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# The Effect of Victimization, Mental Health, and Protective Factors on Crime and Illicit Drug Use Among Homeless Young Adults

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Although research has found high rates of child maltreatment, widespread victimization, and other negative outcomes among homeless youth and young adults, resiliency among this population has largely been understudied. Specifically, a gap remains in terms of how protective factors such as self-efficacy, low deviant beliefs, and religiosity operate among homeless youth and young adults. The purpose of this study is to examine the relationship between various forms of victimization, mental health, and protective factors with property and violent crime and illicit drug use among homeless young adults. Results from regression analyses indicate that running away from home more frequently, experiencing more physical victimization on the street, higher levels of self-efficacy, and more deviant beliefs were associated with greater property crime. Significant correlates of violent crime included being male, running away from home more frequently, greater sexual and physical victimization on the street, higher levels of self-efficacy, and more deviant beliefs. Finally, being male, running away more frequently from home, greater child physical abuse and partner victimization, and more deviant beliefs were all associated with greater illicit drug use. Self-efficacy was positively related to both property and violent crime, suggesting that it may not operate for homeless young adults in the same manner as it does for normative populations.

**Keywords:** child abuse, street victimization, protective factors, illicit behavior, homeless

Much of the prior research conducted on homeless youth and young adults has focused on negative aspects of their lives including troubled childhoods (Tyler & Cauce, 2002) and high-risk outcomes such as delinquency (Baron, 1997; Hagan & McCarthy, 1997), substance use (Baron, 1999; Chen, Tyler, Whitbeck, & Hoyt, 2004), victimization (Baron, 1997; Hoyt, Ryan, & Cauce, 1999; Tyler, Hoyt, Whitbeck, & Cauce, 2001), risky sexual behaviors (Kipke, Unger, Palmer, Iverson, & O'Connor, 1998; Tyler & Melander, 2010), and mental health problems (Bao, Whitbeck, & Hoyt, 2000; Stewart et al., 2004). However, the positive aspects of homeless youth/young adults, including protective factors such as high self-efficacy and religiosity and low deviant beliefs remain largely understudied. General strain theory (GST) suggests that it is possible that youth

who possess these positive characteristics may be less likely to become involved in illegal behavior (Agnew, 2006). Even though a few researchers have examined coping resources among homeless youth (Dalton & Pakenham, 2002; Unger et al., 1998; Votta & Manion, 2003), these studies are generally rare; thus, a huge gap in this literature remains. Moreover, although some studies suggest that homeless youth use substances as a way to cope with stressful life events (Kidd & Kral, 2002), few studies have actually examined the role of protective factors in the lives of homeless youth. Given the limited research concerning protective factors among homeless young people and whether or not they operate in the same fashion as they do for normative youth populations, this study aimed to examine the association of child maltreatment, street victimization, mental health, and protective factors with property and violent crime and illicit drug use among a sample of homeless young adults. Learning more about the role that protective factors play in the lives of homeless young people may allow service providers to specifically target these as areas of strength with the goal of improving youth and young adult outcomes.

## Literature Review

### *Protective Factors*

There is widespread agreement among researchers that basic protective factors including child personality characteristics, family characteristics, and community environment (Garmezy, 1983; Hauser, Vieyra, Jacobson, & Wertlieb, 1985) mitigate developmental risk in the general population. To illustrate how protection might work, consider that youth with high efficacy persist at tasks, remain diligent, focused, and expect positive outcomes from their hard work. High efficacy youth are motivated to engage in tasks and rely on mental pictures or memories of past performance as a guide that shapes their behavior through outcome expectancies (Bandura, 1977). These youth tackle problems, test decisions on a regular basis, and are more engaging with their social environment. As a result, they optimize needed cognitive and social skills, receive positive feedback, and are likely to benefit from continued attempts to solve problems with the expectation of reward.

