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Predictors of close family relationships over one year among homeless young people[☆]

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Abstract

Predictors of perceived family bonds were examined among homeless young people who initially left home one year earlier. Newly homeless young people aged 12–20 years who had recently left home were recruited in Los Angeles County, United States ($n = 201$) and Melbourne, Australia ($n = 124$) and followed longitudinally at 3, 6, and 12 months (follow-up rates ranging from 72% to 86% overall). These homeless young people varied substantially in their bonds to their families. Family bonds at one year were predicted in multivariate regression analyses by having significantly fewer problem behaviours when leaving home and decreasing rates of problem behaviours over the next year. Having more emotional support and more instrumental financial support were also significantly associated with greater family bonds one year later. These results suggest that efforts to reunite families may be a viable intervention strategy for newly homeless young people.

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Introduction

Homeless young people are typically found to engage in a broad range of problem behaviours and to come from backgrounds high in stress that are likely to exacerbate problems (Bao, Whitbeck, & Hoyt, 2000; Tyler, Cauce, & Whitbeck, 2004). The developmental trajectory of homeless young people has been assumed to be one of spiraling into increasingly marginalized subcultures that may exacerbate the onset of problems (Ayerst, 1999; Tyler, Hoyt, Whitbeck, & Cauce, 2001). In particular, families of homeless young people are often believed to be responsible for runaway episodes: physical and sexual abuse, parental substance use, and irreconcilable differences between parents and young people are often cited as precipitants for adolescents leaving home (Tyler, Cauce, & Whitbeck, 2004; Whitbeck, 1999).

Although the relationships that homeless young people have with their parents are often negatively characterized, there is little known about the variability in perceptions and the types of relationships that young people have with their parents after they leave home. Strong parental bonds and family closeness have consistently been identified as a protective factor for adolescents (Steinberg & Morris, 2001; Tinsley, Lees, & Sumartojo, 2004). Positive parental bonds have been linked to lower rates of adolescent sexual risk acts, substance use, and teenage pregnancy (Markham et al., 2003). Conversely, high-quality parent–adolescent relationships have been linked to successful outcomes in early adulthood (Valiente, Fabes, Eisenberg, & Spinrad, 2004). When adolescents experience stressful life events, parents may serve to buffer their children's experiences to lessen the negative impact of these events. Family bonds include being close to, cared for by, and loved and wanted by family members, as well as being satisfied with and acknowledging the importance of relationships with family members. Knowledge of family bonds among homeless young people may allow us to design interventions to mobilize families as a protective factor for some homeless young people. The goal of this paper is to examine perceptions of family bonds one year following an initial incident of leaving home and the prospective predictors of family bonds a year later in a sample of newly¹ homeless young people who had been out of home for a short period of time and engaged in fewer behavioural problems than chronically homeless young people (Milburn, Rotheram-Borus, Rice, Mallett, & Rosenthal, *in submission*). These young people were recruited in Los Angeles County, California in the United States (US) and Melbourne, Victoria in Australia (AU).

¹Most research on homeless adolescents has focused on chronic experienced homeless adolescents who have been out of home for extended periods of time or have had multiple episodes of leaving home (e.g., Whitbeck & Hoyt, 1999). The distinction between newly homeless young people who have been out of home for a short period of time and chronic experienced homeless young people has been often overlooked in the research literature. The distinction that has been made most often among homeless adolescents has been between young people who are literally on the streets and young people in shelters (Kipke, Simon, Montgomery, Unger, & Iversen, 1997; Greene, Ringwalt, & Iachan, 1997). Time out of home is implied within a classification of homeless young people based upon the location but it is not the primary classifying criterion. Classifying homeless young people by time out of home provides a greater understanding of the heterogeneity of homeless young people. For example, in Los Angeles County, newly homeless young people who have been out of home for 6 months or less are more likely to be younger, female, heterosexual, Latino, to be attending school, and come from single parent families, and less likely to report physical/sexual abuse as an important reason for leaving home, less likely to have been in jail/juvenile detention, less likely to be pregnant or parents, and to engage in fewer high risk behaviours for HIV than chronic experienced homeless young people who have been out of home for more than 6 months.

Homeless young people may be much more likely to have distant relationships with their parents. Homeless young people often report that the precipitating event for leaving home is conflict with family (Robertson & Toro, 1999; Whitbeck & Hoyt, 1999). Some homeless young people report a history of experiencing violence and abuse in their families (Schaffner, 1998; Tyler & Cauce, 2002), frequent moves and unstable housing while with their families (Saewyc, 2003), and neglect within the family (Powers, Eckenrode, & Jaklitsch, 1990; Molnar et al., 1998; Yates, MacKenzie, Pennbridge, & Cohen, 1988). Family bonds in homeless young people have not been examined prospectively, so how their family bonds may change over time is not known.

