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Assessing the Relationship Between the Perceived Shelter Environment and Mental Health Among Homeless Caregivers

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Abstract

Little attention has been given to how the environment of homeless shelters may impact the mental health of their residents. This study addresses this gap in the literature and presents a cross-sectional analysis of 209 caregivers nested within 10 family shelters across New York City. Multivariate regression was employed using hierarchical modeling to test the association between two shelter related variables (ie, the perceived social environment of the shelter and difficulty following shelter rules) and the mental health status of the caregiver residents. Less favorable perceptions of the social environment of the shelter and difficulty following shelter rules were both found to be associated with poorer mental health after controlling for demographic covariates as well as time in the shelter and first time in the shelter. These findings highlight the potential impact of the perceived social environment of shelters and methods of governance of shelters on the mental health of caregiver residents. In addition, the findings support the notion that interventions such as trauma informed care could potentially aid in addressing the mental health challenges that residents face.

Keywords

homelessness; families; environment; mental health

INTRODUCTION

Among industrialized nations, the United States has the largest number of homeless women and children, and it has not experienced the current level of homelessness since the Great Depression of the 1930s. In addition, a recent report by the Organization for Economic Cooperation and Development (OECD) revealed that the US reported the 5th highest rate of housing instability out of 35 OECD countries.¹ Homeless families also comprise roughly one third of the total homeless population nationwide.² This equates to approximately 1.6

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million children experiencing homelessness over the course of 1 year,³ and more than 200,000 children having no place to live on any given day.⁴ In addition, caregivers of color are overrepresented in the homeless population.^{5–7}

New York City has not been immune to this nationwide trend and is also experiencing its highest rate of homelessness since the Great Depression. Since 2002, homelessness among families has grown at twice the rate as homelessness among single adults. Today, families make up 78% of all homeless people residing each night in the New York City municipal shelter system.⁸ In February 2015, an average of 14,386 homeless families (25,105 children and 22,357 adults) slept in municipal shelters each night.⁸ This rate is up 12% from the previous year and up 58% since the start of the recession in 2008. In addition, the length of stay in the shelter is increasing along with the number of homeless families with the average shelter stay for homeless families now over 1 year (435 days).⁸ This represents a 25% increase over the past decade. Similar to what is occurring nationally, African American and Latinos are also overrepresented in the homeless population, which reflects a level of racial disparity among factors associated with housing stability.^{8,9}

MENTAL HEALTH AMONG HOMELESS CAREGIVERS

The literature to date suggests that homeless women with children are disproportionately affected by mental health issues when compared to the general population.^{10–12} Specifically, seminal work by Bassuk and her colleagues compared homeless and housed poor mothers across economic, psychosocial, and physical health domains using data from the Worcester Family Research Project (WFRP).¹³ Within the domain of mental health, homeless mothers were more likely to have ever been hospitalized for mental health (12.4% vs 4.2%) when compared to housed mothers, suggesting a high severity of mental health difficulties among this highly stressed population.

Another study conducted by Carolyn Roll and her colleagues compared the prevalence of mental health difficulties among homeless single women, homeless single men, and homeless women with children in Buffalo, New York.¹¹ These 3 subgroups of participants were compared on a wide range of measures with established reliability and validity. Results of the study indicated that both groups of homeless women were more likely than single homeless men to be distressed (ie, to have symptoms of depression, anxiety, phobic anxiety, paranoid ideation, somatization, obsessive compulsive, and interpersonal sensitivity).

ADDRESSING MENTAL HEALTH IN THE SHELTERS

Social scientists have examined the importance of the environment, and the social environment in particular, on mental health for decades.^{14–18} Recent research has also brought to light the importance of social support as a key environmental component associated with improved mental health.^{14,19–21} Specifically, social support has been shown to be a coping mechanisms that buffers the negative effects of trauma on mental health.²² This is particularly salient as homelessness has been shown to be traumatic in and of itself,²³ and homeless caregivers are more likely to have experienced higher cumulative rates of violent abuse and assault over their lifespan relative to their housed counterparts.^{11–13}

Shelter rules can potentially provide needed structure in the lives of homeless families as well as protect residents. However, shelter rules have often been found to be detrimental depending on their restrictiveness and mode of enforcement.^{24,25} This is commonly due to their potential to diminish personhood and autonomy, which are integral to overall well-being as well as to the recovery process from trauma. In addition, shelter rules have been found to be an impediment to parenting practices and family routines that can support mental and emotional well-being.^{26,27}

