

**Features of the Organized Youth Activity Setting that Protect Against
Exposure to Community Violence**

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THESIS

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SUMMARY

There is consistent evidence that at least one in every pair of youth in inner-city areas has previous exposure to community violence (Stein et al., 2003). Affected communities have responded by developing indigenous programs that successfully engage vulnerable youth, to diminish negative outcomes. Yet few studies have researched these activities in the wake of high prevalence rates. Using a cross-sectional design, the current study investigated setting features of an indigenous, community-based drill team, differentiating behavioral and mental health outcomes among African-American youth exposed to community violence. Specifically, positive perceptions of supportive relationships with adult staff, sense of community and connectedness, and norms for behavior were expected to protect against community violence exposure. Sixty-five participants age 13-20 responded to surveys indicating their level of exposure to community violence and violence-related crime, perceptions of activity setting features, and behavior and mental health. Multiple linear regression revealed a nullified relationship between exposure and delinquency and exposure and drug use for youth perceiving more supportive relationships or a greater sense of community (protective-stabilizing effect). In addition, psychological well-being, which was unaffected by exposure, was better for those reporting a greater sense of community or perceived peer-acceptance of prosocial behavior. These findings emerged regardless of the amount of time spent in the drill team and the level of youths' parental monitoring and involvement. Additional studies are needed to investigate indigenous youth activities as promotive settings for youth exposed to community violence, and program setting features as mechanisms by which programs may impact youth outcomes.

I. INTRODUCTION

A. Features of the Organized Youth Activity Setting that Protect Against Exposure to Community Violence

Adolescence is characterized as a time of critical importance during human development (Hall, 1904). It is during this time that youth begin spending unsupervised time with peers and, in some cases, participating in risky behaviors that could have a detrimental impact on their health (Youth Risk Behavior Survey, 2013). While these concerns are shared for the general population of youth, racial and ethnic minority youth face additional and unique challenges in coming of age.

Recent estimates suggest that almost half of all African American and Latino adolescents are living in inner-city neighborhoods that are under-resourced and high in poverty and unemployment; the number is higher when considering family income level (McArdle, 2003). The disadvantage posed by residential segregation has been cited as the primary mechanism leading to racial and ethnic health disparities in the U.S. (Acevedo-Garcia, Osypuk, McArdle, & Williams, 2008). Indeed, Wilson (1996) shed light on the direct impact of segregation, including a lack of institutional resources, social capital, role models, and employed residents. Each of these contributes to the development of subcultures that undermine mainstream values and social mobility. A lot of recent attention has focused on the heightened violence and crime in these communities.

One study examining exposure to community violence among children and adolescents across prior research studies found that between 44% and 82% of study participants reported witnessing someone in their community be hit, slapped, or punched (Stein, Jaycox, Kataoka, Rhodes, & Vestal, 2003). Fewer of the youth had been exposed to weapon-related violence such

as shooting or stabbing, although weapon-related violence was much more prevalent among youth from urban neighborhoods than youth from suburban neighborhoods (Stein et al., 2003). While estimates suggest that fewer youth are victims of violence, underreporting of victimization experiences may yield a distorted picture of reality (Stein et al., 2003). These data highlight the relevance and salience of exposure to community violence as a major issue for youth living in urban neighborhoods.

Anxiety, depression, aggression, and substance use are a few of the negative developmental outcomes associated with youth exposure to violence and crime (e.g., Hardaway, McLoyd, & Wood, 2012). Yet not all youth impacted by neighborhood disadvantage exhibit the same outcomes. Research finds that youth who participate in organized youth activities, or activities that are “generally voluntary, have regular and scheduled meetings, maintain developmentally based expectations and rules for participants in the activity setting (and sometimes beyond it), involve several participants, offer supervision and guidance from adults, and are organized around developing particular skills and achieving goals” (Mahoney, Larson, Eccles, & Lord, 2005, p. 4), acquire better developmental outcomes than their counterparts who do not (see Eccles, Barber, Stone & Hunt, 2003 for a review). While most of this research focuses on school-based activities, because of their cultural relevance, community-based activities have been known to more effectively engage and sustain the participation of urban youth in the neighborhoods they serve (Carnegie Corporation of New York, 1992; Heath & McLaughlin, 1999). Few studies have focused on youth living in risky neighborhoods specifically, but each of these studies assessed participation in community-based organized youth activities and found them to be beneficial for urban and, specifically, African-American youth (e.g., Hardaway et al., 2012; Posner & Vandell, 1999; Yakin & McMahon, 2003). Findings that

participating youth from risky neighborhoods exhibit better developmental outcomes than non-participating youth living in similar community conditions suggest that participation may serve as a protection against neighborhood risk (Hardaway et al., 2012).

The period immediately following the end of the school day is an especially compelling time for engaging youth in activities and ultimately enhancing their development, given that youth are most likely to commit violent crimes precisely during this time (U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention Statistical Briefing Book, 2006). The enhancement of youth development is defined as both the promotion of positive developmental outcomes and the prevention of negative ones. Very little research has examined factors of participation that are associated with youth development, for example, the relevance of the organized youth activity setting climate for youth developmental outcomes. Focusing on African American youth, this study examined features of an indigenous, community-based, organized youth activity setting that have been found to serve as protective factors against the risks associated with exposure to community violence and violence-related crime. “Protective factor” is a term that was coined by Rutter (1979) and is defined as “features that enhance resistance to psychosocial adversities and hazards of various kinds” (Rutter, 1993, p. 630). Youths’ positive perceptions of these features are expected to diminish the negative effects that exposure to community violence has on several different developmental outcomes. Participation in organized youth activities has been found to serve a protective function for African-American youth from high-risk communities (Hardaway et al., 2012; Yakin & McMahon, 2003). The previous research, however, examines participation in activities based on frequency of participation, to the neglect of information about the qualities of participation that may contribute to outcomes. For example, there is research that demonstrates that features of the

program setting, such as support from adult staff, sense of community and connectedness, and norms for behavior, contribute to youth development (e.g., Eccles & Gootman, 2002).

Examining youths' perceptions of such features lends insight into youth's experience in the setting, the diversity of those experiences, and the implications for positive youth development.

II. CONCEPTUAL FRAMEWORK

Ecological and developmental systems theories (Bronfenbrenner, 1979; Lerner, 2004) suggest that human development is influenced by the interactions that people have in proximal settings, for example, with family and school. In addition, the relationship between youth's interactions in one proximal setting and their development depends on the interactions that they have in other proximal settings. According to ecological systems theory, youths' experiences in these settings occur within the broader context of the experiences they have in multiple settings that are salient in their life. This broader context includes their family, peers, school, and neighborhood, among others (Bronfenbrenner, 1979). Thus, for example, a child's experience of domestic violence in his/her family could be tempered by the warmth and supportiveness of his/her teacher in the school context.

This study focuses on two specific proximal settings for youth: neighborhood and organized youth activity. Based on ecological and developmental systems theories, this study asserts that beyond frequency of participation in organized youth activities, the nature of interactions that youth have in organized activities contributes to development. The quality of youths' interactions in organized youth activities consists of certain features of the activity setting. For youth who experience risk in their neighborhoods, features of activity settings can be recognized as protective factors. Two frameworks that fall under the broader umbrella of ecological developmental theory help to further define the interactions through which these proximal settings influence development.

The first framework is Foster and Brooks-Gunn's (2009) conceptual stress process model on exposure to violence among children and adolescents. This model situates the effect of exposure to community violence in a broader contextual framework that includes youth's

interactions in other settings. Exposure to community violence is defined as both victimization and witnessing of acts that physically harm another person. This type of violence exposure is seen as diminishing youth's sense of safety and security, and cultivating such negative affect as fear, hopelessness, anger and arousal, thereby contributing to negative developmental outcomes. Exposure to community violence also results in reduced coping resources, or cognitive and/or behavioral efforts to deal with stress (Lazarus & Folkman, 1984). The reduction of these resources, including personal (e.g., self-esteem) and social resources (e.g., social support), in turn, leads to more distress.

Foster and Brooks-Gunn (2009) acknowledge that youth's involvement in other social contexts, however, moderate the relationship between exposure to community violence and outcomes. Depending on the context, youth's involvement in other settings can serve to exacerbate or buffer the effect of exposure on outcomes. Settings and roles that increase developmental outcomes in children and adolescents who have been exposed to community violence serve as effective coping resources for youth. Evidence supports that organized youth activities are an effective coping resource for youth in this manner. Participation has been associated with positive outcomes among youth living in risky neighborhoods (e.g., Hardaway et al, 2012; Yakin & McMahon, 2003). A lot of research on organized youth activities has begun to "unpack" participation to understand the different components that lead to positive outcomes, and contribute to activities serving as a coping resource for youth (e.g., Barber, Eccles, & Stone, 2001; Durlak & Weissberg, 2007; Durlak, Weissberg, & Pachan, 2010; Dworkin, Larson, & Hansen, 2003).

The second ecological-developmentally-oriented framework is based on research identifying components of participation that lead to positive outcomes across multiple settings

for youth. In their framework for understanding youths' social settings, Tseng and Seidman (2007) examine the specific interactions that occur in developmental settings and how these contribute to development. According to these researchers, youth-adult relationships, the context for participation and engagement, and peer norms are the features of youths' social settings that are said to contribute to youth outcomes. In their framework, setting-based, adult-youth relationships are key to youth's experience in that setting. Specifically, adult-youth relationships that are warm and supportive are important for positive youth development particularly because they foster youth sense of belonging, importance, engagement, and sometimes empowerment, in the setting. These relationships also help broaden youth's networks and increase their social capital, or more generally, social relationships that increase one's access to resources and provide positive benefits (e.g., Coleman, 1988).

Youth and adults' daily involvement and engagement in settings are also identified as important contributors to youth outcomes (Tseng & Seidman, 2007). This includes youths' daily activities and routines, and the role of adults in creating the context of participation and engagement. Youths' experience of a setting hinges on how adults structure their time and participation in that setting, and the expectations that they set for behavior. These processes help to establish a tone in the setting and contribute to the climate (Tseng & Seidman, 2007).

One component of setting climate includes the norms of a setting, as established by participants in that setting (Tseng & Seidman, 2007). Specifically, norms serve to manage behavior. In any setting, individuals tend to act in ways that are consistent with the norms of the given setting. Youth are made aware of norms about what is acceptable through communication and the behavior of their peers and the adults in a setting (Henry, Cartland, Ruchcross, & Monahan, 2004). Norms are also related to expectations about behavior, which can be

communicated both verbally and non-verbally. The setting and all its participants, however, provide the broader context for which the effect of norms on development should be considered.

One additional indicator of the nature of setting climate is the sense of community and connectedness that is created by setting participants. Sense of community and connectedness includes a sense of membership, or a feeling of belonging or personal relatedness, a sense of mattering, a feeling that membership in the group fulfills needs in some capacity, and a shared emotional connection (McMillan & Chavez, 1986). As with the effect of norms on development, all the participants in a setting provide the broader context for which the effects of a sense of community and connectedness should be considered. Both adults and participants in the setting can help foster such a sense of belonging. Therefore, outcomes are affected by engagement in a setting's activities, and engagement in a particular setting climate, as facets of participation.

Foster and Brooks-Gunn's (2009) conceptual stress process model on exposure to violence among children and adolescents and Tseng and Seidman's (2007) systems framework for understanding youths' social settings serve as the basis for this study's proposed model. This study's conceptual model posits that youth's interactions in an organized youth activity alter the relationship between exposure to community violence and developmental outcomes. In this study, youth's interactions are gauged by their perceptions of the organized youth activity setting. This model is illustrated in Figure 1 by an arrow connecting exposure to community violence to youth developmental outcomes (psychological distress, psychological well-being, and problem behaviors), and an additional arrow connecting this path to youths' perceptions of the activity setting (supportive relationships with adult staff, norms for behavior, and sense of community and connectedness). The first arrow demonstrates a correlation in which greater exposure is expected to be negatively associated with youth developmental outcomes. The

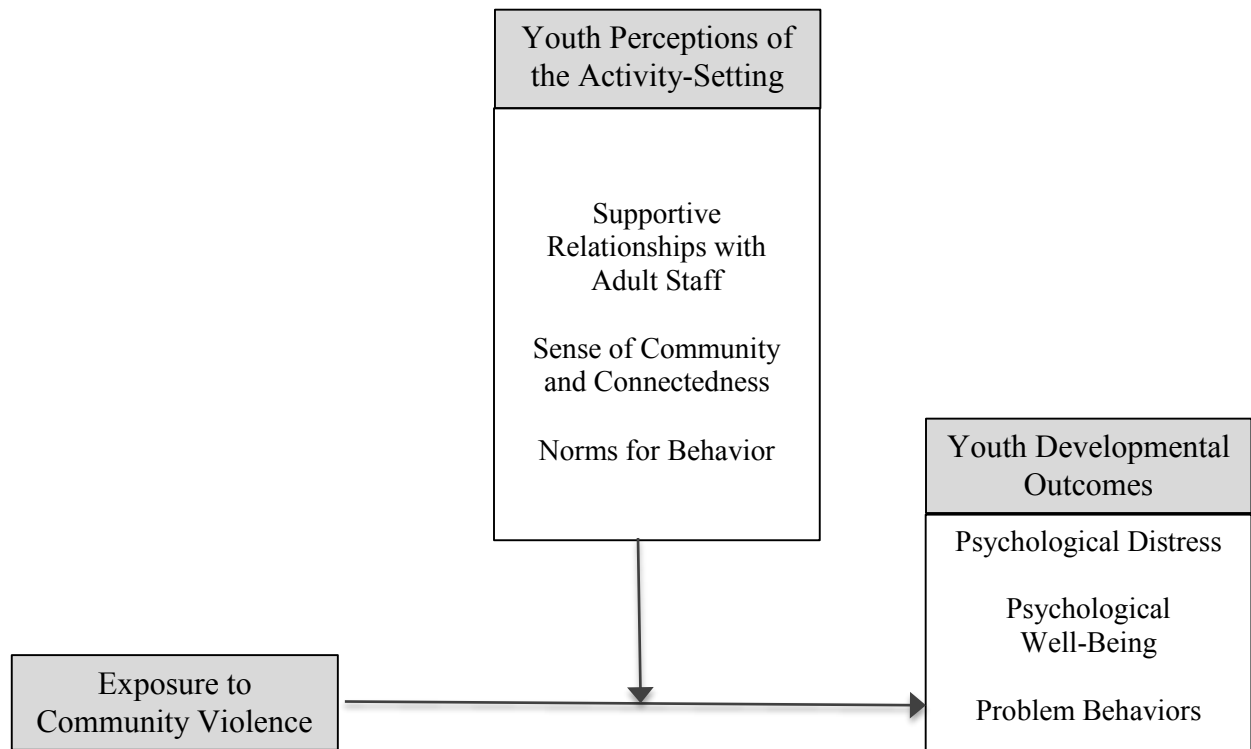


Figure 1. Conceptual Framework

second arrow demonstrates that youths' perceptions of the organized youth activity alter the correlation between exposure to community violence and outcomes depending on whether youths' perceptions are positive or negative.