In contrast, homeless youth/young adults often face certain adversities that encourage deviant adaptations. For instance, because most homeless youth have experienced some form of child abuse (Tyler & Cauce, 2002), the end result is to experience a chronic and persistent form of developmental risks that interfere with the operation of protective factors. Lacking familial support, absent exposure to positive adult role models, and living without positive reinforcement for their behaviors (Tyler & Whitbeck, 2004), many youth may have low self-efficacy. However, it is equally plausible that through their exposure to street life, homeless youth learn how to navigate difficult situations and become more efficient in problem solving and handling various situations. The main difference is that while housed youth have mental frameworks for positive outcomes and consistent forms of reward for task engagement (i.e., warmth and supportive parenting), which fosters prosocial behaviors (Emery & Forehand, 1994), homeless youth lack mental frameworks for positive outcomes and experience inconsistent forms of reward for task management (i.e., harsh parenting), which fosters involvement in high-risk behaviors (Whitbeck & Hoyt, 1999). Thus, the relationship between self-efficacy and high-risk outcomes may be uniquely different for homeless youth/young adults. That is, homeless youth/young adults may have high efficacy because of their ability to navigate street

life, whereas housed youth have high efficacy because of their higher sense of control and positive parenting.

There is a dearth of literature on resiliency (protective factors) among runaway and homeless adolescents because resiliency is difficult to define for this population (Tyler & Whitbeck, 2004). Resilience is generally viewed as having the capacity to overcome serious and cumulative developmental risks to avoid negative outcomes (Rak & Patterson, 1996). Resiliency for homeless youth/young adults may mean navigating street life where successful adaptation includes daily survival and avoiding harm. The unique problem of homeless youth/young adults is that resilience includes to some degree the necessary skills and knowledge to remain safe and to ensure survival and these skills engender risk (e.g., carrying a weapon or trading sex for items of necessity such as food or shelter). This multitude of skills is somewhat incongruent with what is considered essential for successful adult development, such as employment, healthy relationships, and permanent housing (Tyler & Whitbeck, 2004).

Research on coping among homeless youth has found that lower coping resources are associated with depressive symptoms, poorer health, and substance use (Unger et al., 1998). Similarly, lower self-worth and greater disengagement coping was found to be associated with more internalizing and externalizing behaviors among homeless male youth (Votta & Manion, 2003). Finally, Dalton and Pakenham (2002) found that higher self-efficacy was negatively related to social adjustment in a crisis shelter in a study of 78 homeless adolescents.

### *Criminal Offending and Violence*

Many homeless youth engage in criminal offending such as stealing or selling drugs, often for survival, which increases their risk for victimization (Baron, 1997; Hagan & McCarthy, 1997). Other daily survival strategies such as loitering in public places can also increase one's chances of being a victim of crime because of exposure to high-risk individuals. Baron (1997) found that the more offending behaviors in which male street youth engaged (e.g., robbery, assaults), the greater their risk for violent and/or property victimization. Finally, homeless youth with deviant values are more likely to engage in property and violent crime (Baron, 2003, 2009).

### *Illicit Drug Use*

Research finds that homeless youth have high rates of illicit drug use (Hadland et al., 2011; Hagan & McCarthy, 1997; Rice, Milburn, & Monro, 2011). Risk factors for substance use among this population include physical and/or sexual abuse (Gallupe & Baron, 2009; Kipke, Montgomery, & MacKenzie, 1993; Tyler, Gervais, & Davidson, 2013), lower self-efficacy (Gallupe & Baron, 2009), deviant values (Baron, 2003), being a victim of partner violence (Salomon, Bassuk, & Huntington, 2002; Tyler, Melander, & Noel, 2009), post-traumatic stress disorder (PTSD; Johnson, Whitbeck, & Hoyt, 2005), and depression (Hadland et al., 2011; Slesnick et al., 2009). According to the limited research on religiosity and homeless youth, religion generally is not viewed by these young people as a solution to their problems (Rokach, 2005). Among housed populations of youth and young adults, however, research finds that religiosity and delinquency are inversely related (Johnson, Jang, Larson, & De Li, 2001; Regenerus & Elder, 2003), indicating that religion serves as a protective factor among housed populations.

