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WHO IS DOING WELL? A TYPOLOGY OF NEWLY HOMELESS ADOLESCENTS

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There is growing evidence to support developing new typologies for homeless adolescents. Current typologies focus on the risks associated with being homeless, with less consideration of the positive attributes of homeless adolescents. The authors examined both risk and protective factors in a sample of newly homeless adolescents. Using cluster analysis techniques, they identified three distinct clusters of newly homeless adolescents: those who are protected and doing relatively well while out of home with more protective than risk factors, those who are at-risk, and those who are risky with more risk than protective factors. Over half (51.9%) of these newly homeless adolescents were in the protected cluster. This typology has implications for the design and implementation of services and interventions for newly homeless adolescents to reconnect them with stable housing situations. © 2009 Wiley Periodicals, Inc.

Most research on homeless adolescents has focused primarily on chronically homeless adolescents, and has treated heterogeneity among homeless adolescents primarily as a

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function of their geographic location—such as whether they were on the streets or in shelters (e.g., Baron, 1999; Greene, Ringwalt, & Iachan, 1997; Kipke, Montgomery, Simon, & Iverson, 1997)—or their reasons for leaving home—such as being told to leave home or leaving due to physical abuse (e.g., Ringwalt, Green, & Robertson, 1998; Zide & Cherry, 1992). This work has documented the negative effects of being out of home, including increased risk for HIV due to unprotected sex and injecting drug use, mental health problems, alcohol and drug abuse, and delinquent behaviors (Booth & Zhang, 1996; Kamieniecki, 2001; Kipke, et al., 1997; Ringwalt et al., 1998; Rosenthal, Moore, & Buzwell, 1994; Whitbeck, Hoyt, Yoder, Cauce, & Paradise, 2001).

However, our recent research on homeless adolescents suggests that newly homeless adolescents (that have been homeless for less than 6 months), compared to chronically homeless adolescents, are more likely to be younger, attending school, to not be engaging in high-risk sexual practices (e.g., unprotected sex), to not use drugs, and to have never attempted suicide (Milburn, Rotheram-Borus, Rice, Mallett, S., & Rosenthal, 2006). They tend to be the homeless adolescents who are using services and avoiding high-risk behaviors such as unsafe sex practices and drug use (Mallett, Rosenthal, Myers, Milburn, & Rotheram-Borus, 2004). This research indicates that newly homeless adolescents are distinct from experienced homeless adolescents and may require different types of interventions and services. Greater understanding of the heterogeneity of homeless adolescents could substantially enhance services for this population (Haber & Toro, 2004; Mallett et al., 2004). In addition, other factors related to their homelessness experiences, such as the length of time they have been out of home, or where, with whom, and how they spend their time during the day, can distinguish subgroups of homeless adolescents with varying characteristics and service needs (e.g., Mallett et al., 2004; Milburn et al., 2006).

Because the primary focus of previous research on homeless adolescents has been on the risks associated with being homeless (e.g., Ennett, Federman, Bailey, Ringwalt, & Hubbard, 1999; Rosenthal et al., 1994; Votta & Manion, 2004; Whitbeck et al., 2001), less attention has been given to how positive predictors of healthy adolescent development (e.g., being in school, having a job, having friends who engage in positive behaviors as well as being able to survive on the streets) apply to homeless adolescents and may serve as protective factors against negative outcomes such as chronic homelessness (Haber & Toro, 2004; Masten, 2001; Obradovic, Burt, & Masten, 2006; Rew, Taylor-Seehafer, Thomas, & Yockey, 2001; Taylor-Seehafer, 2004; Van Leeuwen et al., 2004; see Masten & Coatsworth, 1998, and Masten & Obradovic, 2006, for a review).

Previous typologies for homeless adolescents have been developed (Jones, 1988; Roberts, 1982; Zide & Cherry, 1992). These typologies provide verbally rich descriptive categories of homeless adolescents, but quantitative data to support or refute the categories have been inadequate because of several limitations (Zide & Cherry, 1992). Principally, they have relied upon small samples with limited external validity (Dunford & Brennan, 1976; Jones, 1988). Most of these typologies clustered homeless adolescents together and did not adequately distinguish between those who were newly homeless and those who were chronically homeless, even though a few acknowledged some of the homeless adolescents in their samples were runaways who had recently left home (e.g., Dunford & Brennan, 1976; Roberts, 1982; Zide & Cherry, 1992). Some of the typologies have categories that were not mutually exclusive such that adolescents seemed to fall in more than one category (Jones, 1988). Other typologies focused on deficits and did not consider resiliency, strengths or other protective factors, to categorize homeless adolescents. These typologies rely primarily

