Resiliency and survival skills among newly homeless adolescents: Implications for future interventions

Sung-Jae Lee, Ph.D.[1,*], **Li-Jung Liang, Ph.D.**[2], **Mary Jane Rotheram-Borus, Ph.D.**[1], and **Norweeta G. Milburn, Ph.D.**[1]

[1]University of California, Los Angeles, Department of Psychiatry and Biobehavioral Sciences, Semel Institute for Neuroscience and Human Behavior, Center for Community Health, Los Angeles, CA

[2]Department of Medicine Statistics Core, University of California, Los Angeles, Los Angeles, CA

Abstract

Recent studies on homeless adolescents suggest that the profiles of homeless adolescents are heterogeneous, and that certain clusters of homeless adolescents demonstrated resiliency and positive coping strategies. This study examined the relationship between HIV-related risk factors and resiliency (survival skills) of homeless adolescents over a 2-year period. Those who did not engage in unprotected sex reported significantly higher survival skills scores. Similarly, those who were monogamous during the study period reported significantly higher survival skills scores. However, there was a significant decline in survival skills scores after 6 months, regardless of the HIV-related risk factors. Findings from this study point to the urgent need to identify and target resilient adolescents early on to provide interventions to facilitate the transition to stable living situations before their resiliency deteriorates.

Keywords

homeless adolescents; resiliency; survival skills

Introduction

Adolescent homelessness is a serious social problem; almost 2 million adolescents live on the streets in the United States (Bucher, 2008). Compared to adolescents with stable housing, high rates of substance use, mental health problems, teen pregnancy, suicide and high-risk behaviors among homeless adolescents have been documented (Ensign & Bell, 2004; Alexander & Schrauben, 2006). These additional risk exposures to homeless adolescents create a distinct context and need for prevention efforts (Messam et al., 2010).

There are a large number of observational studies that have provided evidence on the high rates of risky health behaviors among homeless youth in the U.S. (Moore, 2005; Gomez, Thompson, & Barczyk, 2010). Most existing studies on homeless adolescents have focused primarily on chronically homeless adolescents, and have treated heterogeneity among homeless adolescents primarily as a function of their geographic location (e.g., Baron, 1999; Greene, Ringwalt, & Iachan, 1997; Kipke, Montgomery, Simon, & Iverson, 1997). In addition, because the primary focus of previous research on homeless adolescents has been on the various risk factors associated with being homeless (Ennett et al., 1999; Votta &

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*Corresponding Author: Sung-Jae Lee, Ph.D., UCLA Semel Institute - Center for Community Health, 10920 Wilshire Blvd., Suite 350, Los Angeles, CA 90024. P: 310-794-0357, F: 310-794-8297, sjlee@mednet.ucla.edu.

Manion, 2004; Whitbeck et al., 2001; Ensign & Bell, 2004; Hudson et al., 2010), little attention has been focused on how positive predictors (e.g., adolescent resiliency) apply to homeless adolescents and may operate as a protective factor against negative outcomes such as chronic homelessness (Mastern & Obradovic, 2006; Taylor-Seehafer, 2004).

A recent study Huntington, Buckner, and Bassuk (2008) identified two distinct types of homeless adolescents, described as "higher functioning" or "lower functioning" adolescents. Similarly, recent investigations by Milburn and colleagues confirmed the notion that homeless adolescents are heterogeneous (Milburn et al., 2009a). Furthermore, they demonstrated that newly homeless adolescents are distinct from experienced homeless adolescents and may require different types of interventions and services. Using cluster analysis, they identified two distinct clusters of newly homeless adolescents: those who are resilient and doing relatively well while out of home with more protective than risk factors, and those who are risky with more risk than protective factors (Milburn et al., 2009a).

From a service standpoint, this group of resilient adolescents may be a challenging group. On the one hand, resilient adolescents seem to be the most ready group open to receiving services and interventions that could potentially reconnect them with stable housing situations such as returning home. However, because they are resilient and doing well while being homeless, these adolescents could also choose to remain homeless over time and be less amenable to services and interventions that will facilitate placing them in stable living situations.