There are four different ways that the correlation between exposure to community violence and youths' developmental outcomes can be altered to indicate a protective effect of youths' perceptions of the organized youth activity (Luthar, Cicchetti, & Becker, 2000). A "protective" setting feature is one where youth perceive the setting feature positively and developmental outcomes improve overall, regardless of neighborhood risk. A "protective stabilizing" setting feature is one where youth perceive the setting feature positively and developmental outcomes are stabilized in the presence of risk, in comparison to more negative outcomes when youth perceive the setting feature less positively. In this case, the negative effect of exposure to community violence is diminished by the protective factor such that there is no effect of exposure to community violence. Under the circumstances of a "protective-enhancing" setting feature, perception of the setting feature may be "protective-enhancing", beyond merely stabilizing. In this case, the negative effect of exposure to community violence is diminished by youths' positive perception of the setting such that the developmental outcome is more positive with exposure to community violence. In the case of 'protective-stabilizing' and 'protective-enhancing' effects, perception of setting features would be broadly considered protective for youth experiencing more neighborhood risk.

A "protective but reactive" setting feature would be broadly considered protective for youth experiencing less risk. A "protective but reactive" feature is one where youth perceive the feature positively and developmental outcomes are improved for all youth, but youths' perception of the setting feature would contribute to better gains for youth who experience less

neighborhood risk. In this case, the negative effect of exposure to community violence is mitigated, but increased levels of exposure appear to interfere with the protective process as indicated by the fact that it is youth with less exposure who receive the greatest protective benefit. The proposed study investigates whether the protective effects of organized youth activity setting features follow these patterns.

Key in this study is examining the dual influence of youths' neighborhood and organized youth activity settings from youths' own perspectives. Measures of perceptions, rather than objective measures, are likely to yield a more accurate picture of youth's experiences in their environment (e.g., Shumow, Vandell, & Posner, 1998). As it relates to this study, perceptions of neighborhood, such as perceived fear in a neighborhood, may be a better predictor of outcomes than demographic neighborhood indicators, such as crime rate data (Shumow, Vandell, & Posner, 1998). In addition, studies showing that youth have varying perceptions of the same setting features in community-based activities lend further support to the use of measures that index youth perceptions (Gambone & Arbreton, 1997; Roffman, Pagano, & Hirsch, 2001). This research suggests that objective measures of setting features, as assessed, for example, by observer reports of setting features, would be insufficient in capturing youths' experience and could lead to inaccurate predictions about youth outcomes (Gambone & Arbreton, 1997; Roffman, Pagano, & Hirsch, 2001). A study by Gambone and Arbreton (1997) brings attention to the potential significance of youths' perceptions of program setting features. These researchers found that 30-40% of youth being served in youth programs reported, for example, perceiving no supportive adults in their program, no or infrequent value for their ideas, and no or infrequent opportunity to contribute to decision-making in programs. Given the variation that has been observed in youths' perceptions of programs, it is important to examine and understand the

potential corresponding variation in, and implications of, outcomes.

Examining the complexities of human development through the assessment of youths' perceptions of features of the organized youth activity setting and neighborhood is a major contribution of this study. The fact that many youth programs target youth in urban neighborhoods where youth are negatively impacted by their experiences in their neighborhood has important implications for research, policy, and practice. Given the nature of the protective effects, the organized youth activity setting can help guide efforts to reduce the negative impact of neighborhood risk on development.

III. REVIEW OF THE LITERATURE

A. Youth Development in the Context of Community Violence

Several studies have shown that being both a witness and a victim of violence is related to a number of psychological and behavioral problems in children and adolescents, such as anxiety, depression, posttraumatic stress disorder (PTSD), suicide ideation, and aggression and delinquent behavior (Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009; Lynch & Cicchetti, 1998; Rosario, Salzinger, Feldman, & Ng-Mak, 2008; Rosenthal, 2000). These outcomes have also been found in the case of exposure to community violence (e.g., Brenner, Zimmerman, Bauermeister, & Caldwell, 2013; Colder, Mott, Levy, & Flay, 2000; Gonzalez, Jones, Kincaid, & Cuellar, 2012; Hardaway et al., 2012; McMahon et al., 2012; Molnar, Cerda, Roberts, & Buka, 2005; Overstreet & Braun, 2000; Richters & Martinez, 1993; Wilson & Rosenthal, 2003). Along with forms of domestic violence, exposure to community violence threatens the personal sense of safety and security that is necessary for youth's healthy development (Foster & Brooks-Gunn, 2009). Perceptions of neighborhood fear and danger mediate the relationship between demographic indicators of neighborhood risk and youth's behavioral misconduct and psychological distress (Shumow et al., 1998).

Multiple studies have also found an association between exposure to community violence and subsequent criminal behavior, including violent behavior (Bingenheimer, Brenner, & Earls, 2005; Eitle & Turner, 2002). Aggression, as a result of violence exposure, may be a logical conclusion for youth in risky communities, for example, as a means of protection or as a product of socialization in a community where violence may well be normative (Ferguson & Meehan, 2010; Latzman & Swisher, 2005; Resnick, Ireland & Borowsky, 2004; Van der Merwe & Dawes, 2000). Notably, some longitudinal studies show that youth who experience a consistently

high degree of exposure to community violence over time show less anxiety but persistent aggression, suggesting a desensitization effect (e.g., Horn & Trickett, 1997; Ng-Mak, Salzinger, Feldman, & Stueve, 2004). This effect has been attributed to “moral disengagement” or “cognitive normalization of violence,” explained by minimizing, ignoring, or construing the consequences of violence. Internal processes (thoughts) associated with violence, therefore, become detached from external processes (behavior) (Ng-Mak, Stueve, Salzinger, & Feldman, 2002). This detachment then frees youth to be aggressive or act violently, while experiencing fewer internal consequences for behavior or exposure to violence. Thus, while over time youth may have less anxiety as a result of their experience with violence exposure, increased moral detachment is equally concerning, especially considering the negative implications for youth behavior.

Exposure to community violence also diminishes youth’s psychological well-being. In particular, self-esteem, or the overall evaluation of one’s worth or value (Rosenberg, 1965), and self-efficacy, or the belief that one can produce desired results by their actions (Bandura, 1997), have been found to be self-system protective factors that mitigate against the negative impact of youths’ development in a risky neighborhood. These characteristics have been highlighted as two of the positive youth development constructs that youth development programs should aim to achieve because of their potential for promoting positive outcomes (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004). Exposure to community violence has been found to diminish these personal resources, however (e.g., Vermeiren, 2003). Youth developing in high-risk neighborhoods often report pessimism about survival and future life chances that then, negatively affect their self-perceptions (Hunter & O’Conner, 2003; Stoddard, Henly, Sieving & Bolland, 2011).

In many neighborhoods troubled with violence, indigenous, community-based prevention programs have emerged to support youth and protect them from neighborhood hazards. These programs tend to target older and low-income youth who are not easily engaged in school-based organized youth activities, the most researched of programs associated with positive outcomes. These programs are effective at engaging and sustaining the less engaged, because they understand the local makeup of neighborhoods and the youth living in them. They operate in a framework consistent with local culture, and offer youth a setting compelling enough to be chosen over other influences (Heath & McLaughlin, 1993). The hallmark ethnography examining indigenous youth programs in violent and crime-ridden neighborhoods revealed that programs are an immense resource for ethnic minority youth, serving as a “safe haven” and “urban sanctuary” for them (Heath & McLaughlin, 1993, 1999; McLaughlin & Irby, 1994). The recent surge in evidence documenting the prevalence of community violence exposure among ethnic minority youth, and its negative consequences, stresses the need for research that examines existing and potential resources that ameliorate coping and outcomes for youth under such harsh circumstances.

B. The Drill Team as a Potential Resource for African-American Youth Exposed to Community Violence

One example of an indigenous and culturally relevant program that is highly engaging and sustaining of African-American youth in particular, is the dancing drill team. In African-American communities, dancing drill teams are often neighborhood-based and promote community pride. This kind of activity is highly appealing to African-American youth in urban communities because of the use of dance and music. Youth participate in team precision-drilling (i.e., marching) and dance routines that may involve the use of props and are choreographed to

music. They perform locally and may compete regionally or nationally. There are many urban drill teams that have been created to specifically give youth a positive outlet amidst gang activity and community violence, but the limited study of the participation of at-risk youth in grassroots organized youth activities suggests there is still much to learn.

There are few mentions of drill teams in the research literature on youth programming. For example, only one study focusing on African-Americans was found that studied youth participating in a drill team (Elkins, Cohen, Koralewicz, & Taylor, 2004). The study found that inner-city youth participate in fewer school-sponsored activities and sports but that among school-based activities, participating in a drill team or drill squad was the most popular activity in which to participate. Larson, Hansen, and Moneta (2006) also included the drill team in their study of organized youth activities, but only 42 of more than 2000 youth reported participation in a drill team. In this study, only 13% of the sample was African American, 31% of the sample was urban, and only school-based activities were reported. There are no other studies to help estimate the prevalence of drill team participation, although the relevance of locally-derived performance arts programs has been established for minority youth living in violent neighborhoods.

Ball and Heath (1999) discussed the evolution of the relevance of arts programs for urban adolescents beginning in the 1980s. During this time, youth leaders began to notice that artistic activities, such as dance and musical performance, competed with athletics as key participation opportunities for youth. Youth leaders believed these activities could build discipline, commitment, and a sense of group solidarity. Neighborhood crime was becoming increasingly isolated in inner-city areas, and youth looked to arts activities as a way to express their experiences, cope, and form a positive and safe group identity. Youth leaders began to create

dance and music programs, sometimes combined with drama, and focused on team performance to create a sense of connectedness among members. These programs are still known to engage and sustain inner-city youth participation through two means: the ability to secure major performances with the use of high-quality technical equipment, and the perks of competition including travel, costumes, performances, food, and festivals. Yet little is known about drill teams, especially as this type of activity setting relates to its preventive potential. This study examined this potential in an indigenous drill team for which there was anecdotal evidence similar to that found in the rich ethnographic studies conducted in the past (e.g., Ball & Heath, 1999; Heath & McLaughlin, 1993). There have been few other studies that investigated the impact of participation in community-based youth activities on the relationship between exposure to community violence and youth developmental outcomes that provide insight into this potential for this population.

The impact of participation in community-based youth activities for African-American youth exposed to community violence has varied by outcome and measure of violence exposure. A recent study found that participation in school- and community-based organized youth activities decreased the effect of exposure to community violence on externalizing problems, although not for internalizing problems (Hardaway et al., 2012). In a study looking at only community-based involvement (e.g., church attendance and community-related activity participation), African-American youth who participated more reported less concern about violence, more control over violence, and more adaptive coping with violence compared to youth who participated less (Yakin & McMahon, 2003). This study thus concluded that participation was associated with the psychological resources of youth. At least one study, however, has found a negative effect of participation in community-based programs.

Fauth, Roth, and Brooks-Gunn (2007) found that participation in community-based activities had little impact on youth's anxious/depressed symptoms in neighborhoods with low maternal perceptions of rates of violence. In neighborhoods where mothers perceived a high level of violence, however, youth's anxious/depressed symptoms became amplified as youth's time in the activity increased (for youth who participated one year vs. two years) (Fauth, Roth, & Brooks-Gunn, 2007). Participation in community-based activities did not moderate the relationship between neighborhood violence and substance use or delinquency outcomes (Fauth et al., 2007). Thus, the protective role that participation in community-based organized youth activities plays for youth who are exposed to community violence is unclear.

A major shortcoming in the research on organized youth activities is the limited research on how features of the activity setting contribute to youth outcomes. Examining the features of the activity setting may help to further explain the relationship between participation and outcomes for youth who have been exposed to community violence and is consistent with examining the impact of benefits found through qualitative studies (e.g., Heath & McLaughlin, 1993). Psychologists suggest that supportive relationships with adult staff, positive norms for behavior, and sense of community and connectedness in indigenous youth activities, leads to positive outcomes for participating youth (e.g., Tseng & Seidman, 2007). Indeed, these factors have been identified as features of organized youth activity settings associated with positive youth development (Eccles & Gootman, 2002; Roth & Brooks-Gunn, 2003). There is also support that these features of program settings indicate quality (e.g., Connell & Gambone, 2002; Yohalem & Wilson-Ahlstrom, 2010; Yohalem, Wilson-Ahlstrom, Fischer, S., & Shinn, 2007). Very few studies, however, have examined the influence of these features specifically for youth exposed to community violence and violent-related activities. This study posits that these

features of an indigenous organized youth activity are protective factors for African American youth activity members who are exposed to community violence and violent-related activities.