The current literature also proposes a specific model to describe the manner in which social relationships influence health outcomes. The stress buffering model, in particular, posits that social ties are related to outcomes for people under stress (eg, homeless families).¹⁹ Specifically, the perceived availability of functional support is thought to buffer the effects of stress by enhancing an individual's coping abilities.²⁸ This functional support typically includes emotional support, tangible support (eg, financial assistance, material goods), informational support, and companionship.^{29,30}

Despite the fact that the link between poor mental health and the social environment has been well established,^{19,22,28,31,32} no study to date has looked at whether aspects of the shelter environment specifically are associated with poor mental health outcomes. The research described in this article aims to fill some of the gaps in this literature. The extant research findings also indicate that the social environment of the shelter can serve as a potential place to intervene to enhance mental health or reduce the negative effects of the trauma that a preponderance of the families in the shelters have experienced due to homelessness itself or due to circumstances that led them to be homeless (eg, abuse, poverty). Thus, this research can potentially aid in informing programming in family shelters.

Thus, given the importance of a supportive environment for mental health, the first aim of the study was to test the association between caregiver mental health and favorable perceptions of the social environment of the shelter. The second aim was to test the association between caregiver mental health and difficulty following shelter rules. Thus, this analysis examines the effect of positive aspects (ie, perception of social environment) as well as potential negative aspects of the shelter (ie, difficulty following rules) of the shelter on mental health. Analysis was conducted using cross-sectional data from a federally funded study, HIV prevention Outreach for Parents and Early Adolescents (HOPE), focused on families residing in shelters. It was hypothesized that there would be a direct association between positive perceptions of the social environment of the shelter and better mental health outcomes for caregivers. In addition, it was hypothesized that caregivers reporting greater difficulty following shelter rules would show worse mental health.

METHODS

Data Source

The parent study for the analysis, HIV prevention Outreach for Parents and Early Adolescents Project (HOPE), was a 5-year study funded by the National Institute on Drug Abuse (NIDA). The overall goal of this research was to examine family functioning and HIV and substance abuse risk among homeless families in New York City. Data on 452

caregivers and youth (ages 11–14) nested within 10 supportive housing family shelters sites across New York City were collected from April of 2006 to May of 2008. The eligibility criteria for the HOPE study were that the family resided in the shelter at the time of recruitment and that they had children between the ages of 11–14 who were willing to participate. The only exclusion criterion for the study was that the participant did not have the mental capacity to fully comprehend the consent process. There were no inclusion criteria related to the length of time in a particular shelter. Therefore, the length of time any one family had spent in the shelter varied. The data were collected via self-administered questionnaires completed by both caregivers and their youth concurrently. Institutional Review Board (IRB) exemption was granted by the CUNY Graduate Center for the secondary data analysis of the deidentified dataset.

Measures

The following is a description of the variables included in the analysis. Descriptive statistics (eg, means, standard deviations, frequencies) can be found in Table 1.

Caregiver Mental Health (Dependent Variable)—The outcome of interest for the article was the overall mental and emotional well-being of the caregiver, which was measured using the Global Severity Index (GSI) of the Brief Symptom Inventory (BSI).³³ The BSI measure consists of a self-report symptom inventory of 53 items designed to assess the psychological symptoms of individuals during the past 7 days. This measure covers 9 symptom dimensions: somatization, obsessive-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Each individual symptom dimension was found to have Cronbach's alpha coefficients that ranged from 0.71 on Psychoticism to 0.85 on Depression, denoting good internal consistency.^{34–36} In addition, each of the 9 dimensions has been shown to have good test-retest reliability individually, which ranged from 0.68 for Somatization to 0.91 for Phobic Anxiety.³⁷

The Global Severity Index (GSI) of the BSI includes individual scores of respondents on all 9 dimensions. While no alpha reliability has been reported on this total index, test-retest reliability was found to be strong at 0.91.³⁶ The GSI is created by taking the total score of all items and dividing that sum score by the number of items with valid responses. In this particular sample, the mean GSI score was 0.63 (SD 0.66).