### *Theoretical Background*

Many homeless young people experience numerous strains. Family histories of abuse and neglect, criminal victimization, and the challenges associated with homelessness itself contribute to stressful experiences. GST offers explanations for why some people may react to stress with property crime, violent crime, or drug use. GST posits that for some people, crime may be one way to cope with or manage stressful experiences (Agnew, 1992). Criminal coping is more likely when the individual views the strain as unjust and severe, and when the strain itself creates pressure to react in a criminal fashion. Abuse, criminal victimization, and homelessness meet this criteria (Agnew, 2001, 2002), and a link between victimization and crime has been noted in general population (Hay & Evans, 2006; Kort-Butler, 2010) and homeless samples (Baron, 2009). Such chronic and repeated strains contribute to emotional problems such as anger, anxiety, and depression, which can also lead to deviant coping (Agnew, 2006). Victimization experiences in particular are connected with PTSD (Kilpatrick et al., 2003), although few studies have considered PTSD in a GST framework. PTSD may increase the likelihood of criminal coping, especially among populations at risk for continued victimization (Blevins, Listwan, Cullen, & Jonson, 2010).

Individual characteristics, however, may decrease the likelihood of criminal coping including self-efficacy and holding beliefs unfavorable to crime (Agnew, 1992, 2006). In addition, Piquero and Sealock (2000) argue that spiritually based coping skills, although not initially included by Agnew, represent an important factor that may restrict criminal coping. Factors such as self-efficacy, low deviant beliefs, and religiosity may increase the individual's ability to cope legitimately, increase the perceived costs of crime, and curb one's disposition for crime. These characteristics are often modeled as conditional effects (Baron, 2004; Moon, Morash, McClusky, & Wang, 2009), but chronic or repeated strains (such as abuse or homelessness) may also increase one's predisposition for criminal coping, in part, by eroding positive coping resources (Agnew, 2006). In this case, coping resources act as mediators between strain and criminal outcomes (Bao, Haas, Chen, & Pi, 2012).

### *Hypotheses*

Research finds that homeless youth have extensive histories of victimization, both in the form of child abuse prior to leaving home and street victimization, and these strains put them at greater risk for illicit behaviors. Less is known about the protective factors that homeless youth/young adults may use to cope with stress and how effective these resources are in limiting problematic outcomes. Based on insight from GST, we propose that youth who have experienced more child maltreatment, street victimization, and partner violence will be *more likely* to react to these strains with illegal behaviors (i.e., property and violent crimes and illicit drug use). Those with higher levels of depressive symptoms and PTSD will be *more likely* to engage in illegal behaviors, and these symptoms will mediate the relationship between strain and illegal behavior. Finally, those with higher levels of self-efficacy, lower deviant beliefs, and greater religiosity will engage in less illegal behavior and will be *less likely* to react to strain with illegal behaviors.

### **Method**

Data are from the Homeless Young Adult Project, which included 199 young adults who were interviewed in three midwestern cities from April of 2004 through June of 2005. Of this total, 144 were homeless and 55 were housed at the time of the interview.

Participants comprising the housed sample were obtained via peer nominations from the homeless young adults. Despite being housed at the time of the interview, 28 out of the 55 housed young adults had extensive histories of being homeless and had run away from home numerous times. The final sample for this study included 172 young adults who were homeless or had a history of running away and being homeless. The Institutional Review Board (IRB) at the first author's institution approved this study.

Experienced interviewers who conducted the interviews had completed the Collaborative IRB Training Initiative course, had worked on past projects dealing with at-risk young people, and had served for several years in agencies and shelters that support this group. Interviewers approached shelter residents and located eligible respondents in areas where street youth and young adults were known to congregate. Study eligibility required young people to be between the ages of 19 and 26 years and homeless. Homeless was defined as those currently residing in a shelter, on the street, or those living independently (e.g., with friends) because they had run away, had been pushed out, or had drifted out of their family of origin. Interviewers obtained informed consent from young adults prior to participation and told the young people about the confidentiality of the study and that their participation was voluntary. The interviews, which were conducted in shelter interview rooms or quiet corners of fast-food restaurants or coffee shops, lasted approximately 1 hour and all participants received \$25 for their participation. Referrals for shelter, counseling services, and food services were offered to the young adults at the time of the interview. Although field reporters did not formally tally screening rates, they reported that very few young adults (i.e., less than 5%) refused to participate.