The following sections review the literature examining the protective capacity of supportive relationships, positive norms for behavior, and sense of community and connectedness for African-American youth exposed to community violence and violence-related activities. Studies containing African-American youth exposed to other environmental risks, and studies demonstrating the relationship between features and outcomes in other settings for other less-engaged youth populations, are presented to bridge gaps in the literature where necessary.

C. Supportive Relationships with Adult Staff

Supportive relationships with adults are a valuable resource for youth living in neighborhoods with high violence and crime, because these neighborhoods often lack access to supportive adults or positive role models to help counter neighborhood risks (e.g., Wilson, 1996). Indigenous youth activities provide youth with access to supportive relationships, a resource found to increase positive perceptions of safety and belongingness for African American youth participating in activities (McLaughlin & Irby, 1994). Supportive relationships with staff in community-based organizations in violent and impoverished neighborhoods provide African American youth with self-confidence, self-esteem, and motivation (Hirsch, Roffman, Deutsch, Flynn, Loder, & Pagano, 2000). Thus, supportive relationships are a major reason for sustained participation in programs serving ethnic minority and low-income youth (e.g., Borden et al., 2005; Halpern et al., 2000). Not surprisingly then, staff at youth development programs serving more low-income youth report more program contact with participants than staff at organizations serving less low-income youth. They also report offering more supportive activities, such as counseling and mentoring (Roth & Brooks-Gunn, 2003). The limited research investigating the

impact of supportive relationships against negative outcomes indicates a potential protective function for the feature.

Supportive relationships with adult staff in youth activities have been associated with better outcomes for youth. In a study with a majority African-American low-income youth population, those reporting significant relationships with Boys and Girls Club staff had less trouble with police and higher self-esteem than counterparts reporting less important relationships (Roffman, Pagano, & Hirsch, 2001). The only other studies found examining the impact of supportive relationships in organized youth activities on outcomes have examined the relationship between coaches and players in sports activities, among majority Caucasian American populations (e.g., Smoll, Smith, Barnett, & Everett, 1993; Rutten et al., 2005; Taylor & Brunner, 2012). There are some studies that examine the impact of supportive relationships formed outside of the organized youth activity context that can provide insight into its potential protective function, however.

Studies examining the role of natural mentors, or mentor relationships between a youth and someone older that have formed naturally, find that the protective utility of supportive relationships is based on the risk associated with growing up in urban neighborhoods (Molnar et al., 2005; Dubois & Silverthorn, 2005). These studies show that mentors *promote* positive outcomes and *protect* against negative outcomes when risk is present (Molnar et al., 2005; Dubois & Silverthorn, 2005). For example, Dubois and Silverthorn (2005) indicated that while having a natural mentor increased self-esteem and life-satisfaction and decreased the odds of joining a gang and risk-taking for all young adults (aged 18-26), the odds for getting in a fight and depression decreased only for high-risk young adults. Taken together, these findings demonstrate a protective-stabilizing or protective-enhancing effect of supportive relationships for

youth who report more neighborhood risk. There are no studies that test the moderation specifically for supportive relationships with adults in organized youth activity contexts, or for youth who are exposed to community violence.

D. A Sense of Community and Connectedness

As noted earlier, ecological and developmental systems theories point to the potential of sense of community and connectedness contributing to youth outcomes. In neighborhoods where violence and crime are part of the culture and create heightened levels of fear for residents, indigenous programs offer youth a sense of family, enabling their trust in others and in their own self-worth and future (Ball & Heath, 1999; Heath & McLaughlin, 1993; Hirsch et al., 2000). For example, participation on a local athletic team was found to be popular because youth gained a sense of self-worth from being a member of a group or team that was recognized for their accomplishment (Heath & McLaughlin, 1993). A sense of mattering/belonging was fostered through participants feeling needed, a feeling that was enhanced through the teaching of younger members. African American youth in particular report greater levels of respect, comfort, trust, and support in community-based program settings than in school-based program settings (Kahne et al., 2001). This may be because African American youth develop anti-school attitudes due to underachievement, stereotype threat experiences, or perceptions that achievement and participation in school-related activities may threaten one's self-image (e.g., Steele & Aronson, 1995; Cousins, 1999). These negative attitudes affect youths' educational experience (e.g., youth's value of schoolwork, expectancy, and persistence), and contribute to a lowered sense of community and connectedness in urban school contexts (Goodenow & Grady, 1993).

Community-based settings offer African American youth opportunities to connect with a setting

that are not contingent on their academic ability and are separate from the school context altogether.

Despite the compelling findings on sense of community and connectedness, it has rarely been examined as a protective factor against neighborhood risk. Yet there are findings that hint at a potential link between connectedness and neighborhood risk. For example, a positive school-based sense of community has been found to have a protective effect on the association between poverty level of the school population and average drug use and delinquent behavior in a sample of diverse schools (Battistich & Hom, 1997). At the student level, the reduction was found only with delinquent behavior and only for students in low- to moderate-poverty level schools. There was no protective effect of sense of community and connectedness for youth in schools with high levels of poverty (Battistich & Hom, 1997). Generalizing to youths' neighborhood contexts, these findings suggest a protective-reactive effect of sense of community and connectedness on youth development whereby youth reporting less neighborhood risk may experience greater benefits from having a sense of community and connectedness. As with the research on supportive relationships with adult staff and norms for behavior, more investigation is needed to understand the protective capacity of sense of community and connectedness on youth exposed to community violence.

E. Norms for Behavior

As noted earlier, Tseng and Seidman (2007), identified norms as a setting feature that helps to manage the behavior of participants in that setting. Echoing the salience of this feature, the literature on protective factors indicates that positive norms for behavior are a valuable resource for youth living in neighborhoods with high violence and crime, because these neighborhoods, at least at the neighborhood-level, lack positive norms for behavior. Sampson,

Raudenbush, and Earls (2007) highlight the role of norms and collective efficacy among neighbors in the occurrence of negative neighborhood social processes, such as community violence. Norms for positive behavior in a neighborhood setting, like in other settings, serve as an informal social control and minimize community violence. Thus, in neighborhoods that have high rates of community violence, norms against violence may be lacking. This suggests that youth from high-risk neighborhoods may have less exposure to norms for positive behavior. In an organized youth activity setting, exposure to prosocial norms may contribute to positive developmental outcomes for youth who are exposed to community violence.

Despite findings on the positive impact of prosocial norms, research on the effect of setting norms on outcomes for youth exposed to environmental risk is very limited. The research that does exist emphasizes the role of staff in communicating norms for positive behavior and against risk behavior and reveals a positive relationship between the communication of norms and youths' positive outcomes (Catalano et al., 2004; Eccles & Templeton, 2002; Kirby, 1997, 2001; Roth & Brooks-Gunn, 2003). This research, however, suggests that outcomes related to norms also depend on the transmission of norms to youth by both adults and peers. From this perspective, more research is needed to understand the impact of norms in organized youth activities. Studies assessing social norms through the examination of youths' perceptions of their peers' behavior, and approval/disapproval of behavior, in other proximal youth settings (e.g., Henry et al., 2004) can shed light on the potential impact of this feature.

The research examining youth perceptions of norms shows that perceptions about desirable behavior are related to youths' desirable behavior. For example, Henry and colleagues (2000) found youths' perceptions about the acceptability of aggression by classroom peers to be positively related to youth aggression in a sample of majority African American and Latino

youth. In addition, classroom-level norms that discouraged aggression, as measured by perceptions of peer rejection and teacher reprimand of aggressive behavior, were associated with individual-level reductions in aggression. Others have found youth perceptions of peer norms to predict youths' substance use, including beyond the effect of parent and peer usage (e.g., Allison et al., 1999; Wambeam, Canen, Linkenbach, & Otto, 2013). Beyond behavioral outcomes, one study investigating psychological outcomes related to behavioral norms among a majority African American population found that positive perceptions of school-level peer norms for nonviolence were positively related to youth self-efficacy for nonviolence throughout middle-school (Henry, Farrell, Schoeny, Tolan, & Dymnicki, 2011). While none of these studies examine the protective impact of peer norms, there seems to be a consistent association between norms and outcomes across studies. Given these findings and the context of violent neighborhoods, where youth are susceptible to interaction with gang-affiliated youth and those participating in dangerous or deviant behaviors (McLaughlin & Irby, 1994), there may be a potential protective-stabilizing effect of norms for behavior on developmental outcomes.

IV. THE CURRENT INVESTIGATION

The purpose of the proposed investigation was to identify features of the organized youth activity setting that, as indexed by youths' perceptions, serve as protective factors for African-American youth exposed to community violence and violence-related activities in the indigenous dancing drill team. Protective factors were expected to moderate the relationship between exposure to community violence and youth developmental outcomes by diminishing the negative impact of exposure on youth development. In addition, the nature of the protective effect (Luthar et al., 2000), or pattern of moderation between exposure to community violence and youth development, was also examined. The following research questions and hypotheses were examined:

Research Question 1. The first research question in this study examined whether there was a relationship between exposure to community violence and youth development.

Hypothesis 1. Based on previous research documenting the negative impact of exposure to community violence on youth development (e.g., Foster & Brooks-Gunn, 2009; Richters & Martinez, 1993), exposure to community violence was expected to be significantly positively correlated with psychological distress and problem behavior, and significantly negatively related to psychological well-being. See Figure 2 (Box 1) for an illustration of this hypothesized effect.

Research Question 2. This research question examined whether perceptions of the features of organized youth activity settings (supportive relationships from adult staff, sense of community and connectedness, and norms for behavior) moderate the relationship between exposure to community violence and positive youth development, and, the nature of that moderation. This research question was investigated by comparing the relationship between

exposure to community violence and youth outcomes for youth who report more positive perceptions of activity setting features (one standard deviation above the mean level of the perception) and youth who report less positive perceptions of activity setting features (one standard deviation below the mean level of the perception). Each hypothesis refers to the comparison of the effect of exposure to community violence on outcomes (both measured continuously) for youth reporting more positive versus less positive perceptions (perceptions measured categorically). In addition, the pattern of the protective effect (i.e., Luthar et al., 2000) is reflected in the following three hypotheses.

Hypothesis 1. The natural mentorship literature has established supportive adult relationships as a protective factor for youth in disadvantaged communities where there is a lot of neighborhood risk (e.g., Dubois & Silverthorn, 2005; Molnar et al., 2005). Following from this research, youths' perceptions of supportive relationships with adult staff was expected to function protectively for youth in risky environments, resulting in a protective-stabilizing effect on developmental outcomes.

This study thus hypothesized that youths' perception of supportive relationships would moderate the relationship between exposure to community violence and youth developmental outcomes. Specifically, no difference was expected in the effect of exposure to community violence on youths' reports of psychological distress, problem behavior, and psychological well-being between youth who report more positive perceptions of supportive relationships and youth who report less positive perceptions of supportive relationships (i.e., one standard deviation above the mean level of perception and one standard deviation below the mean level of perception, respectively) at minimal levels of exposure to community violence. As exposure to community violence increases, however, youths' report of psychological distress and problem

behavior was expected to decrease, while positive psychological well-being was expected to increase, among youth who report more positive perceptions of supportive relationships (one standard deviation above the mean level of perception). Among youth who report less positive perceptions of supportive relationships (one standard deviation below the mean level of perception), exposure to community violence was expected to remain positively associated with psychological distress and problem behavior, and negatively associated with positive psychological well-being. See Figure 2 (Box 2) for an illustration of this hypothesized effect.

Hypothesis 2. The second hypothesis for research question two derives from research on sense of community. This research indicates that a sense of community provides youth with meaning and purpose, a specific need that youth who experience high exposure to community violence develop (Stoddard et al., 2013). Qualitative research documents that youth from low-income backgrounds who reside in risky communities and report feeling connected to a youth activity, show positive developmental outcomes (e.g., Heath & McLaughlin, 1993). Based on this research, a sense of community and connectedness was expected to serve as a protective factor against the negative effect of exposure to community violence. Evidence suggests that this effect may be protective-reactive, indicating that it would be more beneficial for youth reporting minimal exposure to community violence than for youth reporting more than minimal exposure (Battistich & Hom, 1997).