Given the dual facets of resilient homeless adolescents, it is important to examine whether resilient adolescents remain consistently resilient over time. Building on the studies by Milburn and colleagues (Millburn et al., 2009a; Milburn et al., 2009b) this paper examined the profiles of resilient homeless adolescents and factors associated with their resiliency over a 2-year follow-up period. As with the main study which is this subsample is based on, the Risk Amplification and Abatement theoretical model guided the study (Milburn et al., 2009c). In addition, primary socialization theory guided this particular study (Oetting & Donnermeyer, 1998). The Risk Amplification and Abatement model posits that newly homeless adolescents are substantially influenced by socializing agents and factors across multiple levels of social organizations (Milburn et al., 2009c). Similarly, the underlying premises to Primary Socialization Theory are that "normative and deviant behaviors are learned social behaviors, products of the interaction of social, psychological and cultural characteristics, and that norms for social behaviors… are learned predominantly in the context of interactions with the primary socialization sources" (Oetting & Donnermeyer, 1998). The framework guiding this paper concerns a situational factor (resilient newly homeless adolescents) and specific coping strategies (survival skills while being homeless) pertaining to that situational factor. The findings from this study will have significant implications for the design of future interventions targeting resilient newly homeless youth.

Methods

Participants and setting

The original study which this manuscript is based on consisted of representative samples of newly homeless adolescents recruited in Los Angeles County, California in the United States. Three criteria were used to select participants: 1) age ranging from 12 to 20 years; 2) 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 3) had been away from home for 6 months or less (Milburn et al., 2005, 2006, 2009a). 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. Participants received $20 in local

currency as compensation for their time for the interviews. Following the baseline assessment, participants were contacted for follow-up interviews for two years (at 3, 6, 12, 18, and 24 months). Each interview captured adolescents' survival skills, sexual behaviors, and their drug use behaviors.

For this analysis, the subsample consisted of 153 newly homeless adolescents classified in the resilient cluster, based on the typology study by Milburn and colleagues (Milburn et al., 2009a; Milburn et al., 2009b). Therefore, it represents a subsample of newly homeless adolescents who are doing well and are most likely to return home and not transition to homelessness. The protocol for this study was approved by the Institutional Review Board at UCLA.

Measures

Survival skills reflected adolescents' resiliency and consisted of 13 behaviors indicative of being able to function independently while out of home: avoiding hassles with the police, avoiding fights, knowing safe places, finding a place to sleep, finding places 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. This measure has been utilized among homeless adolescents in Los Angeles, California, and Melbourne, Australia (Milburn et al., 2005, 2006, 2009a). 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 (Milburn et al., 2009a) and is referred to as an overall survival skills score ($\alpha = .78$).

Potential predictors of survival skills included sexual behaviors and drug use behaviors reported by the adolescents. We also considered alcohol and tobacco use; however, this measure was not retained in the final model since it was not significantly associated with survival skills. For the final model selection, we initially performed a series of sensitivity analysis using various measures in continuous and dichotomous forms. The dichotomous measures were chosen for better interpretability. Sensitivity analysis to revealed robustness of the results.

Unprotected sex was scored 0 if the adolescent always used a condom while having vaginal/anal/oral sex or if the adolescent had never had vaginal/anal/oral sex; or 1 if the adolescent or partner sometimes or never used a condom.

Hard drug use was examined using questions addressing the number of days the adolescent reported use of LSD, inhalants, stimulants, crack, or heroin. Based on the distribution of the hard drug use reported by the adolescents, an overall score for hard drug use 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.

Multiple sexual partners was scored 1 if the adolescent reported more than on sexual partner in the past 3 months; or 0 if the adolescent was monogamous or abstinent in the past 3 months.