### *Measures*

**Child Maltreatment.** *Sexual abuse* included 7 items adapted from previous research with homeless young people (Whitbeck & Simons, 1990). Youth were asked for example how often an adult had touched them sexually on their butt, thigh, breast, or genitals before they were on their own. Due to skewness, the items were dichotomized (0 = *never* and 1 = *at least once*) and then summed to create an index. *Physical abuse* was a summed scale of 16 items from the Conflict Tactics Scale (CTS; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). Youth were asked how frequently their caretaker, for example, shook them or kicked them hard ( $\alpha = .88$ ). *Neglect* was a mean scale of 6 items from the Parent-Child CTS (Straus et al., 1998). Youth were asked for example how often their caretaker was drunk or high on drugs and could not take care of them ( $\alpha = .83$ ). Response categories for both physical abuse and neglect were 0 = *never* to 6 = *more than 20 times*.

**Street Victimization.** *Sexual victimization* included 4 items that asked respondents, for example, how often they have been forced to do something sexual and been sexually assaulted and/or raped since being on the street. Because of skewness, the items were dichotomized (0 = *never* and 1 = *one or more times*) and then summed to create an index. *Physical victimization* was a mean scale of 6 items (e.g., how often they had something stolen from them and been beaten up; 0 = *never* to 3 = *many times*;  $\alpha = .77$ ). *Partner violence scale* included 14 items from the Revised CTS (Straus, Hamby, Boney-McCoy, & Sugarman, 1996) that asked respondents, for example, how many times their partner or previous partner choked them and slammed them against a wall. Because of skewness, items were first dichotomized (0 = *never*; 1 = *at least once*) and then summed to create an index.

**Mental Health.** *Depressive symptoms* included 10 items from the Center for Epidemiological Studies-Depression (CES-D) scale (Radloff, 1977). The CES-D scale, which re-

quires respondents to reflect on their experiences during the past week includes items such as "I was bothered by things that don't usually bother me" and "I had trouble keeping my mind on what I was doing" (0 = *never* to 3 = *5-7 days*). Certain items were reverse coded so that higher scores indicated more depressive symptomology and then a mean scale was created ( $\alpha = .80$ ).

*Posttraumatic stress disorder symptoms* included 15 items from the Impact of Event Scale (Horowitz, Wilner, & Alvarez, 1979), which was designed to measure subjective distress in response to any specific life event. Respondents were asked how true a series of statements were for them in the past 7 days such as "I thought about it when I didn't mean to" and "I tried to remove it from my memory" (0 = *not at all* to 3 = *often*), with higher scores indicating more PTSD symptomology. A mean scale was created ( $\alpha = .95$ ).

**Protective Factors.** *Self-efficacy* included 10 items from the General Self-Efficacy Scale (Jerusalem & Schwarzer, 1992). Respondents were asked how true statements such as "You can always manage to solve difficult problems if you try hard enough," "If someone opposes you, you can find the means and ways to get what you want," and "You can usually handle whatever comes your way" (1 = *not at all true* to 4 = *exactly true*). A mean scale was created ( $\alpha = .81$ ).

*Low deviant beliefs* was an 8-item scale developed by Chapple and Hope (2003). Respondents were asked to what extent they agreed with statements such as, "Rules were meant to be broken," and "I try to get things I want even if I know it's causing problems for other people" (1 = *strongly agree* to 4 = *strongly disagree*). The mean scale was coded such that higher scores reflect lower deviant beliefs ( $\alpha = .82$ ).

*Religiosity* included three items that asked respondents how many days they do something religious such as go to church, pray, or read scriptures in a typical week; how often they have attended religious services in the past year; and how important religion is to them. The items were first standardized and then a mean scale was created.

### **Dependent Variables**

*Property crime* included 8 items in which respondents were asked how often they had stolen from stores; broken into a house, store, or school; or used credit or bank cards without owner's permission (0 = *never* to 3 = *many times [five or more]*). A mean scale was created ( $\alpha = .88$ ).

*Violent crime* included 3 items that asked respondents how often they had "Beaten someone up so badly they probably needed bandages or a doctor," "Used a knife or other weapon in a fight," and "Attacked someone with the idea of seriously hurting or killing them" (0 = *never* to 3 = *many times [five or more]*). A mean scale was created ( $\alpha = .79$ ).

*Illicit drug use* included eight items that asked respondents how often they had used crack, amphetamines, and cocaine, for example, in the past year (0 = *never* to 4 = *daily usage*). An index was initially created, but because of positive skewness, was recoded such that 0 = *no drug use* to 4 = *four or more different types of drugs*.