on risk factors such as substance abuse, mental health problems, and delinquent behaviors to categorize homeless youth (Jones, 1988; Roberts, 1982). Few typologies have been linked to adolescent development to consider the roles of family and friends, and those that have are qualitative or literature reviews of existing research that encompassed studies of varying methods (e.g., Jones, 1988; Roberts, 1982). Protective factors (e.g., being in school, behaviors of friends) that are associated with normative adolescent development were rarely included in these typologies (see Mallett et al., 2004; Zide & Cherry, 1992, for exceptions). Zide and Cherry (1992) in one of the few quantitative studies of a typology for homeless adolescents that included protective factors, used measures of social bonds (e.g., religious, family, school), drug use, assertion, criminality, and “primary motives” to identify four categories of homeless adolescents: those who were “running to,” “running from,” “thrown out,” and “forsaken.” Although problems in the methods (e.g., lack of detail about the measures, inappropriate data analysis, etc.) undermine this investigation, differences emerged in the characteristics of these categories. Recent research further underscores that these protective factors can lead to positive outcomes for adolescents, even high-risk adolescents such as newly homeless adolescents (e.g., Dodge, Dishion, & Lansford, 2006; Taylor-Seehafer, 2004).

In this article, we examine both protective and risk factors in a sample of newly homeless adolescents to identify subgroups to determine if there is variation in how well they are doing despite being out of home. Such variation may have implications for services and interventions for newly homeless adolescents (Milburn, Rosenthal, & Rotheram-Borus, 2005). Protective factors include indicators of positive connections to peers, school and work, overall health, and skills in being able to survive on one’s own while out of home (Masten, 2001; Obradovic et al., 2006; Rew et al., 2001; Tavecchio & Thomeer, 1999; Williams, Lindsey, Kurtz, & Jarvis, 2001). They have rarely been used in studies of homeless adolescents (e.g., Thompson, Pollio, & Bitner, 2000). Consideration of these protective factors, however, is warranted for the tailoring of services and interventions for newly homeless adolescents (Haber & Toro, 2004). Risk factors that have been used include age, race, gender, sexual behaviors, substance use, mental illness, sexually transmitted diseases, and family conflict (e.g., Bao, Whitbeck, & Hoyt, 2000; Cauce et al., 2000; DeRosa, Montgomery, Hyde, Iverson, & Kipke, 2001; Greene, Ennett, & Ringwalt, 1997; Greene & Ringwalt, 1998; McCaskill, Toro, & Wolfe, 1998; Rotheram-Borus, Rosario, & Koopman, 1991; Tyler, Whitbeck, Hoyt, & Yoder, 2000; Whitbeck, Johnson, Hoyt, & Cauce, 2004). They are often used in studies of homeless adolescents and cannot be overlooked in developing a typology of newly homeless adolescents.

Developing new typologies for newly homeless adolescents will enable us to better understand this population for services and interventions (Haber & Toro, 2004; Roberts, 1982). There is growing evidence to support developing new typologies for homeless adolescents. Previous research has shown that other homeless populations, such as homeless mentally ill adults, are not homogeneous and typologies have been developed for these adult homeless populations (e.g., Kuhn & Culhane, 1998; Mowbray, Bybee, & Cohen, 1993). In addition, researchers have consistently shown that the overall homeless population itself is diverse with different types of people with different service and program needs. Services targeted to various subgroups in the adult homeless population, such those who are chronically mentally ill, and those who are substances abusers that are more effective in addressing their service needs has evolved from that research (Drake, Osher, & Wallach, 1991; McCarty, Argeriou,

Heuber, & Lubran, 1991; Rafferty & Shinn, 1991; Shinn, Knickman, & Weitzman, 1991; Stein & Gelberg, 1997). Clearly, similar work is needed for homeless adolescents to better meet their service needs. Distinctions among homeless adolescents may suggest targeted intervention approaches for subpopulations of homeless adolescents.

We build upon previous work that focused on developing typologies of homeless adolescents in several ways. The sample for this article is comprised only of newly homeless adolescents that spent two or more nights out of home and were away from home for 6 months or less. Time out of home and residence (i.e., on the streets vs. in a shelter) are not primary factors for determining differences and similarities among these homeless adolescents, and both risk and protective factors are used to identify similarities and differences among the adolescents. This study addresses the gaps in the current development of typologies for homeless adolescents by examining both risk factors and protective factors to categorize newly homeless adolescent and distinguish between those who are protected and doing relatively well while out of home and those who are not.