Predictors of family bonds

Three types of predictors can influence perceptions of family bonds a year later among newly homeless young people: the geographic and homelessness context of young people, including the country that they live in, their sociodemographic characteristics, family violence in a young person's past as a reason for leaving home and patterns of leaving home (e.g. Whitbeck & Hoyt, 1999; Sutherland & Shepherd, 2001); history and developmental trajectory of externalizing and internalizing problems (e.g. Whitbeck, Hoyt, & Ackley, 1997; Robertson & Toro, 1999; Whitbeck, Johnson, Hoyt & Cauce, 2004); and social relationships and the types of support provided by different members of the young person's social network (e.g. financial help).

The context in which a leaving home episode occurs is a significant determinant of its outcome. Geographic context, such as the country where young people live, can provide service systems that vary in how they encourage young people to return home or offer options for their sustained exit from their families of origin. We included the country site, whether young people were from the US or AU, as a predictor of family bonds. The US and AU are similar in several ways: both are large, developed countries which value family relationships highly, both have very organized social service systems devoted to homeless young people, large immigrant populations, strong social norms for individualism, and formal health care and foster care systems for homeless young people (Kim, Trandis, Kagitchibasi, Choi, & Yoon, 1994). Yet, they also differ in that AU provides geographically dispersed services, preventive services, and limited governmental allowances for homeless young people.

Other contextual factors such as sociodemographic and homelessness characteristics can be related to perceptions of family bonds (e.g. Baer, 1999; Lee, Lester, & Rotheram-Borus, 2002). Both family relationships and patterns of homelessness significantly vary by young people's gender, age, type of parent, and religiosity. As young people grow older, peers become increasingly important, compared to family (Sutherland & Shepherd, 2001). Female adolescents are closer to their families than male adolescents are (Lee et al., 2002); adolescents in single-parent households report more conflicts with family than adolescents in two-parent families (Baer, 1999); and religious practices such as attending church can strengthen family relationships (Snarey & Dollahite, 2001).

Homeless young people often report leaving home because of family abuse (Whitbeck & Hoyt, 1999). Young people who are out of home for a prolonged period of time are more likely to engage in behaviours that further separate them from family (McMorris, Tyler, Whitbeck, & Hoyt, 2002; Milburn, Rotheram-Borus, Rice, Mallett, & Rosenthal, in submission).

Homeless young people have both been characterized by high rates of reports of both externalizing and internalizing symptoms. Externalizing problems generally cause great disturbance to others and

involve conduct problems that may lead to contact with the criminal justice system, substance abuse, and risky behaviours such as multiple sexual partners. Some homeless young people sampled in small- to medium-sized cities were reported to have conduct disorders (Whitbeck et al., 2004), with behaviours such as stealing (23%), breaking and entry (14%), dealing drugs (20%), and prostitution (2%; Whitbeck, Hoyt, & Ackley, 1997) being much higher than among non-homeless young people. At least one in four young people in a sample of 251 homeless adolescents from the Detroit area met criteria for alcohol or substance abuse disorder (McCaskill, Toro, & Wolfe, 1998; Toro & Goldstein, 2000). These behaviours typically cause great distress to parents.

The rates of emotional distress, particularly depression, have also been high and consistent across studies (Robertson & Toro, 1999). Homeless young people are at elevated risk for emotional distress (Robertson & Toro, 1999). Whether the emotional problems are a cause of homelessness or a consequence of the conditions that precipitate homelessness has been unclear, because there are so few longitudinal studies. Emotionally distressed young people may isolate themselves from their family or seek emotional closeness, as young people feel depressed or anxious. Finally, a potential buffer for family bonds may be strong social relationships with peers and other relatives. Simultaneously, emotional, social and instrumental (e.g. financial) support from these social relationships may serve to offer alternatives to family bonds among newly homeless young people who are experiencing conflict at home.

