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COMMUNITY VIOLENCE AND EXTERNALIZING PROBLEMS: MODERATING EFFECTS OF RACE AND RELIGIOSITY IN EMERGING ADULthood

Patrick J. Fowler,
Wayne State University

Sawssan R. Ahmed,
University of California, Los Angeles

Carolyn J. Tompsett,
Bowling Green State University

Debra M. H. Jozefowicz-Simbeni, and
Wayne State University

Paul A. Toro
Wayne State University

Abstract

The present study examined racial differences in the relationship between exposure to community violence and public and private religiosity in predicting externalizing problems among at-risk emerging adults. Participants were 178 African American and 163 European American emerging adults at risk for exposure to community violence. Exposure to community violence related to more externalizing problems. Greater public religious affiliation buffered the relationship between community violence and substance abuse, for both African American and European emerging adults. In addition, more privately religious African American emerging adults engaged in less deviant behavior when exposed to higher levels of community violence. European Americans were not protected by private religiosity.

Prevalence estimates suggest that the majority of urban youth are exposed to some form of neighborhood violence, and most of these youth witness and are victims of multiple violent events across many years (Gorman-Smith, Henry, & Tolan, 2004; Stein, Jaycox, Kataoka, Rhodes, & Vestal, 2003). Exposure to community violence predicts a number of negative mental health outcomes. In particular, adolescents exposed to community violence report greater deviant behavior, including destruction of property, theft, and physical fighting, as well as alcohol and illicit drug abuse (Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, in press; Gorman-Smith et al., 2004; Schwab-Stone et al., 1995). It appears that exposure to community violence normalizes the use of aggressive behavior (Guerra, Huesmann, & Spindler, 2003). As a result, youth learn that violence is an effective method of problem solving, and therefore, are more likely to engage in violent acts themselves. In addition, adolescents may turn to drugs and alcohol in an attempt to cope with the chaos associated with community violence. Illicit substance abuse may alleviate feelings and cognitions of distress and despair associated with exposure to community violence (Horowitz, Weine, & Jekel, 1995). Although little is known about the effect of community violence on such externalizing problems in

emerging adulthood, it seems likely that greater exposure to community violence will predict greater externalizing problems among young adults, as it does among adolescents.

If this relationship does exist, it is important to identify factors that buffer emerging adults exposed to such violence from engaging in risky behaviors. An ecological-transactional model of violence posits that resources and risk factors exist at various levels of developmental context that interact to determine the influence of community violence (Cicchetti & Lynch, 1993). The effects of a community level variable may be attenuated or exacerbated by the presence of more proximal influences. Indeed, research in adolescence has identified a host of environmental and individual factors associated with positive well-being (Blum et al., 2000; Masten et al., 1999).

Although conceptualized differently across numerous studies, religiosity consistently seems to relate to less externalizing problems among adolescents. Most often, religiosity is conceptualized in a multidimensional structure, in which two unique factors emerge as important: private and public religiosity. Private religiosity refers to internal thoughts and beliefs such as one's religious identity, the importance of religion to self, attachment to religion, and personal religious awareness; public religiosity includes church attendance, youth group involvement, and celebration of religious holidays (Bahr, Maughan, Marcos, & Li, 1998; Brega & Coleman, 1999). Even after statistically controlling for demographic variables including gender, age, ethnicity, and socioeconomic status; both private and public religiosity have been found to relate inversely with substance abuse and deviant behavior among teens (Donahue & Benson, 1995; Miller, Davies, & Greenwald, 2000; Nonnemaker, McNeely, & Blum, 2003). Furthermore, the effects of these dimensions of religiosity seem to be independent of each other in that each explains unique aspects of variance of alcohol and cigarette use when assessed together (Litchfield, Thomas, & Li, 1997).