### **Control Variables**

*Gender* was coded 0 = *male* and 1 = *female*. *Number of times run* was a single item indicator that measured the total number of times youth/young adults had ever run away from home. Because of skewness, this variable was collapsed into 1 = *ran away once* to 6 = *ran away more than 20 times*.

## Results

### *Sample Characteristics*

The sample was 40% female, 60% White, ranged in age from 19 to 26 years, and 47% had a high school diploma. Forty-seven percent of young adults had been sexually abused, 95% had been physically abused, and 78% had been neglected on at least one occasion. Finally, 39% had been sexually victimized and 94% had been physically victimized at least one time since being on the street, and 69% had been victimized by their partner at least one time. Pearson correlation coefficients for all measures are presented in Table 1 with the means, standard deviations (*SD*), and range.

### *Procedure*

Ordinary least squares (OLS) multiple regression models were run for each of the three dependent variables including property crime, violent crime, and illicit drug use. The variables for all models were entered into the equation in four separate blocks so the individual effect of child maltreatment prior to leaving home, victimization since being on the street, mental health, and protective factors could be seen. All models controlled for gender and number of times run from home. Standardized beta coefficients are reported. Eighteen interaction terms were created and tested for all forms of strains (i.e., sexual abuse, physical abuse, neglect, sexual victimization, physical victimization, partner violence) by protective factors (i.e., self-efficacy, low deviant beliefs, and religiosity). Interaction terms were entered individually into each of the three full models (i.e., Model 4) for property crime, violent crime, and illicit drug use.

**Property Crime.** The results for property crime are presented in the left columns of Table 2. All four models for property crime revealed that males and those who ran from home more frequently were more likely to have engaged in greater property crime compared to females and those who ran less often. In Model 1, neglect was significant based on a one-tail test criterion in the hypothesized direction ( $\beta = .15$ ;  $p < .10$ ). Model 1 explained 14% of the variance in property crime. Model 2 revealed that young adults who experienced more sexual victimization ( $\beta = .14$ ;  $p < .10$ ) and more physical victimization since being on the street ( $\beta = .26$ ) engaged in greater property crime. Model 2 explained 22% of the variance with the addition of the street victimization variables. In Model 3, physical victimization remained significant. The addition of the protective factors in Model 4 showed that those with lower deviant beliefs ( $\beta = 2.18$ ) and greater religiosity ( $\beta = 2.13$ ;  $p < .10$ ) reported lower involvement in property crime. Self-efficacy was positively correlated with property crime ( $\beta = .20$ ), indicating that young adults with higher self-efficacy engaged in more property crime. Higher levels of depressive symptoms was also linked to more property crime ( $\beta = .15$ ;  $p < .10$ ). Physical victimization remained significant in this model. Overall, these variables explained 31% of the variance in property crime. To examine the potential conditioning effects of the protective factors (i.e., self-efficacy, lower deviant beliefs, religiosity), interaction terms between each of these and the indicators of child maltreatment and street victimization (i.e., strains) were computed and entered individually into the equation. Results for property crime indicated that both partner victimization 3 self-efficacy ( $\beta = 21.094$ ;  $p = .01$ ) and neglect 3 religiosity ( $\beta = 2.217$ ;  $p = .04$ ) were significant.

**Violent Crime.** The middle columns of Table 2 show results for violent crime. All four models for violent crime showed that males and those who have run from home more frequently were more likely to have engaged in more violent crime compared to females