METHOD

Participants

Representative samples of newly homeless adolescents were recruited in Los Angeles County, California in the United States, and in Melbourne, Australia. Three criteria were used to select participants: (a) age ranging from 12 to 20 years; (b) spent at least two consecutive nights away from home without parent's or guardian's permission if under age 17 years or was told to leave home; and (c) had been away from home for 6 months or less. More detailed information on the sampling procedures can be found in Milburn et al. (2006). The interviewers received approximately 40 hours of training, which included lectures, role-playing, mock surveys, ethics training, emergency and adverse event procedures, and technical training. All interviews were conducted face-to-face by trained interviewers using an audio computer-assisted self-interview (ACASI) that lasted between 1 and 1.5 hours. Paper and pencil surveys were used at a few street sites out of necessity. Participants received \$20 in local currency as compensation for their time for the baseline interview. The initial study was a longitudinal investigation of the trajectories of homeless adolescents (Milburn, Rosenthal, Rotheram-Borus, Mallett, & Batterham, 2007), but we focus only on the baseline data for the purposes of this article.

The sample consisted of 426 newly homeless adolescents, 261 (61%) from Los Angeles and 165 (39%) from Melbourne. Most of the adolescents (57%) were female and the average age at the time of the study was 16 years old ($SE = 0.1$). Most of the adolescents reported they were heterosexual (84%). In Los Angeles, most of the adolescents reported they were racial/ethnic minorities (23% African American, 43% Latino/Hispanic American, and 13% Mixed race/ethnicity).

Measures

Given that the goal of this study is to explore and develop groups of newly homeless adolescents, we considered all the relevant variables (140 variables) suggested from previous research (e.g., Haber & Toro, 2004; Ringwalt et al., 1998) that characterize homeless adolescents and had less than 15% missing responses in our dataset. These variables can be summarized as follows: reasons for leaving home (24 items presenting

various reasons why adolescents leave home); friends' characteristics (27 items describing homeless adolescents' friends and acquaintances); education and employment (3 items); alcohol and drug use (10 items); lifetime sexual behavior, including lifetime unprotected sex (4 items); suicidal (1 item); health-related (2 items, hepatitis C testing and self-description of health); survival skills (16 items describing various survival skills of homeless adolescents); and emotional distress (53 items; nine subscales of emotional distress including depressive and anxiety disorders).¹ After considering all these variables through the iterative algorithm described in the Data Analysis section, we retained the following demographic characteristics, risk factors, and protective factors.

Demographic and homelessness characteristics included age, gender, and whether physical/sexual abuse was an important reason for leaving home.

Risk factors included emotional distress, unprotected sex, and substance use. Emotional distress was ascertained by the Brief Symptom Inventory (BSI; Derogatis, 1993), a 53-item inventory that examines symptoms of mental distress. Participants rated the level of severity for each symptom during the previous week on a scale from 0 (*not at all severe*) to 4 (*extremely severe*). The BSI yielded a global severity index score ($\alpha = .96$; Milburn et al., 2005). Unprotected sex was scored 0 if the participant always used a condom while having vaginal/anal/oral sex or if a participant had never had vaginal/anal/oral sex (91 [21%] of the participants); or was scored 1 if a participant or his or her partner sometimes or never used a condom. Substance use was ascertained using questions on the number of days a participant had smoked, had alcoholic drinks, or used drugs such as marijuana, lysergic acid (LSD), inhalants, stimulants, crack/cocaine, or heroin. Questions were asked in the form, "How many days have you used [drug] over the past 3 months?" An overall score for hard drug use, specifically the use of LSD, inhalants, stimulants, crack, or heroin, was defined as 1 if a participant used at least one of these drugs over the past 3 months or 0 if the participant had not used any of them.

Protective factors included school (current attendance as yes [1] or no [0]), employment, positive friends, and survival skills. Employment was based upon a yes (1) or no (0) question, "Have you ever in your lifetime had a job?" Health was ascertained by asking a participant to describe his or her health. This question was scored from 1 (*poor*) to 4 (*excellent*). Positive friends were the number of friends engaging in positive behaviors. It was assessed using 11 questions: whether friends go to school regularly, get along with their family, inject drugs, have overdosed, have died, have been arrested, are in a gang, steal from others, have been in jail or the justice system, are homeless, and whether they have children. Questions were asked in the form, "How many of your friends [activity]?" Two of the questions, go to school regularly and get along with their family, were positively scored with a 1 if the response was *all* or 0 if the response was *most*, *some*, or *none*. The other questions were negatively scored with a 1 if the response was *none* or 0 if the response was *some*, *most*, or *all*. The percentage of positive responses for each participant was calculated by summing across all items, dividing by the total number of items, and multiplying by 100 ($\alpha = .80$). This created an overall measure of the number of friends who engaged in positive behaviors. Higher scores indicate a participant had a greater number of friends engaged in positive behaviors such as attending school regularly, getting along with their family, not injecting drugs, not overdosing, etc.