Private and public religiosity may be an especially important protective resource for youth living in violent communities. The development of a sense of meaning greater than oneself, as well as the presence of a supportive religious community to which to turn, may help youth make sense of the traumatic chaos of neighborhood violence (Garbarino & Bedard, 1996). In fact, in a study of African American teens, private religiosity and religious identification protected youth exposed to higher levels of community violence from developing conduct problems (Pearce, Jones, Schwab-Stone, & Ruckin, 2003). Specifically, youth exposed to higher levels of neighborhood violence demonstrated a smaller increase in conduct problems over a one-year period when they considered themselves to be more religious and reported engaging in more religious behaviors, such as praying and reading religious materials. Authors suggest that a more developed moral responsibility associated with greater religiosity keeps teens out of trouble even when exposed to violence.

The protective relationship of religiosity on behavioral problems among youth exposed to community violence may be especially relevant in emerging adulthood. The primary developmental goal of emerging adulthood is to cultivate an adult identity through exploration (Arnett, 2000). Self-exploration of identity and roles includes examination of spiritual and world beliefs, as well as religious practices (Arnett, 2000; Arnett & Jensen, 2002; Barry & Nelson, 2005). Emerging adults determine what they want to believe and how they want to express their beliefs. When exposed to neighborhood violence, emerging adults who identify privately and publicly with religious principles may have more resources to avoid engagement in deviant behaviors. Yet, racial differences in religiosity increase the complexity of this supposed relationship.

In particular, research suggests that religiosity is more important in the lives of African American adolescents compared to European American teens (Brega & Coleman, 1999;

Donahue, 1995). Not only are African American teens and adults more likely to attend church services regularly compared to European Americans, African Americans also engage in private prayer and look to a higher power for support more regularly (Milevsky & Levitt, 2004; Pattillo-McCoy, 1998; Taylor, Chatters, Rukmalie, & Levin, 1996). Thus, African American communities may elicit personal and social support through religiosity to help process the trauma associated with neighborhood violence. These cultural differences in religiosity may be especially salient in emerging adulthood. Given the greater emphasis on individualism, European American emerging adults may more actively reject the religious beliefs and practices of their childhoods (Arnett & Jensen, 2002). As a result, European Americans may have fewer resources based upon private and public religiosity to avoid engaging in risky behaviors after exposure to neighborhood violence.

PRESENT STUDY

The purpose of the present study was to examine racial differences in the protective function of religiosity on the relationship between exposure to community violence and externalizing problems among at-risk emerging adults. Exposure to community violence represents emerging adults' appraisals of violence in neighborhoods. Two unique dimensions of religiosity were examined. Private religiosity refers to the extent to which religious beliefs provide personal meaning; public religiosity includes the value individuals placed on membership to a religious institution. Externalizing problems referred to self-reported deviant behavior, as well as alcohol and drug abuse and dependence symptoms. Previous research suggests that both private and public religiosity relate to decreased externalizing problems among adolescents (Donahue & Benson, 1995; Miller et al., 2000; Nonnemaker et al., 2003), and aspects of religiosity appear to function as stress buffers for teens exposed to violence (Pearce et al., 2003).

Using cross-sectional data, this study tested the following hypotheses. First, exposure to community violence will relate to more substance abuse and deviant behavior among both African American and European American emerging adults. This relationship will be demonstrated in bivariate relations, as well as after statistically controlling for demographic and other stressful experiences (Kliewer, Lepore, Oskin, & Johnson, 1998). Second, a significant inverse relationship will exist between religious beliefs and practices and externalizing behaviors, with more privately and publicly religious emerging adults reporting less substance abuse and deviant behavior for both African American and European American youth. Third, African American emerging adults will report significantly greater rates of private and public religiosity compared to European Americans. Fourth, public and private religiosity will moderate the effects of community violence on substance and deviant behavior for African American emerging adults. That is, African American emerging adults exposed to higher levels of community violence will report less substance abuse and deviant behavior when reporting higher levels of both private and public religiosity. Fifth, neither private nor public religiosity will protect European American emerging adults exposed to higher levels of community violence from engaging in externalizing problems.