In summary, we expected that: (1) given the negative family relationships that have been reported in cross-sectional work, newly homeless young people would perceive low levels of family bonds one year after leaving home; (2) country site would predict perceptions of family bonds, but whether the US or AU would have higher levels of family bonds was not clear because geographical context has not been considered in previous studies of homeless young people; (3) sociodemographic characteristics would predict perceptions of family bonds with newly homeless young people who were younger or female or attended religious services or were not from single-parent families reporting higher levels of family bonds than their counterparts; (4) reports of family violence and abuse as a reason for leaving home and being away from home a longer period of time would predict lower levels of family bonds; (5) externalizing behaviours (EB) would predict lower levels of family bonds; (6) emotional distress as an internalizing symptom would predict perceptions of family bonds but the direction, high or low, could not be specified; and (7) given the potential for social relationships to influence young people in very different ways, we were unsure whether social relationships and emotional, social and instrumental support would predict high or low levels of family bonds.

Methods

Participants

Representative samples of newly homeless adolescents were recruited in the US and AU. Three criteria were used to select participants: (1) age ranging from 12 to 20 years;² (2) spent at least two

²The purpose of this study was to understand the developmental trajectories of homeless young people over time, so initially the age range of 12–17 years was selected. Previous studies with representative samples of homeless young

consecutive nights away from home without parent's or guardian's permission if under age 17 years or been told to leave home; and (3) had been away from home for 6 months or less. The recruitment process varied somewhat across the two countries. The variation reflected our attempts to be respectful of the research norms and expectations of service providers in the respective countries. In the US, sites were selected through a systematic process. First, all of the potential recruitment sites for homeless adolescents in Los Angeles County were identified through snowball sampling techniques by interviewing line and supervisory staff in agencies that served homeless adolescents throughout the county (Brooks, Milburn, Witkin & Rotheram-Borus, 2004; Witkin, Milburn, May, Brooks, & Rotheram-Borus, in press). Thirty sites were identified, including 17 shelters and drop-in centers and 13 street hangout sites. Next, the 30 sites were audited at pre-selected times over three different weeklong time periods to determine the number of homeless adolescents that could be found at each site. All of these locations were included as recruitment sites. Interviewers were sent out in pairs to screen and recruit eligible homeless adolescents.

In AU, recruitment sites were systematically selected from a database of all young people and homeless services across the five metropolitan regions of Melbourne. Service managers were approached to seek permission for their service's involvement in the project. Of the 114 eligible services, 112 agreed to participate. Participants were subsequently recruited from 95 agencies. Each service was given an information session that outlined the project and informed staff of the eligibility criteria for participants. Potentially eligible homeless young people were referred to the study by staff working at these services, either by giving the young person the project's free-call number or telephoning the number on their behalf.

Interviewers at both sites conducted a comprehensive screening of adolescents with a 13-item screening instrument to determine whether they were eligible to participate in the study. The instrument was designed to mask the eligibility criteria, confirm eligibility, and establish the length of time the young person had been away from home. Participants were assured of confidentiality and the informed consent process was reviewed.³ Participants were also told that interviewers were required to report current physical or sexual abuse (if under 17 years) and serious suicidal or homicidal feelings. The study fulfilled all human subject guidelines and was approved by the Institutional Review Board (IRB) at the University of California, Los Angeles.

Procedure

The interviewers received approximately 40 h of training, which included lectures, role-playing, mock surveys, ethics training, emergency procedures, and technical training. All interviews were conducted face-to-face by trained interviewers using an audio-taped computer-assisted interview

(footnote continued)

people had most often surveyed youth over 18 years (Greene, Ennett, & Ringwalt, 1999). The age range was expanded, however, after service providers noted that some young people who had recently left home were over 17 years, and the range of 12–17 years did not accurately reflect the population that they were serving (Brooks et al., 2004).

³Informed consent was obtained from all participants 18 years and older. If participants were minors and living at home at the time of the interview, informed consent was obtained from a parent/guardian and assent was obtained from the minor. If participants were minors and living on the streets at the time of the interview, en locus parentis consent was obtained from a member of the outreach (recruitment) team present, and assent was obtained from the minor.

schedule (ACASI) that lasted between 1 and 1½h. 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 and \$25, \$30, and \$35, respectively, for the 3-, 6-, and 12-month follow-ups. The follow-up rates were 83%, 88%, and 83% rate in the US; and 72%, 84%, and 86% in AU. Baseline refusal rates were less than 7% in the US and not evaluated in AU.