¹ A complete list of all the variables and measurement items can be obtained from the first author.

Survival skills consisted of 13 behaviors indicative of being able to function independently while out of home (1 = *always*, 0 = *never to most of the time*): avoiding hassles with the police, avoiding fights in the street, knowing places are safe or not, finding a place to sleep, finding a place to keep out of bad weather, getting around without money, getting food without money, getting things when needed, getting money when needed, dealing with agencies and services, avoiding people who will rip you off, identifying people who will look out for you, identifying people that you can learn from, and keeping in touch with people. The percentage of positive responses for each participant was computed in the same way as was done for the friends engaging in positive behaviors measure and is referred to as an overall survival skills score ($\alpha = .78$). Higher scores indicate a participant had more survival skills.

Data Analysis

The data analyses were carried out using the SAS statistical package (SAS Inc., Cary, NC). First, the selected variables were used to determine the cluster membership using the FASTCLUS procedure with the option of the K-means method and the prespecified number of clusters. After cluster membership was determined, the canonical variables were computed using the CANDISC procedure to graphically examine whether the prespecified number of clusters, given the set of selected variables, was clearly separated. The above procedures were done iteratively to identify groups of relatively homogeneous participants based on the selected variables and the prespecified number of clusters. We started with all the selected variables as a completed set, followed by different subsets of selected variables. For each, we specified a different number of clusters, such as 2, 3, and 4. After these trials, the optimal number of clusters was found to be a three-cluster solution because of the theoretical and structural meaning of the clusters, with 93 selected variables. Following the determination of the final cluster memberships, the summary measures for the risk and protective factors presented in the Results section were constructed for the 37 variables that were more reliable, valid, and statistically significant among the three clusters from the 93 selected variables.^{2,3}

Appropriate statistical methods were used to test whether the resulting clusters were statistically different for demographic and homelessness characteristics, and protective and risk factors. For example, chi-square tests were used for the nominal data and ANOVA analyses were used for the continuous data.

RESULTS

Three clusters of newly homeless adolescents emerged from the analyses: those who are protected (cluster 1), at risk (cluster 2), and risky (cluster 3). Table 1 presents a summary overview of the patterns of high and low means for the risk and protective factors for each cluster. More than half (51.9%) of the newly homeless adolescents were

²A complete description of the 93 variables can be obtained from the first author.

³Analyses were conducted to determine whether the samples of newly homeless adolescents could be merged into one sample. We found that constructing the samples merging both samples or using only the U.S. sample had a minor negligible effect on the cluster structure. The cluster structure for the Australia sample was slightly more affected because of the smaller sample size (less than 40% of the merged sample). More important, the majority of the participants in the protected cluster was the same whether the analysis was conducted using the separate country samples or the merged sample.

Table 1. Cluster Characteristics

	Cluster 1	Cluster 2	Cluster 3
Risk factors			
Emotional distress	L*	M	H
Unprotected sex	L*	H	M
Smoking	L*	H	M
Alcohol use	L*	M	H
Drug use	L*	H	M
Hard drug use	L*	H	M
Protective factors			
School	H*	L	M
Employment	L ^a	H	M
Health	H	L ^a	M
Positive friends	H*	M	L
Survival skills	H	L ^a	M

Note. The characteristics for each cluster are shaded: L = low; M = medium; H = high.

^aSignificantly different among the three clusters.

*Significantly different from the other two clusters.

Table 2. Demographic and Homelessness Characteristics

	Cluster 1 (n = 221)	Cluster 2 (n = 142)	Cluster 3 (n = 63)	Significance
Age				
M (SE)	15.6 (0.13)	16.7 (0.14)	16.1 (0.19)	**
Female				
N (%)	139 (62.9)	71 (50.0)	34 (54.0)	*
Physical/sexual abuse				
N (%)	72 (32.6)	29 (20.4)	36 (57.1)	**

* $p < .05$.

** $p < .0001$.

in the protected cluster. These adolescents reported high on four of five protective factors (4/5 high pattern) for protective factors and a low on six of six risk factors (6/6 low pattern). The next largest group, 33.3%, was in the at risk cluster. They had a 1/5 high pattern for protective factors and 0/6 low pattern for risk factors. The smallest group, 14.8%, were the risky who had a 0/5 high pattern for protective factors and a 0/6 low pattern for risk factors.