METHOD

Participants

Participants were 341 at-risk 17.5- to 23-year-olds ($M = 20.0$ years). Approximately half of the sample identified as African American ($n = 178$, 52%), while the remainder reported as European American. Women comprised two thirds of the sample ($n = 205$). Data were collected as part of a larger study of homelessness and runaway behavior among youth. Specifically, data represent the 4.5-year follow-up interview of teens who had experienced homelessness in adolescence, as well as a matched group of low-income youth from the same neighborhood

who had not experienced homelessness. Although the great majority (91%) of participants were stably housed at the time of the follow-up interview, this sample represents an extremely at-risk group for exposure to community violence. Homeless youth most often come from low-income and violent neighborhoods and report higher rates of both witnessing and victimization by neighborhood violence (Kipke, Simon, Montgomery, Unger, & Iverson, 2004; Whitbeck & Hoyt, 1999). Given that the low-income housed comparison group came from the same neighborhoods as the previously homeless youth, they too have increased probability of exposure to such violence. Examining protective and compensatory factors among such at-risk emerging adults provides an opportunity to identify potential protective factors that mitigate the effects of exposure to community violence (Luthar, Cicchetti, & Becker, 2000).

At the baseline data collection, a probability sampling method was used to collect information from 249 13- to 17-year-olds using services for homeless adolescents. A matched sample of 149 low-income housed teens was obtained via peer nomination. Homeless participants nominated housed youths who lived in their neighborhood, but with whom they were not good friends. Participants were matched on age, ethnicity, gender, and neighborhood income. Follow-up interviews occurred between September 2002 and December of 2004 for 86% of participants. Attrition analyses compared participants who were followed up and included in these analyses ($N = 341$) and those participants who were not interviewed and not included ($N = 57$). Differences on baseline demographic characteristics were examined, including age, ethnicity, gender, initial housing status, baseline substance abuse symptoms, and deviant behavior. A significant difference existed only for housing status, $\chi^2(1, 397) = 7.25, p < .01$. Specifically, fewer homeless adolescents were followed up 4½ years later into emerging adulthood. The follow-up sample included 53% previously homeless participants, whereas the baseline sample included 63% homeless youth. This difference most likely reflects the difficulty to track such transient youth and was expected at the outset of the research project. In fact, homeless youth were oversampled at baseline to ensure that follow-up samples would include at least 50% previously homeless youth. Examining protective factors among such at-risk emerging adults provides an opportunity to identify potential protective factors that mitigate the effects of exposure to community violence (Luthar et al., 2000).

Procedure

The affiliated university's Human Investigation Committee approved tracking and data collection methods. Paid, fulltime staff tracked participants and conducted interviews. Tracking occurred through a number of procedures. Foremost, interviewers attempted to maintain phone and mail contact with participants as well as provide collateral contacts (such as family members) throughout the course of the study. If contact information was invalid, free and fee-for-service Internet databases were searched to find contact information. In addition, driver's license records were requested from governmental agencies. If phone contact was not possible, interviewers mailed and if needed conducted home visits to schedule appointments.

Interviewers were given instruction and practice with the measures before conducting interviews to maintain reliability. An experienced interviewer reviewed completed interviews and provided constructive feedback when necessary. All measures were administered orally with responses being recorded into standardized databases by interviewers. Interviews were conducted face-to-face at participants' homes or agreed upon social settings.

Measures

Stressful life events—The Modified Life Events Interview (MLEI) assessed stressful life events. The MLEI is an 85-item checklist of stress-inducing events in a number of life domains, including social relationships, housing, employment, education/job training, and mental and physical health. It was developed for use with homeless populations (Lovell, 1984). The total

score demonstrated good test-retest reliability ($r = .84$) in a study of homeless adults (Toro et al., 1997). Omitted were eight items that overlapped with exposure to community violence.

Exposure to community violence—Exposure to community violence was assessed using a modified version of the survey Things I Have Seen and Heard (TSH; Richters & Martinez, 1990). The TSH asks youths to self-report their lifetime exposure to specific violent events on a 5-point scale from never to always. A modified version of the measure included 11 items that tapped witnessing and victimization by violence in the community, and average scores were computed to capture the range of types of neighborhood violence. Items that tap in-home and school violence and perceptions of safety were excluded. Cronbach's alpha was .86 in this sample.