Caregiver Perception of the Social Environment of the Shelter (Independent Variable)—The shelter environment was measured by a series of 9 items related to feelings of comradery (see Appendix A), resources available, shelter rules, and shelter safety. The answer categories to all of the items were dichotomous (yes/no). It was hypothesized that 6 of these variables related to the perceived social environment of the shelter and that the remaining 3 of the 9 items related more to shelter rules. Thus, a 2-factor exploratory analysis (EFA) was conducted. In addition, oblique rotation was incorporated in the analysis given that both factors were expected to be correlated to one another.

The results of the EFA indicated that the 2-factor model was not sufficiently met, as the eigenvalues indicated that there was only one factor that had an eigenvalue over 1 and would be appropriate to include in the final measure. Four items (2, 3, 4, and 9) sufficiently loaded

onto the one factor of perceived social environment within the shelter (ie, loading values of over 0.4). These 4 items were as follows: “Do you feel safe at the shelter?,” “Are there things for people to do at the shelter?,” “Are there things for families to do together at the shelter?,” and “Does the staff at the shelter help you and your family?” (alpha 0.67). A continuous variable was created that consisted of a sum score of all “yes” responses to these 4 items, which measured the construct of the perceived social environment of the shelter. The average sum score for this variable was 2.94 (SD 1.22) with a range from 0 to 4.

Difficulty Following Rules (Independent Variable)—This variable was one of the nine questions initially asked related to the shelter environment but was not found to load on the same factor as the other items included in the final scale used to measure the perceived social environment of the shelter. Specifically, the item used to measure this difficulty was “Do you have trouble following these [shelter] rules?” Fourteen percent of the caregivers reported having difficulties following shelter rules.

Length of Stay in Shelter (Covariate)—This was measured by one item, “How long have you been living in this shelter?” The responses categories were ordinal: “1 week–1 month,” “2–4 months,” “5–7 months,” “8–10 months,” “11–12 months,” and “over 12 months.” The last 4 answer categories were collapsed in the final analysis due to their relatively low frequency in the respective categories. Thus, the last answer category was combined to be “5 months and over.” As shown in Table 1, the frequencies of each category was 17% (1 week–1 month), 42% (2–4 months), and 41% (5 months or more), respectively.

First Time in Shelter (Covariate)—Time in shelter was a dichotomous variable that was measured with the item “Is this your first time staying in a shelter?” The answer categories were “yes/no.” Fifty-eight percent of the caregivers reported that this was their first time residing in a shelter.

Demographics (Covariates)—Caregiver age was measured as a continuous variable and calculated from their date of birth at the time of the assessment. The average age of the caregivers was 37.95 (SD 6.87). Child’s age was measured in a similar fashion as that of the caregiver, namely that it was a continuous variable and was calculated using their date of birth. The average age of the caregiver’s child was 12.86 (SD 1.18). The variable capturing the number of children between the ages of 11–14 represented the number of children in the family that were eligible to participate in the study and ranged from 1 to 3. The variable was dichotomized given the low frequency of youth in the third category. The final answer categories therefore included “one youth” (82%) and “two or more youth” (18%). Caregiver race was a categorical variable with 3 answer categories, “Hispanic/Latino” (42%), “Black” (47%), and “Mixed or other” (11%). Care-giver education level originally consisted of 6 ordinal answer categories, which were “8th grade or less,” “some high school,” “completed high school/GED,” “some college,” “completed college,” and “post college.” The first two categories were collapsed, given the relatively low frequency within the categories, to one category in the final analysis. Similarly, the last 3 categories were collapsed to one category in the final analysis, “some college or more.” Thus, the final 3 categories included “some

high school or less” (47%), “completed high school/GED” (27 percent), and “some college or more” (26%).

Analysis

Descriptive statistics (eg, frequencies of categorical variables, means, standard deviations) were first run to assess for any needed recoding. Next, Pearson correlation coefficients were conducted for the continuous variables (eg, caregiver age, mental health), and point-biserial correlations were conducted for correlations between continuous and dichotomous variables (eg, caregiver mental health and first time in the shelter). Last, phi coefficients were used to assess for correlations between two dichotomous variables. Phi correlation coefficients for ordinal variables were created for each response category.