Table 1. Correlation Matrix for All Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Property crime	—															
2 Violent crime	.53**	—														
3 Illicit drug use	.44**	.34**	—													
4 Female	-.07	-.12	-.28**	—												
5 Number of times run	.28**	.24**	.19*	.20*	—											
6 Sexual abuse	.18*	.18*	.16*	.26**	.21**	—										
7 Physical abuse	.25**	.29**	.31**	-.07	.13	.15	—									
8 Neglect	.28**	.27**	.17*	.10	.22**	.30**	.48**	—								
9 Sexual victimization	.22**	.28**	.05	.39**	.10	.38**	.13	.25**	—							
10 Physical victimization	.41**	.46**	.22**	-.02	.26**	.12	.25**	.28**	.26**	—						
11 Partner victimization	.18*	.16*	.19*	.20*	.16	.22**	.09	.28**	.17*	.22**	—					
12 CES-D	.24**	.11	.10	.10	.11	.17*	.34**	.25**	.21**	.17*	.22**	—				
13 PTSD	.32**	.31**	.11	.09	.20*	.20*	.28**	.26**	.32**	.33**	.30**	.63**	—			
14 Self-efficacy	.05	.10	-.06	-.11	-.13	-.11	-.07	-.04	-.05	-.05	-.01	-.40**	-.22**	—		
15 Low deviant beliefs	-.25**	-.26**	-.30**	.13	.07	.03	-.17*	-.07	.06	-.08	.09	-.03	-.05	.04	—	
16 Religiosity	-.15	-.10	-.12	.04	-.02	-.03	-.01	-.06	.00	.06	-.09	-.01	.05	.22**	.33**	—
Mean	.58	.83	.96	.40	2.25	1.63	1.45	1.76	.88	.96	2.83	1.29	1.52	3.07	3.08	.00
SD	.74	1.10	1.40	.49	1.55	2.19	1.07	1.79	1.34	.67	3.19	.65	.94	.49	.55	.77
Range	3.00	3.00	4.00	1.00	5.00	7.00	4.75	6.00	4.00	2.83	14.0	2.70	2.93	2.60	3.00	.80

CES-D = Center for Epidemiological Studies-Depression; PTSD = posttraumatic stress disorder.

\*  $p < .05$ ; \*\*  $p < .01$

**Table 2.** OLS Regression Models for Correlates of Property and Violent Crime and Illicit Drug Use (*n* = 172)

Correlates	Property Crime				Violent Crime				Illicit Drug Use			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
Female	-.147†	-.183*	-.183*	-.143†	-.187*	-.248**	-.235**	-.204**	-.346***	-.391***	-.394***	-.387**
Number of times run	.242**	.189*	.181*	.212**	.200**	.143*	.129†	.163*	.192**	.174*	.181*	.204**
Sexual abuse	.103	.055	.051	.062	.121	.050	.052	.061	.176*	.136†	.138†	.132†
Physical abuse	.117	.076	.038	.001	.178*	.126	.139†	.100	.236**	.230**	.244**	.206*
Neglect	.151†	.071	.071	.044	.124	.030	.032	.010	-.003	-.065	-.065	-.075
Sexual victimization		.141†	.113	.105		.233**	.211**	.210**		.077	.093	.119
Physical victimization		.263***	.246**	.247**		.302***	.277***	.271***		.055	.067	.043
Victimization by partner		.068	.039	.025		.052	.039	.038		.180*	.196*	.236**
CES-D			.067	.158†			-.151†	-.070		.003	.003	-.009
PTSD			.094	.091			.177†	.165†		-.079	-.079	-.102
Self-efficacy				.202**				.170*				-.057
Low deviant beliefs				-.187*				-.206**				-.278***
Religiosity				-.139†				-.072				.023
Adjusted R <sup>2</sup>	.14	.22	.23	.31	.15	.29	.30	.37	.21	.23	.23	.29

OLS = ordinary least squares; CES-D = Center for Epidemiological Studies-Depression; PTSD = posttraumatic stress disorder. \**p* < .05 ; \*\**p* < .01 ; \*\*\**p* < .001 ; †*p* < .10

and those who run away less often. Model 1 revealed that young adults who experienced higher levels of physical abuse engaged in more types of violent crime ( $\beta = .17$ ). Model 1 explained 15% of the variance in the dependent variable. With the addition of the street victimization variables, Model 2 showed that those who experienced more sexual and physical street victimization reported perpetrating more types of violent crime ( $\beta = .23$  and  $\beta = .30$ , respectively). These variables explained 29% of the variance in violent crime. In Model 3, both mental health variables were significant based on a one-tail test criterion. Consistent with what was hypothesized, those with higher levels of PTSD ( $\beta = .17$ ;  $p = .10$ ) engaged in more violent crime. Contrary to our hypothesis, those with higher depressive symptomology ( $\beta = 2.15$ ;  $p = .10$ ) perpetrated less violent crime. Sexual and physical street victimization remained significant correlates. This model explained 30% of the variance in our dependent variable. With the addition of the protective factors, Model 4 showed that those with lower deviant beliefs ( $\beta = 2.20$ ) reported lower involvement in violent crime. However, young adults with higher self-efficacy engaged in more violent crime ( $\beta = .17$ ). Similar to Model 3, PTSD and street victimization variables remained significant correlates, and the final model explained 37% of the variance in violent crime. A test for interactions to examine potential conditioning effects revealed one significant finding for violent crime: physical abuse  $\times$  self-efficacy ( $\beta = .884$ ;  $p = .05$ ).