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

Data analysis

We dichotomized the study participants based on each of the following HIV-related risk factors: adolescents who did vs. did not engage in unprotected sex, those who did vs. did not use any hard drugs, and those who were vs. were not monogamous, during the 2-year study period. Frequencies of gender and the HIV-related risk behaviors were then generated. A two-sample t-test was used to compare the baseline survival score between the two levels of each HIV-related risk factor. Next, we examined the trajectory of survival score using a piecewise mixed-effects regression model (referred to as Model 1). Model 1 included time since baseline up to 6 months (first time period), time after 6 months (second time period), age, gender, history of physical/sexual abuse as potential predictors, and also included subject-level random intercept and a first-order autoregressive (AR1) covariance structure to account for correlation between repeated measures at baseline, every 3 months for the first 6 months, and every 6 months thereafter. To further examine whether any of the HIV-related risk factors influenced the trajectory of survival scores, we then fit three individual models (referred to as Models 2-4, for unprotected sex, hard drug use, and monogamous sex, respectively). Each model is Model 1 plus one of the HIV-related risk factors and 2 interaction items (HIV-related risk factor and 2 interaction terms (HIV-related risk factor by first and second time periods). Since we observed similar trajectories between the two levels of each HIV-related factor, we present our Final Model with all the predictors in Model 1 and include all three HIV-related risk factors. All analyses were performed using SAS version 9.1 (SAS Institute Inc., Cary, NC, USA).

Results

Table 1 outlines the demographic and risk factor profiles of the newly homeless youth classified as resilient. A majority of the adolescents was female (64.1%), 26% African American, 46% Latino/Hispanic American and 15% European American, with age ranging from 12 to 20 years (mean=15.0; SD=1.8). Over the two-year study period, over one-third (37.3%) reported no unprotected sex. The large portion of the sample reported no hard drug use (60.8%); and about a half of the sample reported being monogamous or abstinent (48.4%). Those who did not engage in any risk factors were 16.3%.

Table 2 outlines the survival skill score by HIV-related risk factors at baseline. The bivariate analysis indicates that youth reporting no unprotected sex had significantly higher survival skills scores (58.4% vs. 49.4%; p=0.027). Youth who did not engage in hard drug use also reported higher survival scores, but it was marginally significant (55.5% vs. 48.5%; p=.077).

Table 3 summarizes the mixed-effects regression model examining predictors of survival skills over time. Male homeless youth reported significantly higher survival skills scores, compared to female homeless youth (P=0.0355). The final model indicated that there was a significant increase in survival skills scores during the first 6 months (Slope=1.893, Standard Error [SE] = 0.353; P<0.0001), followed by a significant decline in survival skills score after 6 months (Slope=-1.878; SE=0.428; P<0.0001), after adjusting for gender, age, and HIV-related risk factors.

Discussion

Contrary to current literature on homeless adolescents focusing on negative effects of being out of home (Kamieniecki, 2001; Whitbeck, Hoyt, Yoder, Cauce, & Paradise, 2001; Gomez et al., 2010; Hudson et al., 2010), our findings underscore the importance of understanding the heterogeneity of homeless adolescents. Our subsample of homeless adolescents is not a highly dysfunctional group of young people. In fact, these adolescents, in spite of multiple

stressors they face on the street, were highly resilient, reflected through their survival skills over time.

Our findings are consistent with the investigation by Huntington, Bucker, and Bassuk (2008) and Milburn and colleagues (2009a), highlighting two distinct clusters of homeless adolescents: "higher functioning" adolescents who do well despite the stresses they face during homelessness and "lower functioning: adolescents who experience significant challenges reflected in their behavior problems, adaptive functioning and achievement. Our subsample of adolescents embody the traits of "higher functioning" adolescents described by Huntington and colleagues. These resilient homeless adolescents in our study tended to report lower levels of HIV-related risk behaviors at baseline.

