
With parent(s)	41	33.9	79	50.6	7.79**
With friend/relative/foster	11	9.1	62	36.7	32.99**
Institutional setting	6	5.0	7	4.5	<1
Street/temporary shelter	63	52.1	8	5.1	78.76**
Clinically significant PTSD symptoms (score >60)	28	23.1	49	31.4	2.32

	M	SD	M	SD	t
Standardized PTSD score	51.1	10.5	53.7	10.4	-2.01*
Youth's age	14.5	1.1	16.0	1.5	-9.27**
Number of runaway episodes	4.9	9.8	3.3	3.1	1.91
Number of days away	14.4	41.0	3.3	2.4	3.25**
Family functioning factors					
Positive family affect	37.9	12.4	31.9	11.0	4.23**
Family worries	31.0	10.2	32.3	9.4	-1.09
Family communication	28.2	13.3	24.6	11.7	2.35*
Family rituals	39.8	11.2	34.7	11.1	3.75**
Family conflict	28.4	10.6	32.7	9.2	-3.61**
Father's alcohol/drug use	1.46	1.0	1.56	1.2	-7.42**
Mother's alcohol/drug use	1.34	0.8	1.49	1.1	-1.20

Note. PTSD = posttraumatic stress disorder.

* $p < .05$.

** $p < .01$.

Table 2

Multiple Regression to Predict Posttraumatic Stress Disorder (PTSD) Symptom Scores Among Runaway Youth Admitted to Juvenile Detention ($n = 121$)

Variables	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Constant	36.99	5.99	-	-6.18**
Number of runaway episodes	.17	.08	.17	2.05*
Positive family affect	-.09	.09	-.12	-1.07
Worry about relationships	.42	.08	.42	4.89**
Family conflict	.03	.11	.03	<1
Father's alcohol/drug use	2.07	.88	.20	2.36*

* $p < .05$.

** $p < .01$.

Table 3

Multiple Regression to Predict Posttraumatic Stress Disorder (PTSD) Symptom Scores Among Runaway Youth Admitted to Emergency Shelter ($n = 156$)

Variables	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Constant	36.78	5.99	-	6.14**
Number of runaway episodes	.21	.23	.07	0.89
Positive family affect	-.04	.10	-.04	-.041
Worry about relationships	.31	.09	.28	3.51**
Family conflict	.17	.11	.15	1.54
Family communication	-.09	.08	-.10	-1.06
Mother's alcohol/drug use	1.07	.71	.11	1.50

**
 $p < .01$.