Religiosity—The Multidimensional Religiosity Scale (MRS) measured personal religious beliefs. The MRS is a 21-item, self-report measure that assesses aspects of religiosity on a 5-point scale (Allport & Ross, 1967). To evaluate the dimensions of religiosity assessed, principle component analysis with Varimax rotation evaluated the structure of the 21 items. Two factors emerged with eigenvalues greater than 1.0 and items that loaded greater than .50. The first tapped private religiosity, or the extent to which religious beliefs provide personal meaning. Sample items on this factor included the extent of belief in a higher power, frequency of private prayer, and the perceived efficacy of private prayer. The second factor tapped public religiosity, or the value individuals held in membership to a religious institution. For example, items included feelings toward the extent of stability and support one received from church, identification with one's church, and involvement in various church activities. Although both scales reported Cronbach's alpha coefficients of .96 in this sample, the present analyses incorporated factor scores of these two types of religiosity to examine the unique contributions of multiple dimensions of religiosity on outcomes (Ahmed, Fowler, & Toro, 2008).

Externalizing problems—The Diagnostic Interview Schedule (DIS, version 3A) is a structured diagnostic interview used to obtain information for common forms of psychopathology (Regier et al., 1988). Administered were sections pertaining to conduct problems and alcohol and other substance abuse disorders, including alcohol abuse/dependence, marijuana abuse/dependence, and other substance abuse/dependence. Symptom counts were tallied to provide continuous measures of problems. The DIS has exhibited good reliability and validity in previous studies and has also been used with homeless adolescents (Fischer, Shapiro, Breakey, Anthony, & Kramer, 1986).

RESULTS

Exposure to Community Violence

Table 1 presents prevalence of community violence items by race. A large percentage of emerging adults were exposed to some form of violence (81.8%), and most of these youth were exposed to such events more than one time (65.4%). Analyses examined possible group differences in exposure to community violence based on demographic characteristics. African Americans and European Americans were exposed to similar rates of community violence. Significant differences existed on exposure to community violence by gender and previous housing status, $F(3,337) = 24.38, p < .01$. Tukey's B post hoc tests suggested that previously homeless males reported the greatest rates of exposure to community violence. Previously homeless females reported similar rates of exposure as continuously housed males, and continuously housed females reported the lowest rates of exposure.

Religiosity and Race

Comparisons were conducted using Analysis of Variance (ANOVA) to determine if participants differed on private and public religiosity by race as well as gender. Noteworthy, the range of scores by race was the same, such that members of both races scored very low and very high. Differences in fact existed on private religiosity, $F(1,337) = 22.90, p < .01$, and Tukey's B post hoc tests showed that African American females ($M = .48$) reported more private religiosity than African American males ($M = .10$), who indicated more private religiosity than both European American females ($M = -.28$) and males ($M = -.60$). Differences also existed on rates of public religiosity, $F(1,337) = 10.03, p < .01$, with Tukey's B post hoc tests indicating African American females ($M = .30$) and males ($M = .21$) reported greater rates of public religiosity than both European American females ($M = -.33$) and males ($M = -.24$).

Substance Abuse and Deviant Behavior

Differences were examined on outcome variables by race and gender. Differences existed on substance abuse/dependence symptoms by race and gender, $F(1,337) = 20.93, p < .01$. Tukey's B post hoc tests indicated that European American males reported the most symptoms. European American females and African American males endorsed similar rates of substance abuse, while African American females reported the fewest symptoms of substance abuse/dependence. Gender differences also existed for deviant behavior, $F(1,337) = 6.43, p < .01$. Tukey's B post hoc tests showed that males engaged in more deviant behavior than females regardless of race.