Table 2 shows the demographic and homelessness characteristics of the three clusters. Newly homeless adolescents in the protected cluster were younger than adolescents in the other clusters ($M = 15.6$, $SE = .13$, $p < .0001$) and had more females (62.9%, $p < .05$). Newly homeless adolescents in the risky cluster were more likely to report physical/sexual abuse as a reason for leaving home than newly homeless adolescents in the other clusters (57%, $p < .0001$).

The risk and protective factors for the three clusters are shown in Table 3. Newly homeless adolescents in the protected cluster had fewer risk factors and more protective factors than the at risk and risky clusters. They reported less emotional

Table 3. Risk and Protective Factors

Measures	Cluster			Significance
	1 (n = 221)	2 (n = 142)	3 (n = 63)	
Risk factors				
Emotional distress ^a				
M (SE)	0.61 (0.03)	0.92 (0.05)	1.07 (0.08)	**
Unprotected sex ^b				
Yes (%)	54 (24.6)	74 (52.5)	27 (42.9)	**
Smoking ^a				
M (SE)	18.0 (2.1)	63.1 (3.1)	49.9 (5.1)	**
Alcohol use ^a				
M (SE)	4.4 (0.6)	16.3 (1.6)	17.7 (3.0)	**
Hard drug ^{b,c}				
Yes (%)	42 (19.0)	77 (54.2)	34 (54.0)	**
Marijuana ^a				
M (SE)	6.1 (1.1)	39.9 (3.1)	30.2 (4.4)	**
Protective factors				
School ^b				
Yes (%)	151 (68.3)	56 (39.4)	25 (39.7)	**
Employment ^b				
Yes (%)	134 (60.6)	105 (73.9)	43 (68.3)	*
Health ^b				
Good or better (%)	195 (88.2)	91 (64.1)	48 (76.2)	**
Positive friends ^a				
M (SE)	69.9 (1.5)	43.0 (1.8)	36.5 (3.2)	**
Survival skills ^a				
M (SE)	52.3 (1.7)	34.9 (1.8)	43.8 (3.4)	**

^aANOVA was used.

^bChi-square test was used.

^cHard drug includes lysergic acid (LSD), inhalants, stimulants, crack, or heroin.

* $p < .05$.

** $p < .0001$.

distress ($M = .61$, $SE = .03$, $p < .0001$), were less likely to engage in unprotected sex (24.6%, $p < .0001$), smoked ($M = 18$ days, $SE = 2.1$, $p < .0001$), and used alcohol ($M = 4.4$ days, $SE = 0.6$, $p < .0001$) and other drugs such as marijuana ($M = 6.1$ days, $SE = 1.1$, $p < .0001$) fewer days than the at risk and risky clusters. They were also less likely to be hard drug users (19%, $p < .0001$). They were more likely to be in school (68.3%, $p < .0001$) and have good or better health (88.2%, $p < .0001$) than newly homeless adolescents in the other clusters. They had more friends who engaged in positive behaviors such as going to school regularly, getting along with their families, not being in a gang, not stealing from others, and were not homeless than did the newly homeless adolescents in the other clusters ($M = 69.9$, $SE = 1.5$, $p < .0001$). They had more survival skills such as knowing how to avoid hassles with the police, how to deal with agencies and services, how to avoid people who might rip them off, and how to identify people who could look out for them or from whom they could learn ($M = 52.3$, $SE = 1.7$, $p < .0001$). Newly homeless adolescents in the at risk cluster were more likely to have had a job (73.9%, $p < .05$), but had lower survival skills ($M = 34.9$, $SE = 1.8$, $p < .0001$) than the other clusters.

DISCUSSION

Greater understanding of the heterogeneity of homeless adolescents could substantially enhance tailored interventions and services for this population (Haber & Toro, 2004; Mallett et al., 2004). Using risk and protective factors to categorize newly homeless adolescents enables identification of homeless adolescents who are protected and are doing well out of home and that they are not a highly dysfunctional group of adolescents. They have lower risk factors such as emotional distress, substance use, and unprotected sex, and more protective factors such as being enrolled in school and having friends who engage in positive behaviors than other newly homeless youth. This may be the most challenging group of adolescents to work with from a services perspective. On the one hand, this group of protected homeless adolescents seems to be the most ready for services and interventions that can reconnect them with stable housing situations such as returning home. However, because they are doing well out of home, this group of protected homeless adolescents may be more likely to choose to remain homeless over time and be less amenable to services and interventions that will lead to returning home. They are out of home but are less likely to be engaging in risky behaviors such as unprotected sex and hard drug use. They are connected to positive friends and school. They may be less inclined to return to home. Nonetheless, they need stable living situations (e.g., with an adult guardian). For these protected newly homeless adolescents, being out of home for a prolonged period of time could still become problematic because they face greater exposure to risk factors such as sex work and drugs that put them at increased risk for HIV the longer they are not in a stable living situation. Temporal issues, such as current school involvement or recent substance use, may be relevant for newly homeless adolescents who have been out of home for less than 6 months because of the implications for decisions regarding intervening with these adolescents. Future research should consider how these temporal issues contribute to newly homeless adolescents becoming more protected or more risky in their behavior patterns over time.