Measures

Family bonds. Young people rated four types of family relationships by one year: with (1) mother or female guardian, (2) father or male guardian, (3) siblings, and (4) extended family members. The ratings for each of these relationships covered five dimensions: (1) closeness (2) caring, (3) importance, (4) satisfaction, and (5) perceived love received. Questions were asked in the form, “Do you feel close to your mother?” with a follow-up question of “How close, somewhat close or very close?” if the young person answered affirmatively to the first item in the pair. From these pairs, a score was calculated: 0 (not at all), 1 (somewhat), or 2 (very much). These scores were summed across all of the family relations and dimensions, resulting in a summary score ranging from 0 to 40 reflecting positive bonds, which is closeness across all family members.

Predictors

Geographic and sociodemographic characteristics: At baseline, young people reported their country site (US or AU), gender, age (date of birth), type of guardianship (single parent versus other), and attendance at religious services (never, occasional, or frequent).

Homelessness characteristics: Young people reported whether *family physical violence* was a reason for them to leave home at baseline. It was dichotomized as 0 (not important) and 1 (somewhat important, important, and very important). *School-related reasons for leaving home* were ascertained using a scale constructed from summing responses on three questions regarding conflict with teachers, peers, and school problems at baseline. Young people rated each domain on a four-point scale as being unimportant (0) to very important (3) as a reason for leaving home. Scores ranged from 0 to 9. *Family-related reasons for leaving home* were assessed using a scale constructed from summing responses on four questions regarding being told to leave home, parental financial problems, conflict with parents and parental separation or divorce at baseline. Responses were rated on the same four-point scale as school-related reasons. Scores ranged from 0 to 12. *Friend-related reasons for leaving home* were ascertained using a scale constructed from summing responses on three questions regarding boyfriend/girlfriend difficulties, pressure from friends and traumatic events involving a friend or acquaintance at baseline. Responses were rated on the same four-point scale as school-related reasons. Scores ranged from 0 to 9. *Time away from home since baseline* was inferred, as questions regarding this characteristic of homelessness were not directly asked. As a proxy for this predictor, the number of interviews in which the young person reported homelessness was counted, resulting in a time span of either 0, 3, 6, 9 or 12 months away from home. Another measure of the nature of homelessness was whether the young person had *exited homelessness by one year*, which was asked as a yes/no

question in the form, “Are you currently not living with a parent or guardian?” during the 12-month follow-up.

Externalizing behaviours: Four *externalizing problem behaviours* were scored “1” if present or “0” if absent and summed at each assessment point (baseline, 3 and 6 months): (1) contact with the criminal justice system, (2) unprotected sex, (3) alcohol use, or (4) drug use. Scores ranged from 0 to 4, depending on how many of the behaviours were reported. In the case of missing responses, the score was adjusted based on the number of non-missing responses. *Injecting drug use* was included as a separate binary predictor, established on the basis of whether the participant injected any of the injectable drugs that they used. Questions were asked in the form, “When you used [drug] over the past 3 months, did you inject it?” Injecting drug use was excluded from the EB scale, as it is a less-common behaviour.

Emotional distress: *Emotional distress* was ascertained by the Brief Symptom Inventory (BSI; Derogatis, 1993), which is a 53-item inventory that examines symptoms of mental distress at each follow-up point. The BSI yielded a global severity index ($\alpha = 0.96$) and subscales for anxiety ($\alpha = 0.79$) and depression ($\alpha = 0.76$). Participants rated the level of severity for each symptom during the previous week on a scale from 0 (not at all) to 4 (extremely).

Social support: *Family emotional support* was measured as the number of people the participants could seek emotional support from, that is, talking about problems to, as reported at baseline. Scores on this measure ranged from 0 to 3 points, with one point each for father, mother and siblings. Instrumental support that was not financial included several items. The *existence of an adult the young person could go to for guidance, help and support* (yes/no) was reported at baseline. Five types of social network members (close friends, peers, mother, father, siblings) were rated on a 0 (not at all helpful) to 2 (very helpful) scale to form an index of *family and friend helpfulness*, specifically how helpful each person is when the young person had a personal problem. Scores ranged from 0 to 10. *Family financial support* was assessed by rating three types of social network members (mother, father, and siblings) on a 0–2 scale (“not at all” to “a great deal”) to form an index of providing financial support when money was needed. Scores ranged from 0 to 6. *Having fun socially with peers and friends* was summed from two items scaled 0–2 (“not at all” to “a great deal”) for how much fun the participant had with friends and peers at baseline. Scores ranged from 0 to 4.