This study thus hypothesized that youths' sense of community and connectedness would moderate the relationship between exposure to community violence and youth developmental outcomes. Specifically, the overall negative effect of exposure would be observed for youth overall, regardless of the degree of sense of community and connectedness. Furthermore, psychological distress and problem behaviors would increase, and psychological well-being

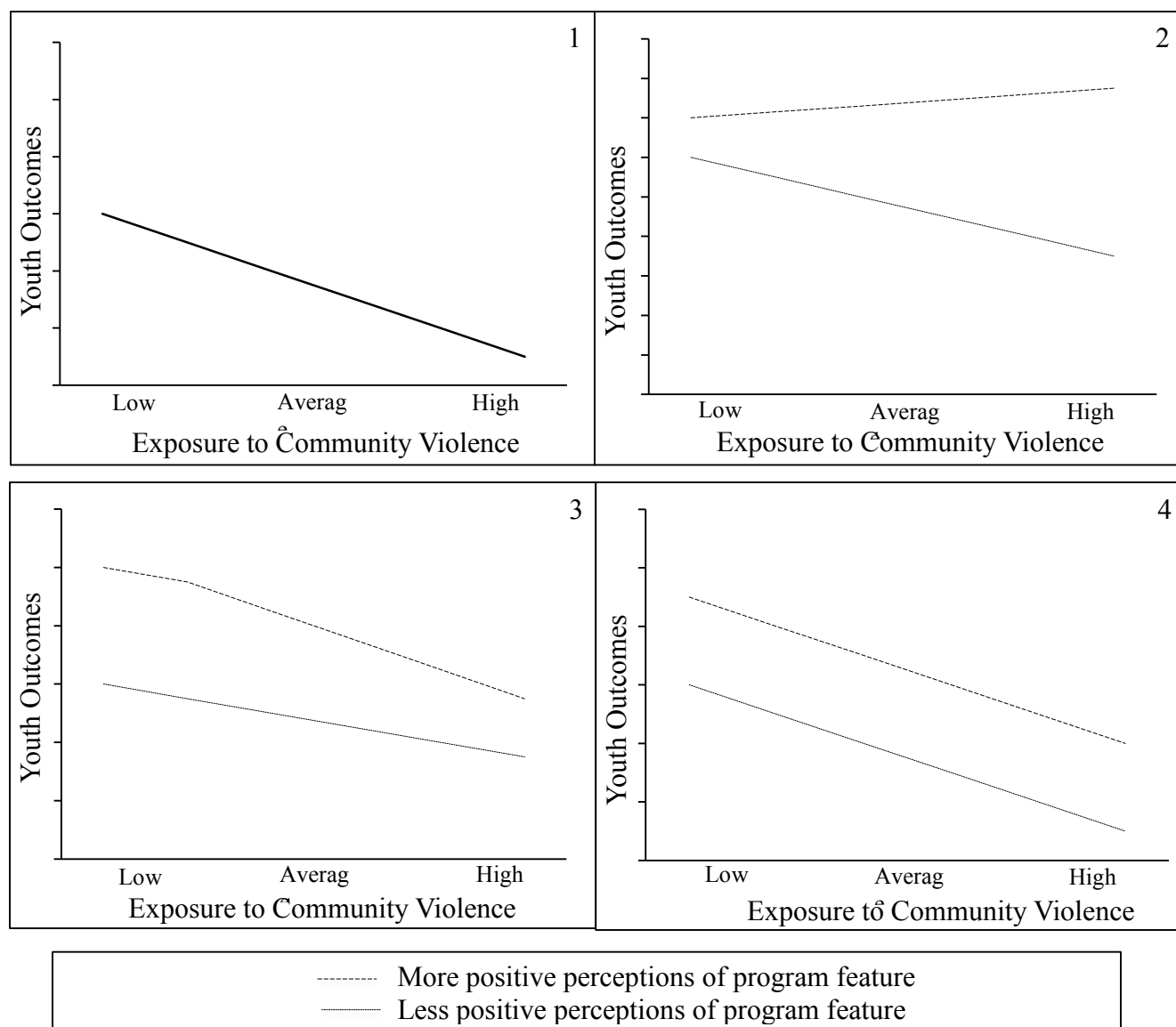


Figure 2. Illustrative effects of youth perceptions of program feature on the relationship between exposure to community violence and youth outcomes. In all boxes, the x-axis represents all of the youth outcomes that will be examined in this study: psychological distress, psychological well-being, and youth problem behaviors; the y-axis represents exposure to community violence. The x-axis is scaled so that youth outcomes become better as the scale gets higher. Both of these variables are continuous. Box 1 shows the hypothesized relationship between exposure to community violence and youth outcomes (Research question [RQ] 1, Study hypothesis [H] 1). Box 2 shows a protective-stabilizing effect of a program feature in the relationship between exposure to community violence and youth outcomes (RQ2, H1, supportive relationships with adult staff; RQ2, H3, norms for behavior). Box 3 shows a protective-reactive effect of a program feature in the relationship between exposure to community violence and youth outcomes (RQ2, H2: sense of community and connectedness). Box 4 shows an overall protective effect of a program feature in the relationship between exposure to community violence and youth outcomes (not hypothesized).

would deteriorate as exposure to community violence increased. Youth who report a greater sense of community and connectedness (i.e., one standard deviation above the mean level of sense of community and connectedness), however, were expected to have more positive outcomes than youth who reported less of a sense of community and connectedness (i.e., one standard deviation below the mean level of sense of community and connectedness). In addition, it was expected that the protective benefits of having a greater sense of community and connectedness would be greatest for youth who have experienced minimal exposure to community violence. This was expected to be evidenced in the greatest difference in youth reports of psychological distress, problem behavior, and psychological well-being between youth who reported a greater sense of community and connectedness and youth who reported a lesser sense of community and connectedness when youth also reported minimal exposure to community violence. See Figure 2 (Box 3) for an illustration of this hypothesized effect.

Hypothesis 3. The final hypothesis for research question two was informed by theory indicating the importance of norms for positive behavior for youth in high-risk settings (e.g., Sampson et al., 1997). These theories link the prevalence of delinquency and community violence in high-risk communities to the absence of neighborhood norms for positive behavior. Exposure to perceived norms for prosocial behavior, however, was expected to serve as a protective factor against the negative effect of exposure to community violence. Furthermore, the protective effect of perceived norms for behavior was expected to be specifically protective-stabilizing indicating that perceived prosocial norms for behavior would be more beneficial for youth reporting greater levels of exposure to community violence than for youth reporting less exposure to community violence. This study thus hypothesized that youths' perception of norms for behavior would moderate the relationship between exposure to community violence and

youth developmental outcomes. Specifically, as with supportive relationships, the effect of perceived norms was expected to be relatively negligible for youth who experience minimal exposure to community violence. As exposure to community violence increases, however, youths' report of psychological distress and problem behavior was expected to decrease, and positive psychological well-being was expected to increase, among youth with greater perceptions of peer acceptance of prosocial behavior (i.e., one standard deviation above the mean level of perceived peer acceptance of prosocial norms), and greater perceptions of peer rejection of deviant behavior (i.e., one standard deviation below the mean level of perceived peer rejection of deviant norms). Among youth who report lesser perceptions of peer acceptance of prosocial behavior (i.e., one standard deviation below the mean level of perceived peer acceptance of prosocial norms), and lesser perceptions of peer rejection of deviant behavior (i.e., one standard deviation above the mean level of perceived peer rejection of deviant norms), exposure to community violence was expected to remain positively associated with psychological distress and problem behavior, and negatively associated with positive psychological well-being. See Figure 2 (Box 2) for an illustration of this hypothesized effect.

V. METHOD

A. Description of the Program Setting

The East Bay Drill Team (pseudonym) is a community-based performing arts ensemble that was started to prevent youth from participating in risky behaviors. The program has successfully engaged youth for more than 30 years, serving approximately 300 youth annually. Although the program has not been empirically evaluated, there is considerable anecdotal evidence indicating the program's success. In addition, 99% of high school participants graduate and many pursue higher education despite attending schools where only 55% of students graduate. Given the program's longstanding focus on serving youth that reside in high-risk areas and from the dangers in high-risk areas and their aim to protect them from the dangers that are present in those areas, the program serves as an ideal case study for addressing the aforementioned gaps in the literature. In addition, the Drill Team's culture in competition and performance allows for additional contributions to be made.

According to the East Bay Drill Team's website, its mission is to "use the performing arts to engage inner-city youth throughout their critical teenage years, mitigate the dangers of gangs, drugs, and violence, and guide members towards completing their education and becoming responsible citizens" (Drill Team, 2011). The drill team is comprised of a system of multiple small groups based on level of performance and leadership. Youth who excel at their current level are allowed to advance to the next level, with the highest performance level having the most opportunities for travel and competition. The drill team uses opportunities to travel and perform to motivate members to work hard in rehearsal and at school – members of school age who are still in school must keep their grades above a 'C' average. The organization also aims to help youth develop a strong work ethic, self-confidence, and a respect for themselves and others.

They do this through the use of small group leaders as mentors, incorporating discussion of life skills into rehearsals, and providing members with workshops on various developmental topics such as, teamwork, leadership, and reproductive health. In addition, the Drill Team offers members various supports to assist with educational, social, and financial needs.

2. Program Structure

Youth as young as age eight are accepted into the program as “new recruits”, where they are separated into small groups based on gender, and spend three hours a day for two days a week learning simple drills (also known as marching) with a team leader. According to the East Bay Drill Team, it takes about a year for a child to learn how to march. The Drill Team system has multiple small groups based on level of performance and leadership that members can advance to with improvement. Typically members progress to the “Pee Wees” (youngest performers), “American Flag” (one to two years on the team), “Cadets” (two to three years on the team, age 12-15), and “Big Guard” (three or more years on the team, age 16-24). During the school year, Big Guard members rehearse at least 12 hours a week over three or four days, and the other groups rehearse about 6-8 hours a week over two or three days. Rehearsal days and hours increase around dates of major performances and competitions.

The entire Drill Team performs in competitions, parades, and other special occasions locally, but the organization’s resources determine how many small groups travel for performances nationally and sometimes internationally. The most advanced group, “Big Guard”, is prioritized to attend performances outside of the local area, and is also the main group that performs for the Drill Team during competition season. Members often aim for this most advanced performance and leadership group.

According to many members of the Drill Team, the team is like a second family for them because of the access they have to supportive relationships. In addition, a large network of former Drill Team members is available who return to the organization as leaders/mentors and staff. As well, members who have gone to college often come back to perform with the Drill Team on breaks from school. This involvement and community-building is incorporated into the Drill Team's practices. Many older members teach younger members, and each small group has its own youth leader who, in turn, learns from his/her staff leader. Furthermore, recreational activities give members an opportunity to bond.

3. Program Supports

All school-aged members are required to be students in good academic standing, and their grades and attendance are monitored. Team staff members also offer information about college and financial aid. Youth at risk of dropping out of school receive help to keep them in school as a part of the program's broader goal to serve and promote the success of youth in risky neighborhoods. The team links students to tutoring programs and offers a computer lab for doing homework.

The Drill Team staff have a year-long curriculum that they follow made up of different weekly topics (e.g., character development such as leadership) that they address with the youth on their team. They address these issues both in a team setting, and in one-on-one meetings. The Drill Team staff also mentors youth as youth seek them out for advice or they feel it is necessary to intervene when it is evident that a youth has an issue.

Some high school and college-age members are eligible to receive a stipend to participate in employment training. These members become assistant instructors to the younger children,

thereby learning how to work with younger children, complete job-related paperwork, and be responsible.

The At-Risk Youth Program is geared towards reducing the negative influences of youth who have had encounters with police or gangs at school or in their neighborhood. Youth in this program are often referred to the Drill Team after an incident at school or in their neighborhood. The program teaches these youth to take responsibility for their actions.

Finally, the team helps youth whose families struggle, providing such basics as food, clothing, haircuts for boys, and bus fare.

B. Participants

Sixty-five youth and young adult members of the East Bay Drill Team were recruited for this study. The sample was 60% female, ranging in age from 13 to 20. The average age of the sample was 16. Sixty-five percent reported having a free-and-reduced price lunch status at school. Exactly half of the sample had been members for 2 or more years, while the average amount of time spent with a group was 4 years. Approximately one-third youth (26%) reported coming to Drill Team 1 day each week, another 43% reported coming 2-3 days each week, and the remaining 30% reported coming between 4 and 7 days each week. Fifty-seven percent of youth reported acting in some type of leadership capacity while on the Drill Team. In 2011, the Drill Team did a neighborhood study on their members in which they looked up various statistics on youth's neighborhood by zip code and community area. An examination of youths' zip codes reveals that many participants live in areas with high violent crime rates, as compared to the rest of Chicago. Table 1 lists statistics on violent crime, as well as property and other crime, on youths' neighborhoods during the study period.

TABLE I. PREVALENCE OF EXPOSURE TO COMMUNITY VIOLENCE AND VIOLENCE-RELATED ACTIVITIES IN SAMPLE

Note. Data on Chicago neighborhoods from Chicago Police Department, 2014. Property crime includes incident reports/arrests for burglary, theft, motor

Zip Code	Number of Members	Number of Residents	Violent Crime August 2013 - July 2014						Property Crime August 2013 - July 2014	Quality of Life Crime August 2013 - July 2014			
			Robbery	Battery	Assault	Homicide	Sexual Assault	Past 30 days/1000 people	Property Crime	Past 30 days/1000 people	Quality of Life Crime	Past 30 days/1000 people	Change since Previous Year
60619	54	31,065	358	173	116	12	25	1.8	2145	6.9	1185	3.4	-30%
60649	29	52,010	415	308	179	17	45	1.9	2723	4.5	1912	2.7	0%
60617	27	15,109	83	59	37	4	10	0.9	761	6.1	408	2.3	-60%
60637	23	23,740	167	142	71	9	14	1.6	1016	3.6	882	3.3	-50%
60653	17	5,918	25	11	13	0	3	0.5	154	3.2	101	1.7	-70%
60620	16	48,743	404	250	162	12	38	1.6	2218	4.6	1640	3.4	-10%
60629	14	55,628	333	157	102	17	45	1.1	1909	3	1453	2.6	-40%
60636	14	35,505	400	292	165	25	39	3.5	2033	5.4	1808	4.3	+20%
60628	12	44,619	362	206	133	16	43	1.5	2058	4.2	1699	3.5	-10%
60621	9	30,654	341	265	147	17	49	2.7	1815	5.1	1452	3.7	-30%
60612	6	54,881	306	124	65	5	24	1.2	3471	5.8	3471	5.8	+10%
60615	6	25,681	62	18	9	2	9	0.2	793	3.1	164	0.7	-70%
60643	4	22,544	66	34	24	6	9	0.5	739	3.1	401	1.3	-30%
60652	3	41,081	100	54	35	6	12	0.3	978	1.9	522	1.2	-50%
60419*	2	23,223	96		25	0	4		1625		71		
60438*	2	28,416	40		38	0	23		1384		303		
60604	2	29,283	172	34	31	0	16	0.9	3910	11.9	497	1.4	-20%
60609	2	44,311	219	180	107	8	28	1.2	1576	3.3	1176	2.2	+10%

vehicle theft, and arson. Quality of Life crime includes arrests for criminal damage, narcotics, and prostitution. Data from Chicago Suburbs (*) from Illinois State Police, 2011. Property crime includes incident reports/arrests for burglary, theft, motor vehicle theft, and arson. Quality of Life crime includes arrests for cannibus, controlled substance, drug periphernelia, hypodermic needles, and meth.