Even with a primary focus on risk factors, previous research has consistently looked at reasons for leaving home to identify categories of homeless adolescents through literature reviews (e.g., Jones, 1988) and qualitative work (e.g., Roberts, 1982). Previous research supports that there are resilient homeless adolescents who are not dysfunctional (Dunford & Brennan, 1976; Jones, 1988). These are homeless adolescents who do not have mental health problems and have some positive connections with family, friends, and school. Our findings provide additional empirical evidence to further underscore this observation. Moreover, because the typology that we have developed does not extrapolate categories of homeless adolescents from reasons for leaving home (e.g., Dunford & Brennan, 1976; Jones, 1988), often cited reasons for leaving such as physical and sexual abuse could be examined in relation to the categories. Newly homeless youth in the risky group were the most likely to report physical/sexual abuse as an important reason for leaving home. The findings from this study build upon our previous work that categorized both newly and chronically homeless youth and focused on how, where, and with whom they spent their time (Mallett et al., 2004). The harm-avoidant-service connected group, a group that also seemed to be doing relatively well in terms of engaging in fewer high-risk behaviors, had also been homeless for less time. However, by looking only at newly homeless adolescents in this study and using both risks and protective factors, we further distinguish homeless adolescents who are doing well out of home.

We also identified groups of newly homeless adolescents who are not doing well and seem to be much more dysfunctional: those who are risky and those who are at risk. Previous research on typologies of homeless adolescents that included risk and protective factors suggest somewhat similar patterns although that work had limitations due to flaws in the research methods (e.g., Zide & Cherry, 1992). Risky and at-risk newly homeless adolescents seem to be similar on a number of the risk and protective factors, but they differ from those who are protected. Risky newly homeless adolescents are more likely to use alcohol and use hard drugs than the other groups. At-risk newly homeless adolescents are more likely to smoke cigarettes and use marijuana than the other groups. At-risk newly homeless adolescents, however, also report high on at least one protective factor; they are more likely to be employed. Risky homeless adolescents did not report high on any protective factors.

There are some limitations in our study. First, we did not set a predetermined number of clusters for the typology. Instead, after running various cluster solutions (e.g., 2, 3, or 4), the three cluster solution was determined to be the most optimal given variables that made up these clusters. For example, when a series of sensitivity analyses were conducted examining the three clusters with different sets of variables the results were very robust. Another limitation is that the distinction between the at-risk and risky groups is less clear than the distinction between the protected group and the other groups. The newly homeless adolescents in the at-risk and risky groups share many common characteristics. Consequently, the at-risk and risky groups were more sensitive to certain subsets of the variables that were considered in the analysis. We chose, however, to focus on the pattern of protective factors in distinguishing between the at-risk and risky groups. The risky group did not have more of any of the protective factors relative to the other groups. Nonetheless, our findings are valid given that the protected group was clearly distinct from the other groups.

Our findings contribute to understanding the dynamics of homelessness among adolescents by including both risk and protective factors to more accurately classify homeless adolescents, developing categories for homeless adolescents that are mutually exclusive, and using a fairly large sample of homeless adolescents who recently left home. This typology can contribute to the development of more appropriate, targeted services for homeless adolescents that consider their varying needs and strengths.

REFERENCES

- Bao, W.N., Whitbeck, L.B., & Hoyt, D.R. (2000). Abuse, support, and depression among homeless and runaway adolescents. *Journal of Health and Social Behavior*, 41, 408–420.
- Baron, S.W. (1999). Street youths and substance use: The role of background, street lifestyle, and economic factors. *Youth & Society*, 31, 3–26.
- Booth, R.E., & Zhang, Y. (1996). Severe aggression and related conduct problems among runaway and homeless adolescents. *Psychiatric Services*, 47, 75–80.
- Cauce, A.M., Paradise, M., Ginzler, J.A., Embry, L., Morgan, C.J., Lohr, Y., et al. (2000). The characteristics and mental health of homeless adolescents: Age and gender differences. *Journal of Emotional & Behavioral Disorders*, 8, 230–239.
- Derogatis, L.R. (1993). *Brief Symptom Inventory: Administration, scoring & procedures manual*. Minneapolis, MN: National Computer Systems.