Intercorrelations Between Study Variables by Race

Correlations among all study variables by race are presented in Table 2. Exposure to community violence significantly related to substance abuse and deviant behavior in emerging adulthood among African Americans and European Americans. Yet, neither private nor public religiosity was related to substance abuse or deviant behavior for African Americans and European Americans. The correlations between private and public religiosity are low due to the use of orthogonal factor scores that force these variables to differ. Exposure to community violence did not relate to private or public religiosity for emerging adults.

Community Violence and Religiosity on Substance Abuse and Deviant Behavior

Hierarchical multiple regressions estimated the independent and interactive effects of community violence and religiosity on substance abuse after controlling for differences explained by demographic variables. Separate regressions were calculated for African Americans versus European Americans to examine the influence of race. Results are displayed in Table 3. Variables were entered into the regression equations by blocks in the following order. First, demographic variables, including age, gender, and previous housing status (previously homeless vs. housed) were entered. Second, religiosity variables and community violence were entered in the same step. Finally, the third step included two interaction terms between both types of religiosity and exposure to community violence. Adequate power existed for these analyses according to sample size and group ratio (Cohen, Cohen, West, & Aiken, 2003).

The model predicting substance abuse for African Americans was significant. Each step significantly contributed to the variance explained in the model. In the final step with all variables entered into the regression equation, gender predicted differences in substance abuse, with males reporting greater substance abuse. Greater stressful life events predicted more substance abuse. Emerging adults exposed to more community violence reported greater substance abuse, and public religiosity significantly interacted with community violence to predict substance abuse. Visual representation of the moderating effect is presented in Fig. 1.

Lines representing religiosity reflect mean scores as well as 1 standard deviation above and below the mean. African American emerging adults exposed to higher rates of community violence reported increased substance abuse/dependence symptoms when less publicly religious.

For European American substance abuse, the model was significant, and each block of predictors significantly contributed to the model. European Americans substance abuse was significantly predicted by greater stressful life events, as well as more exposure to community violence and less private religiosity. Gender predicted differences in substance abuse when entered initially, with European American males reporting greater substance abuse; however, these effects were attenuated when the direct effects of community violence and religiosity were included in the equation. Thus, gender differences on substance abuse seem to be accounted for by religious beliefs and neighborhood violence. In addition, a significant interaction existed between exposure to community violence and private religiosity. This relationship is presented visually in Fig. 2. European American emerging adults exposed to higher rates of community violence reported increased substance abuse/dependence symptoms when less privately religious.

The model significantly predicted African American deviant behavior, with each step being significant. In the final equation, greater stressful life events and more exposure to community violence predicted greater deviant behavior. Gender effects in the first step of the model that showed males engaged in more deviance, were attenuated when the direct effect of community violence was entered into the model. Community violence accounts for gender differences in deviant behavior. Private religiosity did not directly predict deviance; however, it did moderate the relationship between exposure to community violence and deviant behavior among African Americans. Fig. 3 visually displays the relationship. African Americans exposed to greater levels of community violence reported more deviant behavior when less privately religious.

The model predicting European American deviant behavior was significant. However, the inclusion of interaction terms did not contribute significantly to the explanation of variance in deviant behavior, and therefore, moderation did not exist. Instead, only the direct effects of more stressful life events and greater exposure to community violence predicted increases in deviant behavior (Table 4).

DISCUSSION

The present study examined racial differences in the relationship between exposure to community violence and religiosity in predicting externalizing problems in at-risk emerging adults. A number of hypotheses were examined. First, as predicted, greater exposure to community violence related to more substance abuse and deviant behavior in both African American and European American emerging adults. This relationship existed even after accounting statistically for the effects of concurrent life stress, gender, age, and previous adolescent homelessness. Thus, emerging adults, like youth in early and middle adolescence, experience disruptions in behavior in the presence of chaotic neighborhood violence (Fowler et al., in press; Schwab-Stone et al., 1995).