Analysis plan

The analysis proceeded in three stages. In the first stage, the longitudinal covariates, EB and BSI, were summarized with intercepts and slopes calculated for each participant. These summary measures were then used as predictors in regression analyses. Secondly, a best subsets selection procedure was conducted in SAS using all of the predictor variables to determine predictors admitted into the final multivariate regression model with family bonds as the outcome. This procedure ranks subsets of predictors from the full model based on the Adjusted R^2 statistic, to facilitate the selection of a smaller predictive model. Finally, predictor variables selected in by the best subsets selection procedure were included in a multivariate linear regression analysis with family bonds as the outcome.

Results

Sample description. Complete data were available for 325 of 355 (92%) of newly homeless young people: 201 young people from the US (62%) and 124 young people from AU (38%). Across sites, there were more females (59%) than males (41%). Young people ranged in age from 12 to 20, with 21% between 12 and 14, 38% between 15 and 16, 34% between 17 and 18, and 6% between 18 and 20. In the US, 19% were White (non-Hispanic), 22% were African American, 45% were Hispanic, and 14% were of other races/ethnicities.

Predictors of family bonds. From the best subsets regression procedure, a model was selected on the basis of the Adjusted R^2 statistic. Models with up to 12 covariates were investigated, and the final model that was selected contained eight covariates. The following variables were dropped from the final model, as they were not found to be the best multivariate predictors of family bonds: age, gender, site (AU or US), injection drug use, existence of an adult that the young person could go to for help, baseline family and friend helpfulness, reasons for leaving home related to the family, reasons for leaving home related to friends, reason for leaving home related to family violence, religious service attendance, single-parent household, time away from home since baseline and whether the young person had exited homelessness by one year. Table 1 displays univariate descriptive statistics for variables selected into the final regression model. There was a fair degree of variability in family bonds scores at one year, with scores across the entire range of the five-item scale (0 to 40), and a high degree of internal reliability (Cronbach $\alpha = 0.87$). The mean BSI score was in the normative range at baseline; baseline BSI scores for the sample were not significantly different from the adolescent non-patient norms (Derogatis, 1993) for females ($t = 1.37$; $p = 0.17$) or males ($t = 0.21$; $p = 0.84$). Moreover, emotional distress as reflected on the BSI decreased over the next year (reflected in a negative slope over the 3, 6, and 12 month assessments). Likewise, the proportion of participants who could be classified as reaching

Table 1

Univariate descriptive statistics for the outcome and covariates selected into the multivariate regression model

	<i>N</i>	Mean	Median	s.d.	Minimum	Maximum
Family bonds score	325	23.59	24	9.21	0	40
BSI, baseline	325	0.78	0.64	0.57	0	2.91
BSI clinical caseness, baseline	325	0.23	0	0.42	0	1
BSI, 3-month	287	0.64	0.47	0.53	0	2.40
BSI clinical caseness, 3-month	287	0.18	0	0.38	0	1
BSI, 6-month	321	0.57	0.43	0.52	0	3.04
BSI clinical caseness, 6-month	321	0.14	0	0.35	0	1
EB, baseline	325	1.68	2	1.24	0	4
EB, 3-month	287	1.55	1	1.30	0	4
EB, 6-month	321	1.65	2	1.29	0	4
Family emotional support, baseline	325	1.43	1	1.06	0	3
Family financial support, baseline	325	2.44	2	1.73	0	6
Having fun with friends, baseline	325	3.15	3	0.92	0	4
School-related reasons for leaving home	325	1.17	0	1.84	0	9

clinical caseness (Derogatis, 1993) also decreased over the year. EB did not demonstrate a clear pattern of decline in the year following baseline.

To summarize the relationships between family bonds and the predictors included in the final regression model, the family bonds score was also summarized as a binary outcome using a median split. Scores greater than 23 were classified as “high” family bonds and scores less than or equal to 23 were classified as “low” family bonds. As shown in Table 2, young people classified as having low family bonds reported significantly less emotional and financial support from family, significantly higher numbers of EB and some indication of higher emotional distress. Table 2 also shows some differences between the two groups in the trend EB over time—those in the low family bonds group had a fairly consistent level of EB while those in the high family bonds group tended to have fewer EB over time.

The results of the multivariate linear regression analysis are shown in Table 3. Family bonds by one year were significantly predicted by both the initial level of EB and the rate at which these behaviours decreased over the next year (as reflected in the slope). The more EB a young person demonstrated at baseline, the lower the family bonds score reported by one year. The more EB decreased over time, the greater the family bonds score by one year, as also suggested by the bivariate analysis in Table 2. While related to family bonds in the bivariate analyses, initial levels of emotional distress on the BSI and changes in emotional distress over time were not significantly predictive of family bonds by one year.