TABLE 1. PREVALENCE OF EXPOSURE TO COMMUNITY VIOLENCE AND VIOLENCE-RELATED ACTIVITIES IN SAMPLE

Violent Crime August 2013 - July 2014									Property Crime August 2013 - July 2014	Quality of Life Crime August 2013 - July 2014			
Zip Code	Number of Members	Number of Residents	Robbery	Battery	Assault	Homicide	Sexual Assault	Past 30 days/1000 people	Property Crime	Past 30 days/1000 people	Quality of Life Crime	Past 30 days/1000 people	Change Since Previous Year
60610	2	80,484	193	95	38	1	43	0.5	4825	5.5	761	0.8	+30%
60616	2	18,238	145	51	36	5	15	0.9	790	4.2	369	2	-40%
60623	2	79,288	219	177	67	13	31	0.7	1419	2	1034	1.4	-20%
60626	2	54,991	123	81	68	7	34	0.7	1199	2.5	754	1.1	-10%
60644	2	98,514	756	508	307	34	93	1.7	3895	3.6	6062	5.7	
60409*	2	37,042 ^a	160 ^a		52 ^a	4 ^a	31 ^a		2698 ^a		178 ^a		
60827	2	13,590	128		49	3	21		632		46		
60428*	1	12,248 ^b	25 ^b		31 ^b	3 ^b	5 ^b		342 ^b		127 ^b		
60466*	1	22,082	24		31	0	6		530		170		
60625	1	51,542	119	51	46	1	13	0.4	821	1.2	498	0.7	+80%
60632	1	45,368	72	68	40	3	7	0.6	881	1.8	686	1.8	+10%
60639	1	78,684	154	107	99	3	25	0.6	1701	1.7	992	1	+50%
60655	1	19,093	10	3	9	0	1	0.2	190	0.8	121	0.5	-40%
Chicago	262	1,174,285	13506	3591	12277	423	725	0.8	48191	3	30638	1.9	

Note. Data on Chicago neighborhoods from Chicago Police Department, 2014. Property crime includes incident reports/arrests for burglary, theft, motor vehicle theft, and arson. Quality of Life crime includes arrests for criminal damage, narcotics, and prostitution. Data from Chicago Suburbs (*) from Illinois State Police, 2011. Property crime includes incident reports/arrests for burglary, theft, motor vehicle theft, and arson. Quality of Life crime includes arrests for cannabis, controlled substance, drug paraphernalia, hypodermic needles, and meth. a denotes the most recent data available from 2010, b denotes the most recent data available data from 2009.

Adolescent members of the East Bay Drill Team (age 13-20) were told about the study and given a letter and consent form for their parent(s) to sign if they were younger than 18. The researcher then followed-up with parents after Drill Team practice to personally inform them of the study and collect consent forms.

C. Procedure

Once a majority of the forms were returned for a Drill Team group, the researcher coordinated with the staff group leader to schedule a time for surveying. One hour was devoted to taking the survey. Once a group had been surveyed, members who had not returned their parent consent forms but wanted to participate were scheduled to survey at a later time in smaller groups. Prior to passing out surveys, members were reminded about the study and given consent forms if 18 or older, and assent forms if younger than 18. Members could choose not to participate. Those that did participate received a five-dollar gift card to McDonald's or \$5 as compensation for their participation in the study.

D. Measures

The measures for the current study fall into eight categories: 1) demographics; 2) parental monitoring and involvement; 3) exposure to community violence and violence-related events; 4) program participation; 5) participation in other program settings; 6) youth perceptions of the activity setting features; and, 8) youth developmental outcomes.

1. Demographics

A series of close-ended questions assessed participants' age, grade, gender, and whether or not they participate in their school's free and reduced price meal service.

2. Parental monitoring and involvement

Parental monitoring and involvement consistently predicts urban youth outcomes and

moderates the relationship between neighborhood risk and youth developmental outcomes (e.g., Li et al., 2007; Molnar et al., 2005; Hardaway et al., 2012). Given this significance, it was included as a control variable in this study. The Monitoring and Involvement scale of the Parenting Practices measure (Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1989) is a 12-item measure assessing caregiver involvement in daily activities, as well as knowledge of the youth's whereabouts. The measure has been adapted and used in its adapted form in multiple studies (e.g., Tolan, Gorman-Smith, & Henry, D., 2000). The reliability of the scale has been shown to be acceptable in an urban sample ($\alpha = .85$) (Multisite Violence Project, 2006). The Monitoring and Involvement scale has three response formats: for questions one and three (e.g., When was the last time you talked to a parent about what you were going to do for the coming day?), "Don't know" (1), "More than 30 days ago" (2), "Within the last 30 days, but not within the last week" (3), "Within the last week, but not yesterday or today" (4), and "Yesterday or today" (5); for questions 2 and 4 (e.g., How often does a parent talk to you about what you are going to do for the coming day?), "Don't know" (1), "Less than once a month" (2), "Within the last 30 days, but less than once a week" (3), "At least once this week, but less than once per day" (4), and "Every day or almost every day" (5); and, for questions 5 to 12 (e.g., In the past 30 days, how often did you like to get in family activities?), "Hardly ever" (1), "Sometimes" (3), "Often" (5). The composite reliability for the current sample was 0.89.

3. Exposure to community violence and violence-related events

The Children's Exposure to Violence Scale (Richters & Martinez, 1992) is a 20-item self-report measure that assesses the frequency with which a child has been exposed to violence and violence-related activities at home and in the community. For the purposes of the current study, the measure was supplemented (described below) to also assess for direct victimization of

violence, following the format of questions from The Children's Exposure to Community Violence Scale (Richters & Saltzman, 1990b) as a model (please note that the Richters & Martinez, 1992, is different from the Richters & Saltzman, 1990b measure). Richters and Saltzman's (1990) measure is the most widely used measure of exposure to violence (Kuo, Mohler, & Raudenbush, 2000), but the measure chosen for the proposed study was deemed a better fit for this study because it is shorter than the Richters and Saltzman (1990) measure and includes items that assess the child's perception of safety in addition to victimization and witnessing. Validity evidence for the Children's Exposure to Violence Scale has shown that children's self report exposure to violence is correlated with caregiver's report of neighborhood (Richters & Martinez, 1992).

The supplemented version of the measure includes 29 items which ask about the frequency of victimization and witnessing (e.g., "How many times have you yourself been stabbed?"; "How many times have you seen someone else get stabbed?"), and feeling safe (e.g., "How many times have you felt safe outside in your neighborhood?"). The response choices for all items are: "never" (0), "once or twice" (1), "a few times" (2), and "many times" (3). With exception to the safety items, higher scores indicate greater exposure to violence. Safety items are reverse-scored. The Cronbach's alpha for the current sample was 0.87.

4. Program participation

Youth were asked an open-ended question pertaining to their length of participation: "How old were you when you joined the Drill Team?"

5. Youth perceptions of the activity setting features

a. Supportive relationships with adult staff

A modified version of the Non-Parental Social Support Scale (Pagano, 2001) was used to measure perceived social support from adult staff. The Non-Parental Social Support Scale is a 22-item measure that was developed to assess the extent to which a person feels supported by an adult that they have a relationship with, and has been used by others to measure supportive relationships with adult staff in youth programs (e.g., Hirsch, Deutsch, & DuBois, 2011). Two scales of the measure were used in this study, the Trust/Feels Valued scale, and the Mentoring scale. In a study measuring supportive relationships with adult staff in youth programs the Trust/Feels Valued scale had a reliability of .90 for the staff person with whom youth had their closest tie and .85 for other staff persons; the Mentoring scale had a reliability of .64 for the staff person with whom youth had their closest tie and .60 for other staff persons (Hirsch, Deutsch, & DuBois, 2011).

For the purposes of the current study, the scale was modified to specify the source of support as “Drill Team staff”, instead of “this person”. A sample item from the Trust/Feels Valued scale is, “Drill Team staff cares about how I am doing in school”. A sample item from the Mentoring scale is, “Drill Team staff give me useful advice in dealing with my problems”. A five-point response scale was used indicating the extent of support with the options, “Never/Almost Never” (1), “Rarely” (2), “Sometimes” (3), “Often” (4), “Always/Almost Always” (5). The composite reliabilities for the Trust/Feels Valued scale and the Mentoring scales were 0.83 and 0.81, respectively, for the current sample.

d. Sense of community and connectedness

Goodenow's (1993) Psychological Sense of School Membership (PSSM) Scale consists of 18 items and measures the extent to which students feel personally accepted, respected, included, and supported in the school social environment. It was modified for this study to refer to the East Bay Drill Team social environment by inserting the Drill Team's name where the school's name is to be inserted, and by replacing "school" with "Drill Team", "student" with "people", and "teacher" with "staff". Sample items include, "I feel like a real part of the East Bay Drill Team", and "Other kids in this drill team take my opinions seriously". The response scale was also modified to be in the same format as some of the other scales in this study. The original Likert format ranged from "Not at all true" (1) to "Completely true" (5) had the options "Never/Almost Never" (1), "Rarely" (2), "Sometimes" (3), "Often" (4), "Always/Almost Always" (5).

The PSSM Scale has been found to be reliable in both suburban ($\alpha = .88$) and urban samples ($\alpha = .80$) (Goodenow, 1993). Validity tests for the urban sample found perceived psychological sense of school membership to be more positive among students who identified with the numeric majority ethnic group of the school than students who identified with a minority group, and greater among students who were retained at the school they attended the previous year than students who went to a different school (Goodenow, 1993). Psychological school membership was also correlated in the expected direction with educational motivation, expectancies for school success, subjective value of schoolwork, and academic achievement in the urban sample (Goodenow, 1993). The composite reliability was 0.88 for the current study.

e. Norms for behavior

Perceived program norms for behavior were measured by creating a scale that endorsed

the item format from the Norms for Aggression and Alternatives scale from the CDC Multisite Violence Prevention Project (Miller-Johnson, Sullivan, & Simon, 2004). A set of deviant norms and prosocial norms found in another study (Sipsma, Ickovics, Lin, & Kershaw, 2012) measuring adolescent peer norms were borrowed and amended to be used as the items for which the format corresponds. The Norms for Aggression and Alternatives scales (Miller-Johnson et al., 2004) examines students' perceptions of what other students in their schools would think if students engaged in aggression or alternatives to aggression, and students' own evaluations of the same behaviors. Only perceived program norms were used in study analyses. The items were modified so that they pertain to the program context instead of the school context.

The items examining perceived program norms for behavior start with the stem, "How would *the kids in the Drill Team* feel if a kid..." The deviant perceived peer norms that were assessed are "smoked cigarettes", "got drunk", "belonged to a gang", "used drugs", "skipped school", "stole from someone", and "hit someone for any reason". The prosocial perceived peer norms that were assessed are "participated in a school club", "got all As on their report card", "planned to go to college", "did volunteer work", "avoided a fight", and "tried to stop a fight". The three-point response scale includes, "Disapprove", "Neutral", and "Approve". The composite reliability for the sample was 0.87 for the scale assessing deviant norms, and 0.76 for the scale assessing prosocial norms.

B. Youth developmental outcomes

c. Psychological distress

The anxiety and depression subscales from The Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982) were used to assess psychological distress. Each subscale included six symptoms for which participants were asked how much discomfort they felt in the last week.

The five-point Likert scale includes the anchors, “Not at all” (0), and “Extremely” (4). Scores can range from 0 to 24 for the scales separately (24 indicates the highest level of anxiety and depression). The BSI subscales have been used in multiple studies with urban African American samples (e.g., Ball, Armistead, & Austin, 2003; Brown, Tolou-Shams, Lescano, Houck, Zeidman, Pugatch, & Lourie, 2006). The reliability of the combined anxiety and depression subscales ranged from .63 to .83 across studies including African American adolescent samples (Zimmerman, Ramírez-Valles, & Maton, 1999; Zimmerman, Ramírez-Valles, Zapert, & Maton, 2000). Cronbach’s alpha of the combined anxiety and depression subscales was 0.95 for the current sample.

d. Psychological well-being

i. Global self-esteem

The Global scale of the Self-Esteem Questionnaire (SEQ; DuBois, Felner, Brand, Phillips, & Lease, 1996) is comprised of eight items measuring global self-esteem. The reliability of the scale was .86 in two large samples of early adolescents that were majority African-American (84%; DuBois et al., 1996). Validity evidence found that adolescents’ report of self-esteem was correlated with both interview ($r = .80$) and parent-report ($r = .46$) data (DuBois et al., 1996). In addition, scores on the Global scale of the SEQ were associated significantly with greater reports of social support from family, peers, and school teachers, as well as fewer daily stressors and negative events (DuBois et al., 1996).