The second hypothesis predicted a significant inverse relationship between religiosity and externalizing behaviors, with more privately and publicly religious emerging adults reporting less substance abuse and deviant behavior. Surprisingly, religiosity did not systematically relate to a decrease in externalizing problems among emerging adults. Only a small relationship existed such that European American who were more publicly religious reported less substance abuse. These findings contradict previous research that shows an inverse correlation between religiosity and externalizing problems among adolescents (Clark, Beeghley, & Cochran,

1990; Lorch & Hughes, 1985). The absence of a relationship may indicate that religiosity functions in a more complex manner during emerging adulthood compared to other times of life. Instead of a direct relationship, religiosity may relate to decreased behavioral problems in the presence of risk factors, such as exposure to neighborhood violence.

As predicted by the third hypothesis, African American emerging adults reported greater levels of public and private religiosity compared to European Americans. These findings extend previous research that suggests religiosity is a more important aspect of African American life compared to European Americans to at-risk emerging adults (Brega & Coleman, 1999; Donahue, 1995; Milevsky & Levitt, 2004). It should be noted that variance existed on average religiosity scores such that some European Americans scored very high on private and public religiosity, whereas some African Americans scored very low. Certainly, differences exist among individuals and likely subcultures within races (Barry & Nelson, 2005). In addition, as the current sample reflects only urban respondents from both races, it is possible that different patterns exist among suburban and rural populations.

The fourth hypothesis predicted that African American emerging adults exposed to higher levels of community violence would report less substance abuse and deviant behavior when reporting higher levels of both private and public religiosity. This was partially supported. More privately religious African American emerging adults reported fewer deviant behaviors when exposed to higher levels of community violence. This finding extends into emerging adulthood previous research that showed such a protective role in African American adolescent deviance (Pearce et al., 2003). It is assumed that internalized religious beliefs enhance behavioral constraint given greater commitment to a moral code (Pearce et al., 2003). Spiritually oriented adolescents and emerging adults act consistently with their beliefs about the world, and therefore, avoid serious discretions, such as stealing, fighting, or in other ways hurting others.

In addition, more publicly religious African American emerging adults reported less substance abuse when exposed to higher levels of community violence. The sense of belonging to something greater than oneself may help emerging adults exposed to the traumatic chaos of community violence, and peer groups established within the congregation may provide social support, which, in turn, protects children and adolescents exposed to community violence (O'Donnell, Schwab-Stone, & Muyeed, 2002). Specifically, emerging adults involved in more church-related activities may also associate less with peers who abuse alcohol and drugs. This may decrease the opportunity to engage in such activities, and peer networks may model and reinforce more responsible behaviors.

Contrary to the fifth hypothesis, European Americans exposed to greater levels of community violence, like African Americans, reported less substance abuse when more publicly religious. Public religiosity seems to be an especially important protective factor on the reduction of substance abuse. Public religiosity may reflect or foster a greater sense of collective socialization (Sampson & Groves, 1989). This refers to the willingness of adults, not just parents, to monitor the behavior of adolescents in the neighborhood. Higher collective socialization functions as a community protective factor in that it relates to lower levels of adolescent deviance and violence (Brody et al., 2001; Sampson, Raudenbusch, & Earls, 1997). Emerging adults who feel connected to religious institutions may have more adults scrutinizing their decisions. In addition, the public religiosity of emerging adults may indicate greater community cohesion, such that religious institutions foster organization of households, which promotes behavioral regulation among adolescents (Brody et al., 2001). More research is needed to determine how exactly religiosity functions to protect emerging adults from the effects of community violence. For instance, the present study did not examine if churches provided specific services for emerging adults living in violent areas. Also, it may not be

church, per se, that protects youth, but rather the presence of positive relationships with supportive peers and adults that protects emerging adults.

Unlike African Americans, European Americans were not protected by private religiosity on deviant behaviors or substance abuse. Private religiosity may be less of a resource for European American emerging adults. European American emerging adults are more likely to derive their beliefs and practices from various religious and cultural sources that differ from their childhood religious upbringing (Arnett & Jensen, 2002). As a result, more religious European Americans may have less of a spiritual framework to tap when under stress, such as exposure to community violence. Furthermore, involvement in religious activities, which usually necessitates the acceptance of similar beliefs among individuals, seems to impinge on European American young people's desire for individualization. Therefore, a strong spiritual identity in European American communities may further isolate emerging adults. However, more research is needed to understand racial differences in spiritual development in emerging adulthood.