Two models were tested via hierarchical regression to assess the relationship between the caregiver mental health and two shelter related variables (ie, perceived social environment of the shelter and difficulty following shelter rules). The outcome measure used in the analysis for both models was the GSI score of the BSI. The first model included all the demographic variables (eg, parent age, caregiver education) with the sum score of the perceived social environment of the shelter as the independent variable and mental health as the dependent variable. The second and final model included all of the variables in the first model, but also included an additional variable measuring the respondents’ perceived difficulty in following shelter rules (“Do you have trouble following the rules of the shelter?”). This item was included in the analysis to assess whether challenges of living in a shelter (along with positive aspects) of the shelter were associated with mental health.

To account for the fact that the respondents were nested within shelters, regression analyses were performed using PROC SURVEYREG in SAS,³⁸ a procedure that performs regression analysis for sample survey data. PROC SURVEYREG is designed for complex survey sample designs, including designs such as this that samples respondents within clusters (ie, shelters). Such clustering generally results in responses that are not independent of one another. In such circumstances, employing OLS without taking clustering into account could potentially lead to standard errors that are too small with resulting confidence intervals that are too narrow and *p* values that are too low (ie, inflated type I error rates). Standard errors are calculated using Taylor series variance estimation to adjust for sample design.³⁹ In short, accounting for the clustering was the more rigorous and accurate way of conducting regression analyses and calculating appropriate standard errors for this study. In addition, 3 categorical variables (ie, race, caregiver education and length of time in the shelter) were included as “CLASS” variables. This produces an overall *F* test of the significance of the variables as well as specific coefficients for each level of the variable compared to a reference category.

RESULTS

The sample for this particular analysis included only the caregivers (*n* = 209). The average age of this sample was 37.95 (sd 6.87). The sample was largely black and Hispanic, with approximately half of the sample (47%) of the caregivers identifying as being black and 42% identifying as being Hispanic. The sample was also predominantly female (92%), and

the majority had only one child between the ages of 11–14 (82%). In addition, 74% of caregivers reported having completed high school at the time of the study. Overall, the residents reported positive perceptions of the social environment of the shelter. This was indicated by the relatively high sum score mean of 2.94 (SD 1.12) and high frequency of positive endorsements of each item in the scale, which ranged from 56% to 80% of “yes” responses to each individual item. This was the first stay in a shelter for 58% of the respondents, and almost half (42%) of the sample reported having been in the shelter between 2 to 4 months (see Table 1).

Correlation matrices indicated that poor mental health was correlated with difficulty following rules and a less favorable perception of the shelter's social environment (see Table 2). In addition, length of time in the shelter was positively correlated with poor mental health in one of the three categories (ie, 5 months or more) (see Table 2). Poorer caregiver mental health was also positively correlated with being Hispanic, and negatively with being black (see Table 3).

The results of the first model in the regression analysis indicated that the perceived social environment of the shelter was directly associated with mental health of the caregiver residents when controlling for all demographic and shelter related variables (ie, time in shelter and first time in shelter) (see Table 4). Similarly, the results of the second multivariate regression model indicate that the association between more positive perceptions of the social environment and caregiver mental health remained statistically significant in the second model when including the additional variable of difficulty following shelter rules. Difficulty with shelter rules was itself found to be positively associated with poor mental health in the second model as well.

DISCUSSION

Overall, the caregivers reported a relatively positive perception of the social environment of the shelter. In addition, a significant direct association between a poorer perception of social environment of the shelter and increased mental difficulties was found in both models, which took into account demographic and family related variables, length of time in the shelter, first time in a shelter, and difficulty following shelter rules. Last, difficulty following rules was also positively associated with poorer mental health in the second model.

The overall positive report of the social environment of the shelter was most likely because all the shelters were privately run supportive housing sites that aim to incorporate programming within the shelters for their residents (eg, rec rooms, social workers). These amenities and services are not consistently available in all shelter housing types. Yet, even despite this overall positive perception of the social environment of the shelter, poor mental health was still found to be associated with less favorable perceptions of the social environment of the shelter.

In addition, the fact that this association persisted even after controlling for length of time in the shelter suggests that the connection between the perceived social environment and mental health is present irrespective of how long individuals have been residing in the

shelter. These findings align with previous research that has shown perceived social support can have a direct effect on psychological and mental health outcomes. This effect has been attributed to the positive affect and cognitive states associated with knowledge and security that social networks can offer during times of instability such as instances of homelessness.⁴⁰

Similarly, the finding that difficulty following rules was positively associated with poorer mental health aligns with the previous literature that suggests that parenting can often clash with shelter rules. Specifically, caregivers often have to parent in a more public way and under the scrutiny and criticism of shelter staff once they enter the shelter system.^{41,42} In addition, shelter rules and shelter living can disrupt family routines, which have been shown to be helpful in maintaining good mental health.^{26,27}

Limitations

One limitation of this study is that it includes only cross-sectional data, which limits the extent to which causation can be inferred from the findings. Specifically, caregivers were reporting on mental health outcomes concurrently with perception of the shelter. Assessing for mental health outcomes at a later date (eg, 2 months or 6 months) would have aided in the ability to infer causation from the findings and to confirm the direction of the association.