A few sample items from the Global scale are, “I am happy with myself as a person”, and “I am the kind of person I want to be”. There is a four-point response scale including, “Strongly Disagree” (1), “Disagree” (2), “Agree” (3), and “Strongly Agree” (4). The composite reliability for the current sample was 0.78.

ii. Global self-efficacy

Global self-efficacy was measured by using a 10-item scale that has been used in another study measuring global self-efficacy in youth involved in urban youth programs (Hirsch, Deutsch, & DuBois, 2011). The measure is composed of both items adapted from the Mastery Scale (Pearlin & Schooler, 1978) and items from the Self-Efficacy Scale (Sherer, Maddox, Mercandante, Prentice-Dunn, Jacobs, & Rogers, 1982). The reliability for the scale with an urban sample was .73 (Hirsch, Deutsch, & DuBois, 2011). A few sample items from the scale are, “I can do just about anything I really set my mind to”, and “When I set goals, I know how to reach them”. There is a four-point response scale including, “Strongly Disagree” (1), “Disagree” (2), “Agree” (3), and “Strongly Agree” (4). The composite reliability for the sample was 0.83.

e. Youth problem behaviors

To measure youth problem behaviors, three scales were used from the Problem Behavior Frequency Scale (PBFS; Farrell, Kung, White, & Valois, 2000), which consists of 26 items, including the scales for drug use, physical aggression, and delinquent behavior. Seven drug use items focus on gateway drugs (e.g., cigarettes, beer, wine, hard liquor, and marijuana), six items assess physical aggression (based on the Center for Disease Control’s Youth Risk Survey, Kolbe, Kann, & Collins, 1993; e.g., “been in a fight in which someone was hit”), and six items assess delinquent behavior (based on items in Jessor and Jessor’s, 1977, Attitudes Toward Deviance Scale; e.g., “skipped school”, “stolen from someone”). Each of these scales has shown acceptable test-retest reliability in previous studies (Farrell et al., 2000). The reliability statistics for the subscales ranged between .85 to .87 for an urban sample, and .79 for the entire scale (Farrell et al., 2000). Each scale is introduced by the following stem: “In the last 30 days, how many times have you?” Responses are based on a 6-point scale: “never” (1), “1–2 times” (2), “3–

5 times” (3), “6–9 times” (4), “10–19 times” (5), and “20 times or more” (6). Scores are averaged for each scale and higher responses indicate more problem behavior for that scale.

Cronbach’s alpha for the sample was 0.82 for the drug use scale, 0.75 for the physical aggression scale, and 0.86 for the delinquency scale.

VI. DATA ANALYSIS

The statistical modeling software *Mplus* version 6 was used to test the hypothesized models (Muthén & Muthén, 1998–2010). SEM uses data to estimate model fit statistics that take into account measurement and prediction error of predictor and outcome variables, making it more powerful than other statistical tools without these features.

A. Missing Values Analysis

Mplus uses full information maximum likelihood estimation (FIML) to estimate any missing values in the dataset. FIML uses an iterative procedure to generate the missing data that is most likely to have been produced by the sample, as long as data is available for the covariates.

B. Confirmatory Factor Analysis

Maximum likelihood (ML) estimation was used to complete confirmatory factor analyses (CFA). The ML estimator is robust against minor deviations from normality. To confirm there were no major deviations from normality, CFA was also completed using the maximum likelihood with robust standard errors and chi-square (MLR) estimator and no differences in results were observed (Byrne, 2011). *Mplus* uses regression technique to compute factor scores, in which items are used to predict the location of each individual on the factor. For each latent variable utilizing a likert-type scale or different response scales (all program setting variables, global self-esteem, global self-efficacy, parental monitoring and involvement), the typical *Mplus* CFA was conducted. As such, the means of each latent variable were standardized to zero. In addition, the variance of the latent variable was fixed to 1. Sum scores were estimated for each variable utilizing a frequency scale (exposure to community violence, youth problem behaviors, psychological distress); average sum scores were used for youth problem behaviors specifically.

For these methods, the factor loadings for each scale were fixed to 1 to distribute the weight of items equally.

Prior to hypothesis testing, the latent variables and sum scores were assessed for nonnormality. Skewness statistics greater than two and/or kurtosis statistics greater seven were used to flag nonnormality (West, Finch, & Curran, 1995). The analysis found that each of the outcome variables was affected by either skewness or leptokurtosis (see Table 2 for nonnormality results). Therefore all hypothesis testing was completed using the MLR estimator in MPlus.

C. Preliminary Analyses

Previous research indicates that the outcomes of interest in the current study may differ by age, gender, SES, and parental monitoring and involvement. In addition, this study was focused on the impact of the activity setting above and beyond length of participation in the youth activity. Therefore, these variables were selected as potential control variables. T-tests and bivariate correlations were conducted to assess differences in age (13-16 vs. 17 and older), gender, and SES (free and reduced price lunch status; FRPL) for each study variable. Correlations between family monitoring and involvement and length of participation and each of the study variables were also explored. Given the limited sample size, these tests were used to determine which of the variables would be entered into each model as a control variable.

Multicollinearity for the sample was also assessed by examining bivariate correlations between each predictor variable with moderator and outcome variables being tested in each model. This is the standard way of testing for multicollinearity in MPlus (MPlus webnotes, 2012). Correlations were checked for ranges above 0.60 due to small sample size; 0.80 has been established as reason for concern (Berry & Feldman, 1985). All correlations ranged between

TABLE II. STANDARDIZED SKEWNESS AND KURTOSIS VALUES

Measure	Skewness	Kurtosis
Exposure to Community Violence	0.59	-1.94
Perceived Trust & Valued	0.41	-1.46
Perceived Mentor Support	0.28	-1.55
Sense of Community and Connectedness	-1.11	-1.63
Perceived Deviant Peer Norms	2.04	-0.42
Perceived Prosocial Peer Norms	-0.97	-1.45
Psychological Distress	3.33	-0.4
Global Self-Esteem	-3.73	0.11
Global Self-Efficacy	-3.03	0.87
Physical Aggression	3.22	0.33
Delinquency	5.28	3.53
Drug Use	5.69	4.29
Parental Monitoring and Involvement	-0.31	-2.65

-0.41 and 0.59, with only 2 in the 0.50-0.60 range.

D. Hypothesis Testing

The hypothesis models that were tested are depicted in Figure 3. Note that control variables and accompanying paths to outcome variables are not depicted in Figure 3. Due to limited sample size, separate models were run for each of the hypothesized moderators (supportive relationships with adult staff, sense of community and connectedness, norms for behavior) and each outcome (physical aggression, delinquent behavior, drug use, psychological distress, global self-esteem, global self-efficacy).

Hypotheses were tested utilizing multiple linear regressions, and R^2 was used to determine sufficient model fit. Models yielding a significant and marginally significant amount of variance explained in the outcome variable ($p < 0.08$), as well as models in which the program setting characteristic was a significant predictor of the outcome, were selected for additional testing.

The first test assessed whether the additive (main effects-only) model or moderator (interaction) model was a better fit for the data:

$$\text{Additive (Main-effects only): } O = b_0 + b_1E + b_2P$$

and

$$\text{Moderator (Interaction): } O = b_0 + b_1E + b_2P + b_3EP,$$

where the program (P) was set to moderate the relationship between exposure to community violence (E) and the outcome (O). A model comparison between the two models was conducted in which chi-square difference testing was conducted using log-likelihood values due to use of the MLR estimator. A significant chi-square value would suggest that the fit of the model

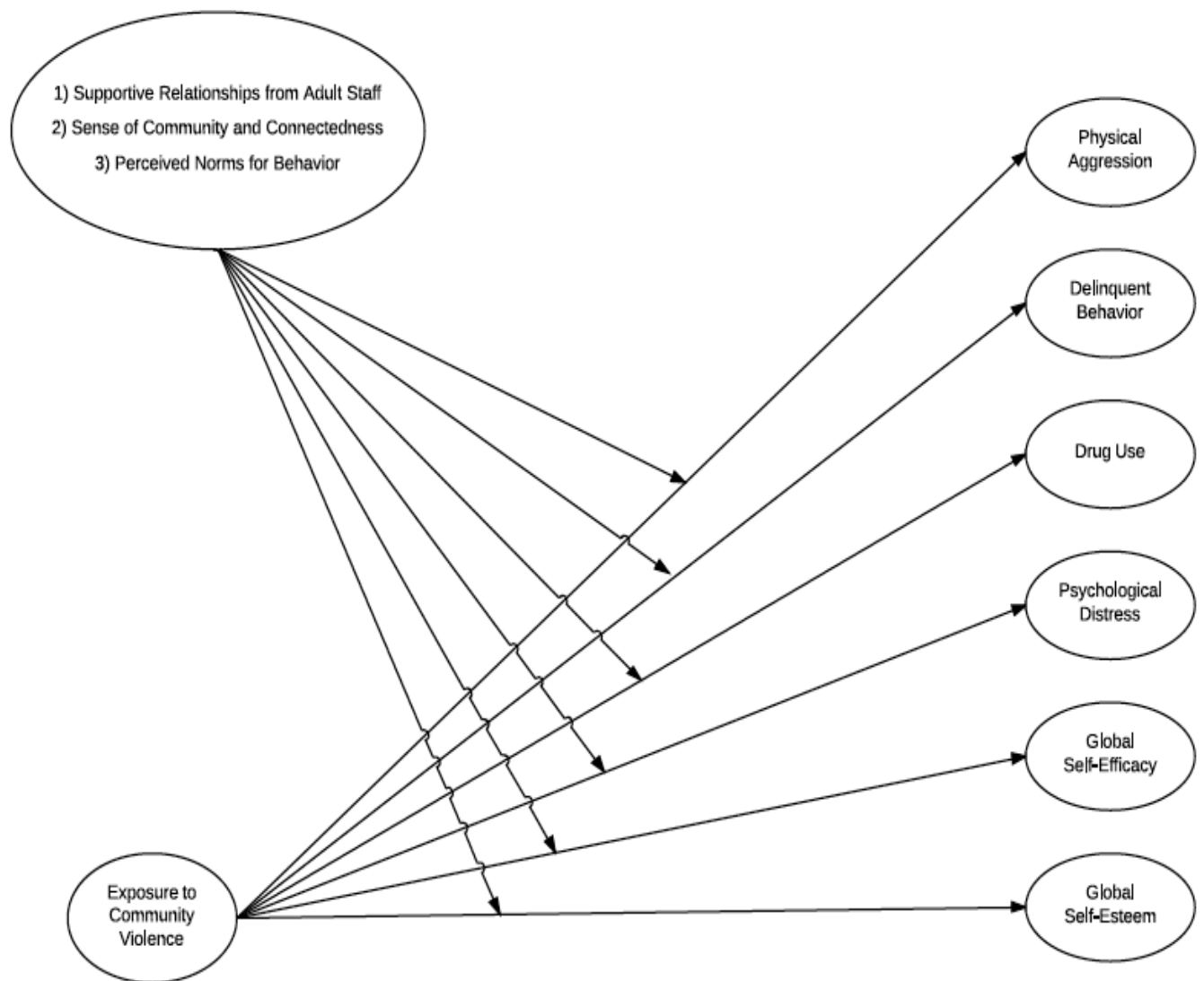


Figure 3. Hypothesized model for testing organized youth activity setting features as moderators of the relationship between exposure to community violence and youth development outcomes. Control variables and scale items are not depicted.

accounting for the variance in the outcome is improved by adding the interaction. This test assessed the importance of including an interaction term in the model, and if significant, suggested that significantly more variance is explained in the outcome variable by including the interaction between the focal program setting variable and exposure to community violence.

Then, if group differences or correlations were found with potential control variables and any variable in the model, model comparisons were conducted between the simple additive or moderator model and the same model including the control variable. Due to limited sample size, the inclusion of group differences was tested by comparing a model regressing the outcome on a model for each group, but only of the additive model. For example, if a variable in the model varied by gender, an additional model comparison was conducted between the additive model and the additive model with separate regressions for males versus females. However, in moderator models, the comparison was between the simple moderator model and the moderator model including a term for the group difference. In the previous example, gender would be included in the moderator model. Model comparisons in which a variable was included that was correlated with the predictors or outcome variable were tested in the same way. For example, if a variable in the model was correlated with parental monitoring and involvement, the model comparison was conducted between the additive/moderator model and the additive/moderator model including the additional term for parental monitoring and involvement. If significant, this would suggest that a significant amount more variance was explained by including control variables. Of interest in this study is whether or not the addition of control variables changes the impact of the program setting variable on outcomes. There were a total of 30 families of models that included each predictor and each outcome.

Once the best fitting model was found, if it was a moderator model and the interaction

term was significant, interactions were followed up by centering necessary predictor variables and testing the simple slopes to understand the nature of the interaction as recommended (Aiken & West, 1991; Cohen et al., 2003). Specifically, simple slopes for the relationship between exposure to community violence and the outcome were assessed at high (1 SD above the mean) and low (1 SD below the mean) levels of the program moderator variable (Aiken & West, 1991).

The equation that describes the simple slopes is found by re-expressing the moderator model:

$$O = (b_0 + b_2P) + (b_1 + b_3P)E,$$

where the relationship between exposure to community violence (E) and the outcome (O) both depend on program (P). The path coefficients for the simple effects of exposure to community violence on the outcome at different levels of the program (P), represented by b_1 , explain how the effect of exposure to community violence on the outcome varies by program moderator variables.