**Illicit Drug Use.** The results for illicit drug use are in the right hand columns in Table 2. All four models for illicit drug use showed that males and those who have run from home more frequently were more likely to have engaged in greater illicit drug use compared to females and those who have run away less often. Model 1 revealed that young adults who experienced greater physical abuse ( $\beta = .23$ ) and greater sexual abuse ( $\beta = .17$ ) reported using more types of illicit drugs. Model 1 explained 21% of the variance in drug use. Model 2 showed that experiencing more types of partner victimization was related to more drug use ( $\beta = .18$ ). Similar to Model 1, physical and sexual abuse remained significant. This model explained 23% of the variance. The results for Model 3 mirror those of Model 2 and no additional variance was explained. For Model 4, one protective factor was significant: those with lower deviant beliefs reported lower drug use ( $\beta = 2.27$ ). Partner victimization and sexual and physical abuse remained significant correlates. The final model explained 29% of the variance in illicit drug use. A test for interactions to examine potential conditioning effects revealed two significant findings for drug use: physical abuse  $\times$  self-efficacy ( $\beta = 2.915$ ;  $p = .05$ ) and neglect  $\times$  self-efficacy ( $\beta = 2.244$ ;  $p = .01$ ).

## Discussion

This study examined the relationship between child maltreatment, street victimization, mental health, and protective factors with property crime, violent crime, and illicit drug use among 172 homeless young adults. Although previous research has found widespread child maltreatment and victimization among homeless youth (Baron, 1997; Hoyt et al., 1999; Tyler & Cauce, 2002) as well as other negative outcomes (Bao et al., 2000; Baron, 1997, 1999; Hagan & McCarthy, 1997; Stewart et al., 2004; Tyler & Johnson, 2004), protective factors such as self-efficacy, lower deviant beliefs, and religiosity among this population remain largely understudied. Overall, our results show that greater physical and/or sexual victimization, lower deviant beliefs, and higher self-efficacy matter most for property and violent crime involvement. For illicit drug use, more child physical abuse, more partner violence, and lower deviant beliefs are all important correlates. We find that lower deviant beliefs is a protective factor for each of our three outcome vari-

ables. Self-efficacy is important for understanding different types of crime, but its positive correlation suggests that it may operate differentially for homeless young adults compared to normative populations.

Current results show that sexual and/or physical street victimization are important for understanding involvement in property and/or violent crime, whereas child maltreatment and partner violence are important for explaining drug use, thus our hypotheses were partially supported. That is, the relation between strains and illegal behaviors are in the hypothesized direction. It is possible that young adults who have previously experienced child abuse and/or street victimization may respond to future conflict or other encounters with violence so as to avoid being a victim. In addition, street victimization is likely to be viewed as unjust, leading the young adult to react to it in a criminal fashion. Also, some young adults may turn to drug use as a way to cope with early childhood trauma, being a victim of partner violence (Baron, 1997; Tyler & Cauce, 2002; Tyler et al., 2009), and/or to relieve some of the daily stresses of street life (Thompson, Rew, Barczyk, McCoy, & Mi-Sedhi, 2009; Tyler & Johnson, 2006). Consistent with GST, street victimization experiences are positively correlated with illicit behaviors. However, not all forms of victimization had significant direct effects in each model. For example, physical victimization was a key predictor of both property and violent crime, but sexual victimization was a correlate only of violent crime. In contrast, experiencing childhood physical abuse and recent victimization by a partner were linked to drug use. Although GST makes no specific predictions about such relationships, one conclusion supported by this study is that proximate victimization experiences are linked to street crimes, whereas distal and relationship-based victimization experiences are linked to illicit drug use.