While poor mental health among caregivers in this study was found to be associated with less favorable perceptions of the social environment of the shelter, as previously described, the clinical significance of the scores that respondents received on the BSI was not included in this analysis. Including this level of analysis in future research could aid service providers in assessing the level of clinical significance of mental health difficulties that residents come to the shelters with and assist in informing programming that better targets services to those most affected by more severe symptoms.

Last, the perceived social environment scale included only 4 items, which limited the extent to which the construct could be measured. However, the literature suggests that the sample size was sufficient to test the scale, given that the required item-to-response ratio has been found to range from 1:4 to 1:10.^{43–45} In addition, a sample of at least 100 is needed to conduct a factor analysis.⁴⁶ The sample size of the HOPE dataset met all of these suggested criteria to test this scale.

CONCLUSIONS

The findings from this study support the notion that perception of the social environment of the shelter can affect mental health. This held true even after all covariates (eg, age, length of time in the shelter, difficulty following rules) were included in the model. Overall, these findings suggest that further research could focus on exploring these associations by developing additional measures to assess the social environment of the shelter in addition to other aspects of the shelter environment (eg, physical environment).

While there was still a fair amount of variability in shelter environment within these privately run shelters included in the study, future research could also incorporate other types of shelters (eg, municipal or government run shelters, service enriched housing) in the sample to assess how they fare in comparison to one another and where similar potential areas of enhanced support lie. In addition, efforts could be made to address the four aspects of the shelter environment covered in the scale (eg, feeling safe, having things to do, having difficulty following rules) directly.

However, as the stress-buffering model suggests, functional aspects of social relationships (or perceived support) can buffer the effects of stress by enhancing an individual's coping abilities. Thus, services and social interactions that residents also *perceive* as responding to needs in particular can aid in buffering the negative effects brought on by stressful events. This is relevant given that the measure in the current study looked at perceptions of the social environment and was not an objective measure.

Last, more knowledge is also needed in regard to how caregivers can be best supported. Randomized control trials could be developed in order to test interventions in various shelters focused on enhancing social networks, social support, and concrete services for caregivers and their families. Recent research suggests that implementing trauma informed care can serve the function of ameliorating the negative effects of trauma many of the caregivers come to the shelters having experienced.⁴⁷ In particular, having increased control of surroundings through providing input into the creation and implementation of shelter rules can potentially be therapeutic for residents of shelters.

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APPENDIX A

Items Related to the Shelter Included in the Exploratory Factor Analysis

- 1) Do you have friends at the shelter?
- 2) Do you feel safe at the shelter?
- 3) Are there things for people to do at the shelter?
- 4) Are there things for families to do together at the shelter?
- 5) Is there a staff person that you like?
- 6) Are there rules that you have to follow at the shelter?
- 7) Do you have trouble following these rules?
- 8) Do you get in trouble for not following rules at the shelter?
- 9) Does the staff at the shelter help you and your family?

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TABLE 1Mental Health, Shelter Variables, and Demographics ($N = 209$)

Mental Health and Shelter Measures		
	Mean (SD)	Range
Global Severity Index Score	0.63 (0.66)	0–3.08
Perceived Social Env. of Shelter	2.94 (1.22)	0–4.00

	Percentage	<i>N</i>
First Time in Shelter		
No	42%	87
Yes	58%	119
Time in Shelter		
1 wk–1 mo	17%	35
2 mo–4 mo	42%	87
5 mo or more	41%	83
Difficulty with Shelter Rules		
No	86%	174
Yes	14%	28

Participant Demographics		
	Mean (SD)	Range
Age		
Caregiver Age	37.95 (SD = 6.87)	20.00–58.00
Youth Age	12.86 (SD = 1.18)	11.01–14.98