VII. RESULTS

A. Prevalence of exposure to community violence

The prevalence of exposure to community violence and violent-related activities is reported in Table 3. Witnessing violence was the form of exposure reported by the most participants. Roughly eight in 10 youth in the study reported witnessing violence in their community. More than half of all youth witnessed violence involving guns, including hearing gunshots and seeing someone get shot. Witnessing someone get beaten up, someone arrested, shoplifting, adults fighting, gangs, or drug dealing were also reported at high rates.

In terms of victimization, approximately one in five to six youth reported being the victim of a stabbing, shooting, or an attempt at either, having a gun pulled on them, and having a knife pulled on them. These figures jump to approximately one in three where being beaten up or evidenced more positive mental health with regard to these variables.

Overall, problem behaviors, including physical aggression, delinquency, and drug use, were low (see note in Table 4 for means and ranges). There were no group differences found among the reported problem behaviors.

B. Correlations between exposure to community violence, program setting characteristics, psychological health, and youth problem behaviors

Correlations among exposure to community violence, program setting characteristics, psychological health, and problem behaviors are presented in Table 5. Strong positive correlations were found between exposure to community violence and both aspects of supportive relationships with adult staff, indicating that more exposure to community violence was associated with more positive perceptions of trust and support from adult staff, as well as more positive regard of adult staff as mentors. In addition, a significant, moderate positive correlation

TABLE III. PREVALENCE OF EXPOSURE TO COMMUNITY VIOLENCE AND VIOLENCE-RELATED ACTIVITIES

	Total %	n
Perception of Safety	48%	65
Felt Afraid in Neighborhood	40%	62
Felt Afraid going to School	23%	64
Felt Afraid at Home	22%	65
Community Violence Victimization	68%	65
Target of Drug Dealing	43%	65
Beaten Up/Attempted	35%	65
Arrested/Picked Up by Police	31%	63
Adults been mean	29%	65
House Broken Into	23%	63
Had Gun Pulled on	20%	64
Had Knife Pulled on	17%	64
Stabbed/Attempted	17%	63
Shot/Attempted	17%	64
Community Violence Witnessing	85%	65
Adults Yelling	72%	65
Heard Guns Shot	71%	65
Someone Beaten Up	65%	65
Someone Arrested	60%	64
Shoplifting	58%	65
Adults Fighting	58%	65
Gangs	58%	65
Drug dealing	57%	65
Someone Get Shot	51%	65
Dead Body	45%	65
Knife Pulled on Someone	38%	64
Gun Pulled on Someone	38%	65
Stabbing	32%	65
Gun in Home	31%	64

TABLE IV. GENDER, AGE, AND INCOME DIFFERENCES IN EXPOSURE TO COMMUNITY VIOLENCE, PROGRAM SETTING CHARACTERISTICS, PSYCHOLOGICAL HEALTH, AND PROBLEM BEHAVIOR

	Total		Males		Females			13-16		17 and older			FRPL		non-FRPL		
	M	SD	M	SD	M	SD	t	M	SD	M	SD	t	M	SD	M	SD	t
Exposure to Community Violence	18.97	14.13	20.35	16.00	18.05	12.88	-0.64*	16.84	13.7	23.75	14.28	-1.85 ^a	19.24	14.13	14.55	10.74	1.02
Perceived Trust & Valued	0	0.96	0.01	1.00	0.00	0.95	-0.05	-0.21	0.87	0.47	1.02	-2.76**	-0.03	0.9	-0.22	0.98	0.62
Perceived Mentor Support	0	0.96	0.01	0.99	-0.01	0.96	-0.06	-0.21	0.88	0.46	1.01	-2.71**	-0.03	0.89	-0.21	1.02	0.58
Sense of Community and Connectedness	0	0.95	-0.26	1.06	0.17	0.85	1.81 ^a	-0.13	0.99	0.29	0.83	-1.63	-0.04	0.94	0.3	0.85	-1.06
Perceived Deviant Peer Norms	0	0.94	-0.18	0.85	0.12	1.00	1.25	-0.02	0.87	0.04	1.12	-0.25	0.19	0.96	-0.22	0.93	1.25
Perceived Prosocial Peer Norms	0	0.91	-0.10	0.95	0.07	0.88	0.72	-0.09	0.95	0.19	0.79	-1.15	-0.07	0.86	0.04	1.14	-0.34
Psychological Distress	11.29	12.54	10.24	12.16	11.97	12.9	0.53	10.61	12.05	12.84	13.83	-0.64	11.37	12.56	12.73	15.41	0.30
Global Self-Esteem	0	0.95	-0.31	1.04	0.22	0.83	2.17*	-0.03	0.96	0.07	0.94	-0.37	0.1	0.87	-0.03	0.93	0.43
Global Self-Efficacy	0	0.95	-0.26	0.89	0.18	0.96	1.85 ^a	-0.11	1.01	0.24	0.78	-1.38	0.08	0.9	-0.01	0.91	0.27
Physical Aggression	0.87	0.90	1.02	0.91	0.77	0.89	-1.12	0.86	0.84	0.9	1.04	-0.17	1.07	0.97	0.65	0.77	1.33
Delinquency	0.62	0.82	0.81	1.00	0.50	0.66	-1.48	0.66	0.82	0.54	0.85	0.54	0.76	0.86	0.38	0.75	1.33
Drug Use	0.62	0.87	0.78	0.98	0.52	0.79	-1.19	0.62	0.92	0.64	0.78	-0.10	0.63	0.91	0.61	0.97	0.08

Note. Ranges for the variables are as follows: Exposure to Community Violence (0-50), Perceived Trust & Valued (-1.89-1.86), Perceived Mentor Support (-1.91 -1.78), Sense of Community and Connectedness (-2.2-1.45), Perceived Deviant Norms (-1.03–2.98), Perceived Prosocial Norms (-2.21-1.17), Psychological Distress (0-43), Global Self-Esteem (-2.56-0.75), Global Self-Efficacy (-3-1.08), Physical Aggression (0-3.57), Delinquency (0-3.5), Drug Use (0-3.83).

^ap < 0.08, * p < 0.05, ** p < 0.01

TABLE V. CORRELATIONS BETWEEN EXPOSURE TO COMMUNITY VIOLENCE, PROGRAM SETTING FEATURES, PSYCHOLOGICAL HEALTH, PROBLEM BEHAVIOR, PARENTAL MONITORING AND INVOLVEMENT, AND TIME SPENT ON DRILL TEAM

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Exposure to Community Violence	1.00													
2. Perceived Trust & Valued	0.50**	1.00												
3. Perceived Mentor Support	0.47**	0.99**	1.00											
4. Sense of Community and Connectedness	0.23	0.57**	0.57**	1.00										
5. Perceived Deviant Peer Norms	-0.01	-0.33**	-0.32**	-0.33**	1.00									
6. Perceived Prosocial Peer Norms	0.24	0.40**	0.39**	0.46**	-0.44**	1.00								
7. Psychological Distress	0.08	-0.05	-0.05	-0.41**	0.40**	-0.24	1.00							
8. Global Self-Esteem	0.16	0.20	0.20	0.59**	-0.18	0.47**	-0.46**	1.00						
9. Global Self-Efficacy	0.23	0.43**	0.43**	0.54**	-0.19	0.59**	-0.24	0.63**	1.00					
10. Physical Aggression	0.22	-0.10	-0.11	-0.15	0.34**	-0.03	0.10	-0.05	-0.01	1.00				
11. Delinquency	0.26*	-0.13	-0.14	-0.33**	0.19	-0.14	0.21	-0.31*	-0.34**	0.68**	1.00			
12. Drug Use	0.35**	0.03	0.03	-0.24	0.16	-0.08	0.29*	-0.27*	-0.23	0.50**	0.75**	1.00		
13. Parental Monitoring and Involvement	0.18	0.30*	0.31*	0.45**	0.21	-0.06	-0.01	0.40**	0.44**	-0.003	-0.22	-0.08	1.00	
14. Time spent on drill team	0.12	0.31*	0.30*	0.31*	0.38**	-0.28*	-0.06	0.17	0.25*	-0.09	-0.15	0.03	0.17	1.00

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

was found between exposure to community violence and drug use, with a significant, though weak, correlation with delinquency, indicating that greater exposure to community violence was associated with greater drug use and delinquency.

Of the correlations between program setting characteristics and outcomes, both aspects of supportive relationships with adult staff were significantly and moderately positively correlated with global self-efficacy. This indicates that more positive perceptions of trust and support from adult staff, and more positive regard of adult staff as mentors, were both associated with a greater perceived sense of control of one's life. Sense of community and connectedness was significantly and moderately negatively correlated with youth report of delinquency and psychological distress, while strongly positively correlated with global self-esteem and global self-efficacy. This indicates that a greater sense of community and connectedness within the drill team was associated with less psychological distress, more positive self-perceptions, and a greater perceived sense of control over one's life. Youth perception of deviant peer norms was significantly and moderately positively correlated with both physical aggression and psychological distress, while youth perception of prosocial peer norms was likewise correlated with global self-esteem and strongly positively correlated with global self-efficacy. Thus, more positive perceptions of drill team youths' acceptance of deviant behaviors were associated with more physical aggression and psychological distress, and more positive perceptions of drill team youths' acceptance of prosocial behaviors were associated with more positive self-perceptions and greater sense of control over one's life.

C. Additional Controls: Parental Monitoring and Involvement and Time Spent on Drill Team

Correlations for parental monitoring and involvement, and time spent on drill team, are also presented in Table 5. Neither parental monitoring and involvement nor time on drill team was correlated with exposure to community violence or youth report of problem behaviors or psychological distress. Parental monitoring and involvement, however, was moderately positively correlated with global self-esteem and global self-efficacy, indicating that more parental monitoring and involvement was associated with more positive self-perceptions and a greater perceived sense of control over one's life. Time spent on drill team was positively, though weakly, correlated with global self-efficacy, indicating that more time spent on drill team was associated with greater sense of control over one's life. Both parental monitoring and involvement and time spent on drill team were weakly positively correlated with both aspects of supportive relationships with adult staff. This finding indicates that more parental monitoring and involvement, and more time spent on drill team, were associated with more positive perceptions of trust and support from adult staff and more positive regard of adult staff as mentors. Only parental monitoring and involvement was moderately positively correlated with sense of community and connectedness, indicating that more parental monitoring and involvement was associated with a greater sense of community and connectedness in drill team. Only time spent on drill team was correlated with youth perceptions of both types of peer norms. Specifically, time on drill team was moderately positively correlated with perception of prosocial norms and weakly negatively correlated with perception of deviant norms, indicating more time spent on drill team was associated with more positive perceptions of drill team youths' acceptance of prosocial norms and more positive perceptions of drill team youths' rejection of

deviant norms. Table 6 presents a summary of model comparisons conducted, based on these findings.

D. Hypothesis Testing

Appendix A lists the loglikelihood values and scaling factors produced from utilizing the MLR estimator that was used for each model comparison, as well as R^2 results from each model. Results of the best fitting model were then interpreted. Results are presented by program setting characteristic and for significant results, predicting outcomes in the following order: 1) Physical Aggression, 2) Delinquency, 3) Drug Use, 4) Psychological Distress, 5) Global Self-Esteem, 6) Global Self-Efficacy.

1. Supportive Relationships with Adult Staff

The findings for youth perception of trust and value, and youth perception of mentor support, were similar. Neither the additive nor the moderator models predicting physical aggression explained a significant amount of variance in physical aggression, but both supportive relationships variables emerged as marginally significant predictors of physical aggression in both the additive and moderator models. Follow-up model comparisons revealed that the additive model was the best fitting model in both cases, which was improved by the model explaining physical aggression separately for younger versus older youth.

While both models for youth perception of trust and value and youth perception of mentor support accounted for a significant proportion of the variance in physical aggression only for the sample of youth ages 16 and younger, neither predicted physical aggression in either model. Exposure to community violence, however, was a positive predictor of physical aggression, but only for youth ages 16 and younger. Variance explained, regression coefficients, standard errors, and significance for all parameters in each model can be found in Table 7.

TABLE VI. MODEL COMPARISONS CONDUCTED

	Gender	Age	Parental Monitoring & Involvement	Time spent on drill team
Model by Program Setting Characteristic				
1. Youth perception of trust and value from program staff		X	X	X
2. Youth perception of mentor support from program staff		X	X	X
3. Youth sense of community and connectedness with drill team			X	X
4. Youth perception of prosocial peer norms				X
5. Youth perception of deviant peer norms				X
Outcome Models				
A. Physical Aggression				
B. Delinquency				
C. Drug Use				
D. Psychological Distress				
E. Global Self-Esteem	X		X	
F. Global Self-Efficacy			X	X

TABLE VII. SUMMARY OF MULTIPLE LINEAR REGRESSION ANALYSES RELATING EXPOSURE TO COMMUNITY VIOLENCE AND SUPPORTIVE RELATIONSHIPS WITH DRILL TEAM STAFF TO PHYSICAL AGGRESSION

Model/Predictor	Perceived Trust and Value Predicting Physical Aggression				Perceived Mentor Support Predicting Physical Aggression			
	R^2	β	SE	p	R^2	β	SE	p
Youth 16 & younger	0.28			0.05	0.28			0.05
Exposure to community violence		0.03	0.01	0.001		0.56	0.15	0.001
Perceived support moderator		-0.15	0.13	0.24		-0.15	0.13	0.25
Youth 17 & older	0.14			0.36	0.15			0.35
Exposure to community violence		-0.01	0.03	0.83		-0.07	0.39	0.86
Perceived support moderator		-0.31	0.40	0.44		-0.33	0.39	0.40

The moderator models for both supportive relationships with adult staff variables explained a marginally significant amount of the variance in delinquency.