Our hypotheses for the mental health indicators were marginally supported. Higher levels of depression are associated with more property crime involvement, whereas higher levels of PTSD are associated with more involvement in violent crime. This is somewhat consistent with GST, which suggests that depression might inhibit externalizing behavior such as violent crime. Neither depression nor PTSD was related to drug use and they did not appear to mediate the relationship between victimization and illicit behavior, as GST suggests. Research indicates that depression and PTSD are likely to be comorbid among adolescents who experience victimization (Kilpatrick et al., 2003), which may make the independent effects of each mental health problem difficult to detect. Further research is needed to determine if and how such mental health issues explain the relationship between victimization and illegal behavior.

Our hypotheses regarding protective factors were partly supported. We find that lower deviant beliefs serve a protective function against all three illicit behaviors. Even though numerous homeless young adults are likely to be in a "survival" mind set where breaking rules and not concerning themselves with who gets hurt in the process (i.e., high deviant beliefs), which may be something many of these young adults do to make it through the day unscathed, such deviant beliefs serve to increase their chances of perpetrating crime and using drugs. This is consistent with prior research, which finds that those with lower self-control or high deviant attitudes (Baron, 2003, 2009; Pratt & Cullen, 2000) are more likely to participate in crime and use drugs (Baron, 2003). It is possible that when confronted with unjust or severe strains, young people with higher deviant beliefs may be more likely to retaliate physically and use other deviant methods of coping (Agnew, 2006) such as illicit drug use and property crime to cope with both distal (e.g., child abuse) and proximal (e.g., stressors of street life) strains.

Current findings also reveal that higher levels of self-efficacy is associated with being a perpetrator of both property and violent crime, suggesting that this protective fac-

tor among normative populations may operate differently among homeless individuals. For example, Agnew (2006) described a kind of criminal self-efficacy, the extent to which people feel they can solve problems illegitimately, particularly if they are low in legitimate self-efficacy. Criminal self-efficacy may facilitate deviant responses, especially to strains such as victimization, which require corrective action. Agnew (2006) also argued measures of self-efficacy typically blur the distinction between criminal and legitimate forms. Thus, within a homeless population, items such as "If someone opposes you, you can find the means and ways to get what you want" or "Thanks to your resourcefulness, you know how to handle unforeseen situations" may hold different meaning. Conceptualized in this light, self-efficacy can promote criminal behavior. This is further supported by our interaction effects where at high levels of self-efficacy, having experienced greater physical abuse is linked to more violent crime but having greater self-efficacy and greater physical abuse experiences results in less drug use.

Some limitations should be noted. Because our data are self-reported, we cannot confirm actual incidents of abuse and victimization. In addition, inferences about causality cannot be made because of the cross-sectional nature of the data. However, because youth were asked to reflect on experiences that occurred during specific time periods (e.g., before leaving home for child abuse and since being on the street for physical and sexual victimization), this assists with temporal ordering of variables. Finally, we were unable to measure certain factors such as social support and anger, which may have explained additional variance in our models.

Overall, these results emphasize the importance of lower deviant beliefs as a protective factor against involvement in property and violent crime as well as illicit drug use. In addition, self-efficacy is also an important mechanism for understanding crime but it appears to operate differentially among these homeless young adults and thus may not have the same protective meaning as it does for housed individuals. That is, homeless young adults may have high self-efficacy because of their ability to navigate street life, whereas housed youth have high self-efficacy because of their higher sense of control and positive parenting. Thus, both groups may have high efficacy but it does not have the same meaning. This study adds to the limited literature in this area by examining protective factors such as low deviant beliefs, self-efficacy, and religiosity, which remain largely understudied among homeless youth and young adults. In other words, little is known about protective factors among the homeless in general and even less is known about whether these personal characteristics operate the same among homeless youth/young adults compared to other populations. Our results suggest that protective factors such as low deviant beliefs and religiosity operate similarly among homeless young adults compared with housed populations, but that self-efficacy operates differently. Future research should continue to examine protective mechanisms among this population that may help to offset risk given their strong association with both crime and substance use in this study and the positive impact found for low deviant beliefs.

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