There are a number of limitations with the present study. First, data was cross-sectional. This greatly limits the ability to determine casual and transactional pathways between spirituality, community violence, and substance abuse. Longitudinal models will be important in future research to better understand the developmental process involved. It may be the case that exposure to community violence only impacts spirituality at initial exposure. After initial exposure, children and adolescents incorporate the events into their understanding of the world and spirituality. In the present study, emerging adults may have been exposed to community violence for years, and therefore, have desensitized to such events. Also, Garbarino and Bedard (1996) suggest that there may exist a critical period of spiritual development. They argue that children develop an understanding of the world that includes religious beliefs at a young age. After this age, exposure to community violence fails to shape these beliefs. More research is needed to determine these pathways and feedback loops.

Second, only self-report questionnaire-based data were used. Future multimethod and multiinformant examinations of community violence and religiosity will provide a richer picture of the lives of youth exposed to neighborhood violence. Furthermore, more objective measures of exposure to community violence, such as census tract data or neighborhood crime rates, should be examined in future research to determine if perceived exposure to community violence differs in important ways from neighborhood crime rates. In addition, a standardized measure of religiosity that applies to low-income emerging adults is needed. A more standardized measure of private and public religiosity is needed that is developmentally appropriate for adolescents and emerging adults. Such measures will greatly assist interpretation and meanings of level of religiosity.

Finally, future research must analyze additional possible mediating and moderating factors on the relationship between community violence, religiosity, and substance abuse. In particular, future research should examine why some youth do not get involved in religious activities. Other risk factors in the family or peer groups may confound the risk of low religiosity. That is, the reasons why youth are not involved in church may be the risk factor for increased substance abuse and deviant behavior, not the lack of church attendance. For example, youth with low levels of public religiosity may come from more disorganized families, and this disorganization puts youth at risk for a number of negative outcomes. Alternatively, youth who do not attend church may be more involved with deviant peer groups. These peer groups may push youth away from church and into more risky behavior, including substance abuse.

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Figure 1. Public religiosity moderates the association between community violence and substance abuse and dependence among African Americans (N = 178).

Figure 2. Private religiosity moderates the association between community violence and deviant behavior among African Americans (N = 178).

Figure 3. Private religiosity moderates the association between community violence and substance abuse and dependence among European Americans ($N = 162$).

Table 1
Prevalence of Exposure to Community Violence (European American N = 163; African American N = 178)

Violent event	Percentage Exposed					
	At least one time		At least two times		>2 Times	
	African American	European American	African American	European American	African American	European American
Seen someone arrested	16.3	16.6	14.6	9.2	53.9	52.8
Seen drug deals	12.9	8.6	7.3	7.4	56.2	59.5
Seen someone beaten up	11.2	14.7	17.4	11.7	48.9	45.4
Heard gunfire	11.8	16.6	10.1	7.4	64.0	33.1
Been beaten up	10.7	11.7	3.9	4.9	6.7	9.8
Seen someone shot	11.2	4.3	5.1	2.5	9.6	3.1
Seen someone stabbed	10.1	3.7	4.5	6.1	6.2	3.1
Threatened with death	5.1	8.0	3.4	3.1	2.3	8.6
Threatened with shooting	5.6	5.5	2.2	4.3	2.8	4.9
Seen a dead body	4.5	12.9	1.1	2.5	1.7	1.2
Threatened with stabbing	3.4	1.2	2.2	.6	2.8	5.5