- De Rosa, C.J., Montgomery, S.B., Hyde, J., Iverson, E., & Kipke, M.D. (2001). HIV risk behavior and HIV testing: A comparison of rates and associated factors among homeless and runaway adolescents in two cities. *AIDS Education and Prevention, 13*, 131–148.
- Dodge, K.A., Dishion, T.J., & Lansford, J.E. (2006). Deviant peer influences in intervention and public policy for youth. *Social Policy Report, 20*, 3–19.
- Drake, R.E., Osher, F.C., & Wallach, M.A. (1991). Homelessness and dual diagnosis. *American Psychologist, 46*, 1149–1158.
- Dunford, F.W., & Brennan, T. (1976). A taxonomy of runaway youth. *Social Service Review, 50*, 457–470.
- Ennett, S.T., Federman, E.B., Bailey, S.L., Ringwalt, C.L., & Hubbard, M.L. (1999). HIV-risk behaviors associated with homelessness characteristics in youth. *Journal of Adolescent Health, 25*, 344–353.
- Greene, J.M., Ennett, S.T., & Ringwalt, C.L. (1997). Substance use among runaway and homeless youth in three national samples. *American Journal of Public Health, 87*, 229–35.
- Greene, J.M., & Ringwalt, C.L. (1998). Pregnancy among three national samples of runaway and homeless youth. *Journal of Adolescent Health, 23*, 370–7.
- Greene, J.M., Ringwalt, C.L., & Iachan, R. (1997). Shelters for runaway and homeless youths: Capacity and occupancy. *Child Welfare, 76*, 549–561.
- Haber, M.G., & Toro, P.A. (2004). Homelessness among families, children, and adolescents: An ecological–developmental perspective. *Clinical Child and Family Psychology Review, 7*, 123–164.
- Jones, L.P. (1988). A typology of adolescent runaways. *Child and Adolescent Social Work, 5*, 16–28.
- Kamieniecki, G.W. (2001). Prevalence of psychological distress and psychiatric disorders among homeless youth in Australia: A comparative review. *Australian & New Zealand Journal of Psychiatry, 35*, 352–358.
- Kipke, M.D., Montgomery, S.B., Simon, T.R., & Iverson, E.F. (1997). "Substance abuse" disorders among runaway and homeless youth. *Substance Use and Misuse, 32*(7–8), 969–986.
- Kuhn, R., & Culhane, D.P. (1998). Applying cluster analysis to test a typology of homelessness by pattern of shelter utilization: Results from the analysis of administrative data. *American Journal of Community Psychology, 26*, 207–232.
- Mallett, S., Rosenthal, D., Myers, P., Milburn, N., & Rotheram-Borus, M.J. (2004). Practicing homelessness: A typology approach to young people's daily routines. *Journal of Adolescence, 27*, 337–349.
- Masten, A.S. (2001). Ordinary magic. Resilience processes in development. *American Psychologist, 56*, 227–38.
- Masten, A.S., & Coatsworth, J.D. (1998). The development of competence in favorable and unfavorable environments. Lessons from research on successful children. *American Psychologist, 53*, 205–20.
- Masten, A.S., & Obradovic, J. (2006). Competence and resilience in development. *Annals of the New York Academy of Sciences, 1094*, 13–27.
- McCarty, D., Argeriou, M., Heuber, R.B., & Lubran, B. (1991). Alcoholism, drug abuse, and the homeless. *American Psychologist, 46*, 1139–1148.
- McCaskill, P.A., Toro, P.A., & Wolfe, S.M. (1998). Homeless and matched housed adolescents: A comparative study of psychopathology. *Journal of Clinical and Child Psychology, 27*, 306–19.
- Milburn, N.G., Rosenthal, D., & Rotheram-Borus, M.J. (2005). Needed: Services research with homeless young people. *Journal of Health and Social Policy, 20*(3), 1–9.