Family bonds by one year were significantly related to higher social support reported at baseline. The more family emotional support and financial support reported at baseline the higher the family bonds by one year. Although the variables reflecting school-related reasons for leaving home and having fun with friends were selected into the model as predictors, they were not significantly predictive of family bonds by one year in the multivariate model.

Table 2
Descriptive statistics for the predictors included in the regression model by level of family bonds

	Low bonds (<i>n</i> = 185)	High bonds (<i>n</i> = 170)
<i>Emotional distress</i>		
BSI, baseline—mean (s.d.)	0.83 (0.57)	0.73 (0.55)
BSI clinical caseness, baseline	26.4%	17.9%
BSI, 3-month—mean (s.d.)	0.73 (0.57)	0.57 (0.48)**
BSI clinical caseness, 3-month	21.3%	12.9%
BSI, 6-month—mean (s.d.)	0.64 (0.53)	0.49 (0.48)**
BSI clinical caseness, 6-month	18.4%	8.6%*
<i>Externalizing behaviours</i>		
EB, baseline—mean (s.d.)	1.83 (1.29)	1.52 (1.18)*
EB, 3-month—mean (s.d.)	1.81 (1.29)	1.29 (1.28)***
EB, 6-month—mean (s.d.)	1.86 (1.30)	1.37 (1.25)***
Family emotional support, baseline—mean (s.d.)	1.16 (0.98)	1.70 (1.05)****
Family financial support, baseline—mean (s.d.)	1.88 (1.55)	2.88 (1.76)****
Having fun with friends, baseline—mean (s.d.)	3.08 (0.97)	3.20 (0.87)
School-related reasons scale—mean (s.d.)	1.10 (1.84)	1.19 (1.81)

Chi-square (χ^2) tests for percentages and *t*-tests for means: **p* < 0.05; ***p* < 0.01; ****p* < 0.001; *****p* < 0.0001.

Table 3

Multivariate regression analysis, coefficient estimates, standard errors, and *p*-values (*N* = 325)

	Coefficient estimate	Standard error	<i>p</i> -value
Intercept	21.84	2.20	<0.0001
EB slope	−2.09	0.95	0.028
EB intercept	−0.91	0.46	0.048
BSI slope	−3.10	2.25	0.169
BSI intercept	−1.77	1.11	0.113
Family emotional support, baseline	1.56	0.53	0.003
Family financial support, baseline	1.06	0.33	0.001
Having fun with friends, baseline	−0.33	0.53	0.535
School-related reasons for leaving home	0.40	0.26	0.131

Discussion

It is often argued that conflictual family relationships, especially in situations in which parents are substance users or abusers, are the primary reasons for adolescents running away from home (Whitbeck, 1999; Tyler et al., 2004). Staff at temporary shelters and community-based agencies servicing high-risk young people often does not want to attempt to reunite homeless young people with families, assuming that the family will further abuse the young people or inflict other emotional harm (Sullivan & Knutson, 2000). Yet, Milburn and colleagues (Milburn et al., in submission) have demonstrated that 65% of newly homeless young people in Los Angeles County return to live at home, usually with a parent or parents, within the first year; 25% of young people return home in Melbourne in a similar time period. Returning home at this rate was unexpected.

Family bonds were not anticipated to be high among homeless young people; however, there was a large degree of variability in the bonds reported among newly homeless young people one year later. Some young people reported high rates of feeling loved, cared for, satisfied and important to their families; others reported the opposite pattern. The variability in the reports of family bonds one year later suggest the importance of understanding how the social service system, the family, and the young person interact over time in order to lead to long-term perceptions of family alienation or perceiving a highly satisfying relationship with one's family. Both types of perceptions were demonstrated in this sample.

The predictors of who felt close and who felt distant were unrelated to gender, age, country site, time away from home, exiting homelessness, or a history of family violence. These findings are surprising. For example, given that girls are far more oriented to their social relationships than are boys, we anticipated the girls would feel high levels of family bonds at one year. We also anticipated that young people who were younger, had exited homelessness, and reported family violence was not a reason for leaving home would have higher levels of family bonds than their counterparts. This was not observed. Rather than demographic characteristics or geographic and homelessness context, family bonds are associated with factors related to social and behavioural problems.