However, our study findings also revealed that the resiliency of homeless adolescents, reflected through their survival skills, tended to decrease over time, regardless of their HIV-related risk profiles. One plausible explanations is that the constant challenges adolescents face while being homeless may take their toll if they are homeless long enough. This is an important finding. Because of their ability to effectively hope with homelessness, these resilient homeless adolescents may be less inclined to seek services and interventions to help them transition into stable housing. However, our findings suggest that if they are homeless for sufficiently long enough (e.g., beyond six months), their resiliency deteriorates. This finding has significant implications for future intervention design and implementation. Our study underscores the critical importance of targeting and identifying these resilient adolescents early on to mount interventions, before their resiliency declines.

Given the heterogeneous nature of homeless adolescents (Milburn et al., 2009a), we acknowledge that our findings have inherent limitations, since our findings are not applicable or generalizable to all subgroups of homeless adolescents. In addition, our study sample consisted of more female adolescents (64%) than males. While this gender composition poses limitations in the applicability of our findings, it also reflects gender composition of resilient newly homeless adolescents in Los Angeles at the time of the study. In addition, our findings are relevant and applicable to "higher functioning" newly homeless adolescents who are resilient, and future interventions should consider the disparate needs of distinct subgroups of homeless adolescents. Our findings point to the urgent need to identify and target this resilient, protected group early, before their resiliency starts to decline.

Our study findings underscore the critical importance for service providers to have an understanding of the contexts of these resilient homeless adolescents. Such understanding may be able to guide them in choosing survival strategies that are the least harmful and that facilitate their transition to more stable living situations. One crucial component for these resilient homeless adolescents would be to provide stable housing as an effective way to intervene early to prevent chronic homelessness. For instance, the Housing first model (e.g., Pearson, Montgomery & Locke, 2009) that provides housing without requiring people to engage in treatment or be abstinent as been efficacious in keeping clients with mental illness and substance abuse stably housed. Stable housing targeted to these adolescents will decrease the consequences associated with homelessness. Early intervention to provide stable housing will also take these adolescents away from the streets before their survival skills deteriorate to help prevent chronic homelessness. Stable housing would also prevent many unaccompanied youth from being victimized on the streets. More work is needed, however, in this area to determine the types and effectiveness of housing that could be created for newly homeless adolescents. For example, many of them are minors and would require housing that included adult supervision and monitoring that was needed for homeless adults in the Housing first model.

In conclusion, more rigorous investigations of their profiles may inform the design of future interventions targeting newly homeless adolescents who are resilient. Designing interventions that utilize the resilient features and strengths of newly homeless adolescents will ensure intervention efficacy, with specific intervention contents tailored to the specific needs of resilient homeless adolescents. In addition, the design of the intervention should take advantage of the opportunity to identify and target the resilient, protected homeless adolescents early on to help them finds concrete positive ways to return to the stable housing and prevent them from leaving the stable environment.

Acknowledgments

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Table 1

Demographic and Risk Factor Profiles of the Resilient Cluster (n=153).

Characteristics	Frequency (%)
Gender (Female)	98 (64.1%)
No unprotected sex	57 (37.3%)
No hard drug use	93 (60.8%)
Monogamous or abstinent	74 (48.4%)
No risk behaviors	25 (16.3%)

Table 2

Baseline Survival Skill Score by HIV-related risk behaviors

	Mean (SD)		
	Unprotected Sex	Hard Drug Use	Non-Monogamous
No	58.4 (25.1)	55.5 (25.4)	53.3 (25.0)
Yes	49.4 (23.0)	48.5 (21.4)	52.2 (23.5)
p-value	0.0266	0.0774	0.7802

Note: Two-sample t tests were used.

Table 3

Mixed-effects regression examining predictors of survival skills over time

Predictors	Estimate (SE)	p-value
Gender (M-F)	6.689 (3.172)	0.0355
Age	1.293 (0.845)	0.1265
Abuse	-5.326 (3.248)	0.1016
No Unprotected Sex	4.405 (3.334)	0.1869
No Hard Drug Use	3.218 (3.004)	0.2845
Monogamous	2.391 (3.187)	0.4534
Estimated Slopes		
First 6 months	1.893 (0.353)	<.0001
≥ 6 months	-1.878 (0.428)	<.0001