	Percentage	<i>N</i>
Gender		
Male	8%	17
Female	92%	192
No. of Youth (11–14)		
1	82%	171
2 or more	18%	38
Race		
Hispanic/Latino	42%	88
Black	47%	98
Black/Hispanic mix or other	11%	23
Caregiver Education		
Some HS or less	47%	95
Completed HS/GED	27%	54
Some college or more	26%	53

TABLE 2

Correlation Matrix of Caregiver Mental Health and Shelter Variables

	BSI	Time in Shelter (1 wk–1 mo)	Time in Shelter (2 mo–4 mo)	Time in Shelter (5 mo or more)	Diff with Shelter Rules	First Time in Shelter
BSI						
Time in Shelter (1 wk – 1 mo)	–0.08					
Time in Shelter (2 mo – 4 mo)	–0.08	–0.39***				
Time in Shelter (5 mo or more)	0.15*	–0.37***	–0.71***			
Diff with Shelter Rules	0.18**	–0.04	–0.03	0.05		
First Time in Shelter	–0.01	–0.14*	–0.06	0.17*	–0.08	
Perceived Social Env. of Shelter	–0.22**	0.07	0.10	–0.08*	–0.04	0.05

*
p 0.05**
p 0.01***
p 0.001.

TABLE 3

Correlation Matrix of Caregiver Mental Health and Demographics

	BSI	Caregiver Age	Youth Age	No. of Youth	Race (Hispanic)	Race (Black)	Race (mix/other)	Caregiver Edu (Some HS or less)	Caregiver Edu (Completed HS/GED)
BSI									
Caregiver Age	0.08								
Youth Age	-0.07	0.09							
No. of Youth	-0.05	-0.001	0.13						
Race (Hispanic)	0.25***	0.01	0.03	0.04					
Race (Black)	-0.20**	0.01	-0.04	0.09	-0.69***				
Race (mix/other)	0.07	0.04	-0.15*	-0.07	-0.07	-0.09			
Caregiver Edu (Some HS or less)	-0.02	-0.05	0.09	0.11	0.19**	-0.24***	-0.04		
Caregiver Edu (Completed HS/ GED)	0.04	0.01	-0.07	0.10	-0.17*	0.16*	0.04	-0.57***	
Caregiver Edu (Some College or more)	-0.02	0.04	-0.03	0.06	-0.04	0.11	0.01	-0.56***	-0.56***

*
 $p < 0.05$ **
 $p < 0.01$ ***
 $p < 0.001$.

TABLE 4

Hierarchical Models of Caregiver Mental Health and Shelter Variables

	Model 1		Model 2	
	B (SE)	p	B (SE)	p
Age (Caregiver)	0.01 (0.01)	0.37	0.01 (0.01)	0.38
Age (Youth)	-0.07 (0.04)	0.14	-0.06 (0.04)	0.16
No. of Youth ^a	-0.01 (0.12)	0.97	-0.01 (0.12)	0.94
Race ^b				
Black	-0.37 (0.10)***	0.001	-0.40 (0.10)***	0.00
Mixed/Other	-0.05 (0.15)	0.72	-0.07 (0.15)	0.62
Caregiver Edu. ^c				
Some HS or less	0.04 (0.12)	0.76	0.07 (0.12)	0.57
High School	0.12 (0.13)	0.34	0.16 (0.12)	0.20
First Time in Shelter ^d	-0.12 (0.09)	0.17	-0.14 (0.10)	0.15
Length of time in shelter ^e				
1 wk –1 mo.	-0.24 (0.15)	0.11	-0.22 (0.15)	0.14
2–4 mo	-0.19 (0.11)	0.09	-0.17 (0.11)	0.12
Perception of Social Env. of Shelter	-0.09 (0.05)*	0.05	-0.09 (0.04)*	0.05
Diff with shelter rules ^f			0.35 (0.13)**	0.01

^aNumber of youth was coded as 0 = one youth, and 1 = two or more youth.

^bRace categories were dummy coded (0 or 1), using “Hispanic/Latino” as the comparison group.

^cCaregiver education categories were dummy coded (0 or 1), using “some college or more” as the comparison group.

^dFirst time in shelter was coded 0 = no and 1 = yes.

^eLength of time in shelter categories were dummy coded (0 or 1), using “5 months or more” as the comparison group.

^fDifficulty following shelter rules was coded as 0 = no and 1 = yes.

*
p 0.05

**
p 0.01

p 0.001.