Demonstrating externalizing problem behaviours (contact with the criminal justice system, sexual risk, and substance use) is associated with lower levels of family bonds a year later. Both

the initial level of EB and increases over time in EB are associated with worse family relationships. Parents often do not respond warmly to the socially unpredictable and argumentative behaviours that accompany adolescent substance abuse (Donohue, DeCato, Azrin, Teichner, 2001) or involvement in the peer networks that engage in high rates of sexual risk acts. It is unclear whether the adolescents become involved in EB because the family has lower levels of bonds or family bonds decrease when EB increase, given that we do not have any ratings of family bonds at baseline. However, it appears that an inverse relationship between bonds and externalizing acts would be anticipated.

Given that the young people were rating family bonds, it was also expected that emotional distress (depression, anxiety, overall distress) would be associated with family bonds. Emotional distress is unrelated to perceptions of family bonds.

Family bonds were also associated with social support from family, and not just social and behavioural problems. The higher the degree of financial and emotional support in one's familial network when initially exiting home, the more likely homeless young people will report higher levels of family bonds one year later. These data suggest that the families that provided instrumental and emotional support to their children who had left home experienced benefits in family bonds by one year. Our findings support the development of family-focused interventions that assist parents and siblings to provide supportive family interactions as an important early intervention strategy for newly homeless young people. Family-focused interventions are not appropriate for all homeless young people. Nonetheless, our findings show that some newly homeless young people do have family bonds that can be viewed as strengths to build upon in developing interventions for these homeless adolescents.

There were some limitations in our study. The findings were based upon self-report data. ACASI was used for sensitive questions on stigmatizing behaviours such as alcohol and other drug use, and sexual activities to minimize bias. Nonetheless, homeless young people in this sample may have been reluctant to report undesirable behaviours such as unprotected sex, and alcohol and other drug use. Another limitation was that different strategies for recruiting homeless young people were used in the US and AU because of differences in the service sectors approaches to research practices in the two countries. The sample from AU may not adequately represent newly homeless young people in AU because agency staff may have been somewhat biased in their referrals of young people to the study. Agency staff in AU were, however, thoroughly briefed on eligibility requirements for the study, and 83% of the agencies that served homeless young people in Melbourne participated in the study. A final limitation is that baseline data on family bonds were not collected. The direction of the relationship between the predictors and family bonds cannot be determined.

References

- Ayerst, S. L. (1999). Depression and stress in street youth. *Adolescence*, 34(135), 567–575.
- Baer, J. (1999). The effects of family structure and SES on family processes in early adolescence. *Journal of Adolescence*, 22(3), 341–354.
- 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(4), 408–420.