Table 2

Bivariate Intercorrelations Between Study Variables by Race

	1	2	3	5	6	7	8	9	10
1. Public religiosity	1	.10	.11	-.10	.04	.08	-.12	-.04	.07
2. Private religiosity	.14	1	.08	-.02	.03	.01	.14	.16*	.06
3. Community violence	-.09	-.02	1	.50**	.52**	.49**	-.02	-.25	.25**
5. Substance abuse/dependence	-.09	-.10	.47**	1	.62**	.49**	-.03	-.28**	.04
6. Deviancy	-.10	-.01	.49**	.63**	1	.58**	-.15	-.21**	.01
7. Stressful life events	.02	-.11	.46**	.49**	.50**	1	-.13*	-.17*	.11
8. Age	-.12	.11	.13	-.03	.02	.05	1	.01	-.02
9. Gender	.04	.21**	-.21**	-.24**	-.24**	-.15*	-.06	1	.09
10. Previous housing status	-.02	-.16*	.44**	.20**	.14	.31**	-.10	.06	1

Note. African American data presented below the diagonal ($N = 178$); European American data presented above the diagonal ($N = 163$). Variables were dummy coded such that previous homeless youths and females were coded as ones.

*
 $p < .05$;

**
 $p < .01$.

Table 3
Summary of Hierarchal Regression Analyses for Variables Predicting Substance Abuse/Dependence Symptoms by Race

Variable	African Americans (N = 178)			European Americans (N = 163)		
	B	SE B	β	B	SE B	β
Step 1		$\Delta R^2 = .29^{**}$			$\Delta R^2 = .28^{**}$	
Stressful life events	.283 ^{**}	.063	.310	.424 ^{**}	.091	.333
Gender	-1.546 [*]	.757	-.133	-1.996	1.010	-.132
Previous housing status	-.239	.767	-.022	-1.124	.972	-.075
Age	-.404	.252	-.098	-.074	.338	-.014
Step 2		$\Delta R^2 = .07^{**}$			$\Delta R^2 = .11^{**}$	
Community violence (ECV)	3.191 ^{**}	.604	.452	3.137 ^{**}	.684	.368
Private religiosity	-.254	.406	-.041	-.320	.470	-.044
Public religiosity	-.207	.359	-.037	-1.361 ^{**}	.478	-.180
Step 3		$\Delta R^2 = .04^{**}$			$\Delta R^2 = .03^{*}$	
ECV $\times$ Private religiosity	-1.220	.576	-.145	.498	.570	.062
ECV $\times$ Public religiosity	-1.372 ^{**}	.473	-.199	-1.557 ^{**}	.572	-.171

Note. African American: $R^2 = .40$; $F(9, 168) = 12.476$, $p < .001$. European American: $R^2 = .42$; $F(9, 153) = 12.316$, $p < .001$.

*
 $p < .05$;

**
 $p < .01$.

Table 4
Summary of Hierarchal Regression Analyses for Variables Predicting Deviant Behavior by Race

Variable	African Americans (N = 178)			European Americans (N = 162)		
	B	SE B	β	B	SE B	β
Step 1		$\Delta R^2 = .28^{**}$			$\Delta R^2 = .36^{**}$	
Stressful life events	.106 ^{**}	.022	.333	.160 ^{**}	.027	.419
Gender	-.459	.264	-.114	-.344	.294	-.076
Previous housing status	-.378	.267	-.100	-.510	.283	-.114
Age	-.063	.088	-.044	-.152	.099	-.095
Step 2		$\Delta R^2 = .11^{**}$			$\Delta R^2 = .08^{**}$	
Community violence (ECV)	1.132 ^{**}	.210	.462	.974 ^{**}	.199	.383
Private religiosity	.086	.141	.040	.043	.137	.019
Public religiosity	-.116	.125	-.060	-.117	.139	-.047
Step 3		$\Delta R^2 = .03^*$			$\Delta R^2 = .01$	
ECV $\times$ Private religiosity	-.493 [*]	.201	-.169	.303	.166	.127
ECV $\times$ Public religiosity	-.246	.165	-.103	-.079	.167	-.029

Note. African American: $R^2 = .40$; $F(9, 168) = 12.235$, $p < .001$. European American: $R^2 = .45$, $F(9, 153) = 13.776$, $p < .001$.

* $p < .05$;

** $p < .01$.