- Milburn, N.G., Rotheram-Borus, M.J., Batterham, P., Brumback, B., Rosenthal, D., & Mallett, S. (2005). Predictors of close family relationship over one year among homeless young people. *Journal of Adolescence*, 28, 263–275.
- Milburn, N.G., Rotheram-Borus, M.J., Rice, E., Mallett, S., & Rosenthal, D. (2006). Cross-national variations in behavioral profiles among homeless youth. *American Journal of Community Psychology*, 37, 63–76.
- Milburn, N.G., Rosenthal, D., Rotheram-Borus, M.J., Mallett, S., & Batterham, P. (2007). Newly homeless youth typically return home. *Journal of Child and Adolescent Mental Health*, 40, 574–6.
- Mowbray, C.T., Bybee, D., & Cohen, E. (1993). Describing the homeless mentally ill: Cluster analysis results. *American Journal of Community Psychology*, 21, 67–93.
- Obradovic, J., Burt, K.B., & Masten, A.S. (2006). Pathways of adaptation from adolescence to young adulthood: Antecedents and correlates. *Annals of the New York Academy of Sciences*, 1094, 340–344.
- Rafferty, Y., & Shinn, M. (1991). The impact of homelessness on children. *American Psychologist*, 46, 1170–1179.
- Rew, L., Taylor-Seehafer, M., Thomas, N.Y., & Yockey, R.D. (2001). Correlates of resilience in homeless adolescents. *Journal of Nursing Scholarship*, 33, 33–40.
- Ringwalt, C.L., Greene, J.M., & Robertson, M.J. (1998). Familial backgrounds and risk behaviors of youth with runaway experiences. *Journal of Adolescence*, 21, 241–252.
- Roberts, A.R. (1982). Adolescent runaways in suburbia: A new typology. *Adolescence*, 17, 387–396.
- Rosenthal, D., Moore, S., & Buzwell, S. (1994). Homeless youths: Sexual and drug-related behaviour, sexual beliefs and HIV/AIDS risk. *AIDS Care*, 6, 83–94.
- Rotheram-Borus, M.J., Rosario, M., & Koopman, C. (1991). Minority youths at high risk: Gay males and runaways. In M.E. Colten & S. Gore (Eds.), *Adolescent stress: Causes and consequences. Social institutions and social change* (pp. 181–200). Hawthorne, NY: Aldine de Gruyter.
- Shinn, M., Knickman, J.R., & Weitzman, B.C. (1991). Social relationships, and vulnerability to becoming homeless among poor families. *American Psychologist*, 46, 1180–1187.
- Stein, J., & Gelberg, L. (1997). Comparability and representativeness of clinical homeless, community homeless, and domiciled clinic samples: Physical and mental health, substance use, and health service utilization. *Health Psychology*, 16, 155–162.
- Taylor-Seehafer, M.A. (2004). Positive youth development: reducing the health risks of homeless youth. *The American Journal of Maternal/Child Nursing*, 29, 36–40.
- Tavecchio, L.W.C., & Thomeer, M.A.E. (1999). Attachment, social network, and homelessness in young people. *Social Behavior and Personality*, 27, 247–262.
- Thompson, S.J., Pollio, D.E., & Bitner, L. (2000). Outcomes for adolescents using runaway and homeless youth services. *Journal of Human Behavior in the Social Environment*, 3, 79–97.
- Tyler, K.A., Whitbeck, L.B., Hoyt, D.R., & Yoder, K.A. (2000). Predictors of self-reported sexually transmitted diseases among homeless and runaway adolescents. *Journal of Sex Research*, 37, 369–377.
- Van Leeuwen, J.M., Hopfer, C., Hooks, S., White, R., Petersen, J., & Pirkopf, J. (2004). A snapshot of substance abuse among homeless and runaway youth in Denver, Colorado. *Journal of Community Health*, 29, 217–229.
- Votta, E., & Manion, I. (2004). Suicide, high-risk behaviors, and coping style in homeless adolescent males' adjustment. *Journal of Adolescent Health*, 34, 237–243.

- Whitbeck, L.B., Hoyt, D.R., Yoder, K.A., Cauce, A.M., & Paradise, M. (2001). Deviant behavior and victimization among homeless and runaway adolescents. *Journal of Interpersonal Violence*, 16, 1175–1204.
- Whitbeck, L.B., Johnson, K.D., Hoyt, D.R., & Cauce, A.M. (2004). Mental disorder and comorbidity among runaway and homeless adolescents. *Journal of Adolescent Health*, 35, 132–140.
- Williams, N.R., Lindsey, E.W., Kurtz, P.D., & Jarvis, S. (2001). From trauma to resiliency: Lessons from former runaway and homeless youth. *Journal of Youth Studies*, 4, 233–253.
- Zide, M.R., & Cherry, A.L. (1992). A typology of runaway youths: An empirically based definition. *Child and Adolescent Social Work Journal*, 9, 155–168.