- Brooks, R., Milburn, N. G., Witkin, A., & Rotheram-Borus, M. J. (2004). System-of-care for homeless youth: service providers' perspective. *Evaluation and Program Planning*, 27, 443–451.
- Derogatis, L. R. (1993). *Brief Symptom Inventory: Administration, scoring, and procedures manual*. Minneapolis, MN: National Computer Systems.
- Donohue, B., DeCato, L. A., Azrin, N. H., & Teichner, G. A. (2001). Satisfaction of parents with their conduct-disordered and substance-abusing youth. *Behavior Modification*, 25(1), 21–43.
- Greene, J. M., Ringwalt, C. L., & Iachan, R. (1997). Shelters for runaway and homeless youths: Capacity and occupancy. *Child Welfare*, 76(4), 549–561.
- Greene, J. M., Ennett, S. T., & Ringwalt, C. L. (1999). Prevalence and correlates of survival sex among runaway and homeless youth. *American Journal of Public Health*, 89(9), 1406–1409.
- Kim, U., Trandis, H. C., Kagitchibasi, C., Choi, S-C., & Yoon, C. (1994). *Individualism and collectivism: Theory, method, and applications*. Thousand Oaks, CA: Sage.
- Kipke, M. D., Simon, T. R., Montgomery, S. B., Unger, J. B., & Iversen, E. F. (1997). Homeless youth and their exposure to and involvement in violence while living on the streets. *Journal of Adolescent Health*, 20(5), 360–367.
- Lee, M. B., Lester, P., & Rotheram-Borus, M. J. (2002). The relationship between adjustment of mothers with HIV and their adolescent daughters. *Journal of Clinical Child Psychology and Psychiatry*, 7, 71–84.
- Markham, C. M., Tortolero, S. R., Escobar-Chaves, S. L., Parcel, G. S., Harrist, R., & Addy, R. C. (2003). Family connectedness and sexual risk-taking among urban youth attending alternative high schools. *Perspectives in Sexual and Reproductive Health*, 35(4), 174–179.
- McCaskill, P. A., Toro, P. A., & Wolfe, S. M. (1998). Homeless and matched housed adolescents: A comparative study of psychology. *Journal of Clinical Child Psychology*, 27, 306–319.
- McMorris, B. J., Tyler, K. A., Whitbeck, L. B., & Hoyt, D. R. (2002). Familial and “on-the-street” risk factors associated with alcohol use among homeless and runaway adolescents. *Journal of Studies on Alcohol*, 63(1), 34–43.
- Milburn, N., Rotheram-Borus, M. J., Rice, E., Mallett, S., & Rosenthal, D. (in submission). Cross-national variations in behavioral profiles among homeless youth. *American Journal of Community Psychology*.
- Molnar, B. E., Shade, S. B., Kral, A. H., Booth, R. E., & Watters, J. K. (1998). Suicidal behavior and sexual/physical abuse among street youth. *Child Abuse and Neglect*, 22(3), 213–222.
- Powers, J. L., Eckenrode, J., & Jaklitsch, B. (1990). Maltreatment among runaway and homeless youth. *Child Abuse and Neglect*, 14(1), 87–98.
- Robertson, M.J., & Toro, P.A. (1999). Homeless youth: Research, intervention and policy. In: L.B. Fosburg & D.L. Dennis (Eds.), *Practical lessons: The 1998 national symposium on homeless research*, (pp. 3.1–3.32). Washington, DC: US Department of Housing and Urban Development and US Department of Health and Human Services.
- Saewyc, E. M. (2003). Influential life contexts and environments for out-of-home pregnant adolescents. *Journal of Holistic Nursing*, 21(4), 343–367.
- Schaffner, L. (1998). Searching for connection: A new look at teenaged runaways. *Adolescence*, 33(131), 619–627.
- Snarey, J. R., & Dollahite, D. C. (2001). Varieties of religion–family linkages. *Journal of Family Psychology*, 15(4), 646–651.
- Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Annual Review of Psychology*, 52, 83–110.
- Sullivan, P. M., & Knutson, J. F. (2000). The prevalence of disabilities and maltreatment among runaway children. *Child Abuse and Neglect*, 24(10), 1275–1288.
- Sutherland, I., & Shepherd, J. P. (2001). Social dimensions of adolescent substance use. *Addiction*, 96(3), 445–458.
- Tinsley, B. J., Lees, N. B., & Sumartojo, E. (2004). Child and adolescent HIV risk: Familial and cultural perspectives. *Journal of Family Psychology*, 18(1), 208–224.
- Toro, P. A., & Goldstein, M. S. (August, 2000). Outcomes among homeless and matched housed homeless adolescents: A longitudinal comparison. *108th annual convention*. Washington, DC: American Psychological Association.
- Tyler, K. A., & Cauce, A. M. (2002). Perpetrators of early physical and sexual abuse among homeless and runaway adolescents. *Child Abuse and Neglect*, 26(12), 1261–1274.
- Tyler, K. A., Cauce, A. M., & Whitbeck, L. (2004). Family risk factors and prevalence of dissociative symptoms among homeless and runaway youth. *Child Abuse and Neglect*, 28(3), 355–366.
- Tyler, K. A., Hoyt, D. R., Whitbeck, L. B., & Cauce, A. M. (2001). The effects of a high-risk environment on the sexual victimization of homeless and runaway youth. *Violence and Victims*, 16(4), 441–455.

- Valiente, C., Fabes, R. A., Eisenberg, N., & Spinrad, T. L. (2004). The relations of parental expressivity and support to children's coping with daily stress. *Journal of Family Psychology*, *18*(1), 97–106.
- Whitbeck, L. B. (1999). Primary socialization theory: it all begins with the family. *Substance Use and Misuse*, *34*(7), 1025–1032.
- Whitbeck, L. B., & Hoyt, D. R. (1999). *Nowhere to grow: Homeless and runaway adolescents and their families*. New York: Aldine de Gruyter.
- Whitbeck, L. B., Hoyt, D. R., & Ackley, K. A. (1997). Abusive family backgrounds and victimization among runaway and homeless adolescents. *Journal of Research on Adolescence*, *7*, 375–392.
- 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*(2), 132–140.
- Witkin, A., Milburn, N., May, S., Brooks, R., & Rotheram-Borus, M. J. (in press). Finding homeless youth: patterns based on geographic location. *Youth and Society*.
- Yates, G. L., MacKenzie, R., Pennbridge, J., & Cohen, E. (1988). A risk profile comparison of runaway and non-runaway youth. *American Journal of Public Health*, *78*, 820–821.