Follow-up model comparisons revealed that the moderator models including parental monitoring and involvement improved model fit in both cases, explaining a significant amount of the variance in delinquency. The results revealed that parental monitoring and involvement was a negative, but marginally significant, predictor of delinquency. In addition, exposure to community violence positively predicted delinquent behavior. Youth perception of trust and value did not predict delinquent behavior, but there were significant interactions between exposure to community violence and both youth perception of trust and value, and youth perception of mentor support.

Simple slopes were tested for the association between exposure to community violence and delinquency at low ($-1SD$) and high ($+1SD$) levels of the program moderator variable (i.e., Aiken & West, 1991). Simple slopes revealed a positive relationship between violence and delinquency when youth reported less perceived support, but no relationship between violence and delinquency when youth reported more perceived support. The results suggest that the impact of exposure to community violence on delinquency is suppressed only under conditions of more positive perceptions of trust and support from adult staff or more positive regard of adult staff as mentors, following the protective-stabilizing pattern. See Table 8 for variance explained, regression coefficients, standard errors, and significance for all parameters in each model. Figures 4 and 5 display the relationship between exposure and delinquency at the levels of the youth-reported feelings of trust and value, and levels of youth reported mentor support, respectively.

TABLE VIII. SUMMARY OF MULTIPLE LINEAR REGRESSION ANALYSES RELATING EXPOSURE TO COMMUNITY VIOLENCE AND SUPPORTIVE RELATIONSHIPS WITH DRILL TEAM STAFF TO DELINQUENCY, DRUG USE, AND GLOBAL SELF-EFFICACY

Model/Predictor	Delinquency				Drug Use				Global Self-Efficacy			
	R^2	β	SE	p	R^2	β	SE	p	R^2	β	SE	p
Perceived trust and value	0.30			0.001	0.16			0.07	0.29			0.001
Parental monitoring and involvement		-0.21	0.11	0.07		-0.10	0.11	0.35		0.34	0.14	0.01
Exposure to community violence		0.03	0.01	0.001		0.03	0.01	0.005		0.005	0.12	0.67
Perceived trust and value		-0.23	0.17	0.18		-0.14	0.13	0.25		0.33	0.18	0.07
Exposure x perceived trust and value		-0.02	0.01	0.005								
Exposure to community violence at less perceived trust and value		0.80	0.16	0.001								
Exposure to community violence at more perceived trust and value		0.20	0.16	0.23								
Perceived mentor support	0.30			0.001	0.16			0.07	0.30			0.001
Parental monitoring and involvement		-0.21	0.11	0.07		-0.10	0.11	0.36		0.33	0.14	0.01
Exposure to community violence		0.03	0.01	0.001		0.03	0.01	0.005		0.01	0.12	0.95
Perceived mentor support		-0.24	0.17	0.16		-0.14	0.12	0.17		0.32	0.18	0.10
Exposure x perceived mentor support		-0.02	0.01	0.004								
Exposure to community violence at less perceived mentor support		0.81	0.16	0.001								
Exposure to community violence at more perceived mentor support		0.20	0.16	0.21								

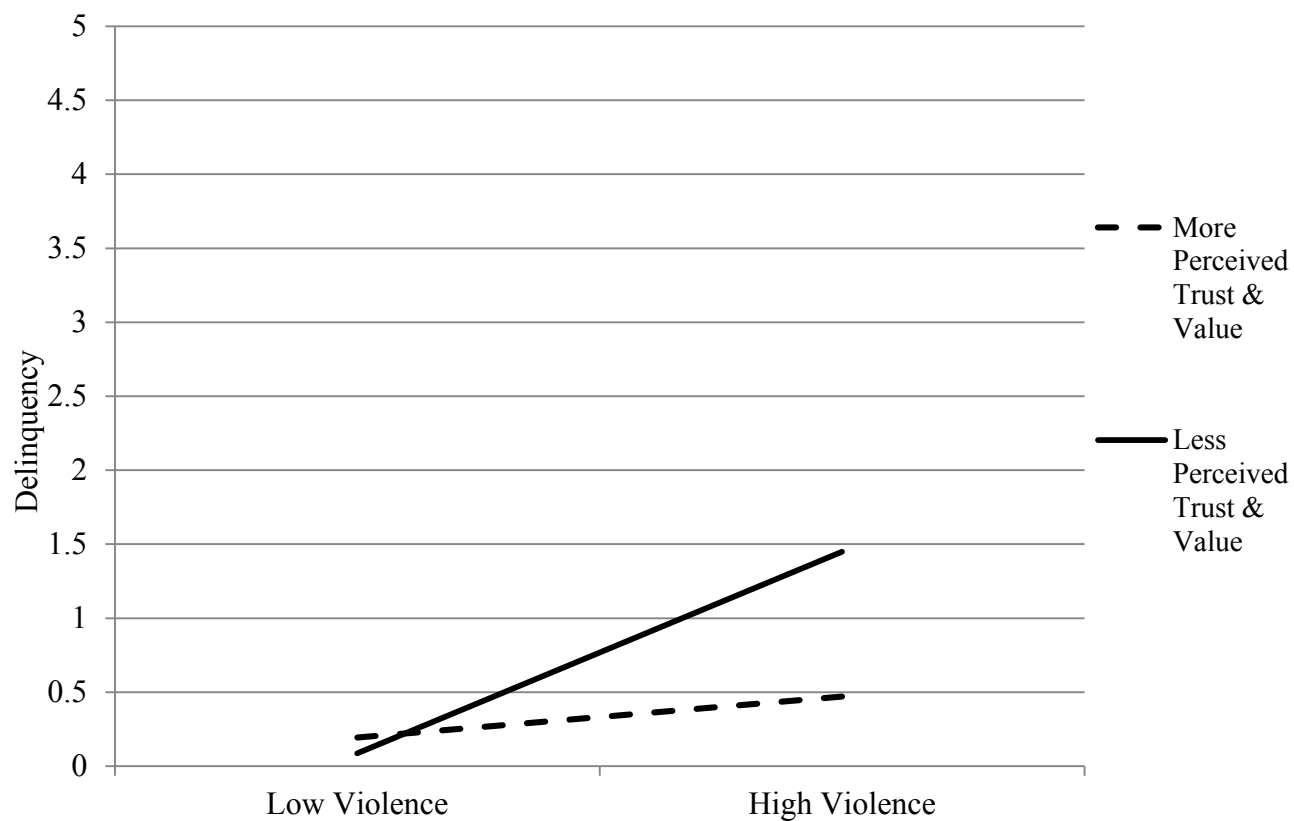


Figure 4. Simple slopes for the reported frequency of delinquent behaviors as a function of exposure to community violence and youth perception of trust and value from adult staff.

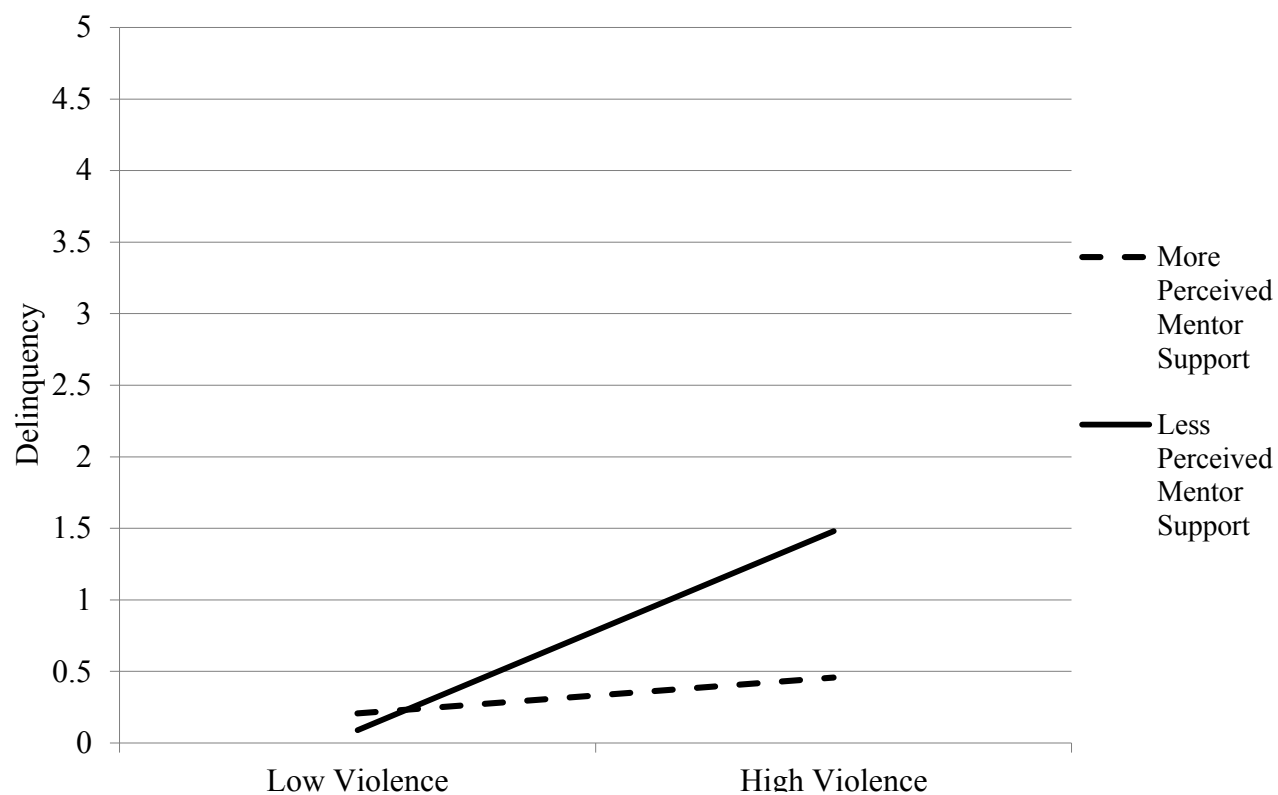


Figure 5. Simple slopes for the reported frequency of delinquent behaviors as a function of exposure to community violence and youth perception of mentor support from adult staff.

Both the additive and moderator models explained a marginally significant amount of the variance in drug use, but the additive model was retained as the better model for both supportive relationships with adult staff variables. Follow-up model comparisons further revealed that the additive model including parental monitoring and involvement was the best fitting model, which also explained a marginally significant amount of the variance in drug use. In this model, exposure to community violence was positively associated with drug use, but neither youth perception of trust and value nor youth perception of mentor support was associated with drug use. All model statistics can be found in Table 8.

Both the additive and moderator models predicting global self-efficacy explained the same amount of variance in their respective models for both supportive relationships with adult staff variables. Given that the amount was significant, the more parsimonious model was retained. The model including parental monitoring and involvement was retained as the best fitting model, explaining a significant amount of the variance in global self-efficacy. Parental monitoring and involvement was a positive predictor of global self-efficacy, but exposure to community violence was not related to global self-efficacy. Both youth perception of trust and value and youth perception of mentor support were marginally significant and positive predictors of global self-efficacy. All model statistics can be found in Table 8.

2. Sense of Community and Connectedness

Consistent with most models predicting physical aggression, the additive model including youth sense of community and connectedness fit the data better than the respective moderator model. Follow-up model comparisons revealed that adding the variable of time on drill team yielded the best model fit. The model with sense of community and connectedness and time on drill time explained a marginally significant amount of the variance in physical aggression.

Exposure to community violence was positively associated with physical aggression, and sense of community and connectedness was negatively associated with physical aggression. Thus, sense of community and connectedness is an overall protective factor in the relationship between exposure to community violence and physical aggression. Regardless of the extent to which youth are exposed to community violence, youth reporting a greater sense of community and connectedness overall reported less physical aggression. Regression coefficients, standard errors, and significance for all parameters in the model can be found in Table 9. See Figure 6 for a graph of this relationship. According to the model, time is unrelated to physical aggression.

The moderator model predicting delinquency accounted for a significant amount of the variance in delinquency, and fit the data better than the additive model and the other models including control variables. The moderator model revealed a significant positive relationship between exposure to community violence and delinquency, a significant but negative relationship between sense of community and connectedness and delinquency, and a significant interaction between exposure to community violence and sense of community and connectedness.

Simple slopes were tested for the association between exposure to community violence and delinquency at low (-1 SD) and high ($+1$ SD) levels of perceived sense of community and connectedness. Simple slopes revealed only a positive relationship between exposure to community violence and delinquency when report of the program setting variable was low. These results are consistent with a protective-stabilizing effect of sense of community and connectedness. That is, the main effect of exposure to community violence on delinquency is present only for youth who report less of a sense of community and connectedness within drill team while youth who report more of a sense of community and connectedness are protected

TABLE IX. SUMMARY OF MULTIPLE LINEAR REGRESSION ANALYSES RELATING EXPOSURE TO COMMUNITY VIOLENCE AND SENSE OF COMMUNITY AND CONNECTEDNESS IN DRILL TEAM TO YOUTH PROBLEM BEHAVIORS

Model/Predictor	Physical Aggression				Delinquency				Drug Use			
	R^2	β	SE	p	R^2	β	SE	p	R^2	β	SE	p
Model	0.24			0.09	0.32			0.03	0.31			0.001
Time spent on drill team		-0.07	0.10	0.49								
Exposure to community violence		0.36	0.12	0.002		0.02	0.01	0.001		0.03	0.01	0.001
Sense of community		-0.40	0.12	0.001		-0.33	0.09	0.001		-0.28	0.1	0.01
Exposure x sense of community						-0.02	0.005	0.001		-0.02	0.01	0.03
Exposure to community violence at less sense of community						0.65	0.11	0.001		0.71	0.13	0.001
Exposure to community violence at more sense of community						0.09	0.13	0.49		0.16	0.13	0.24

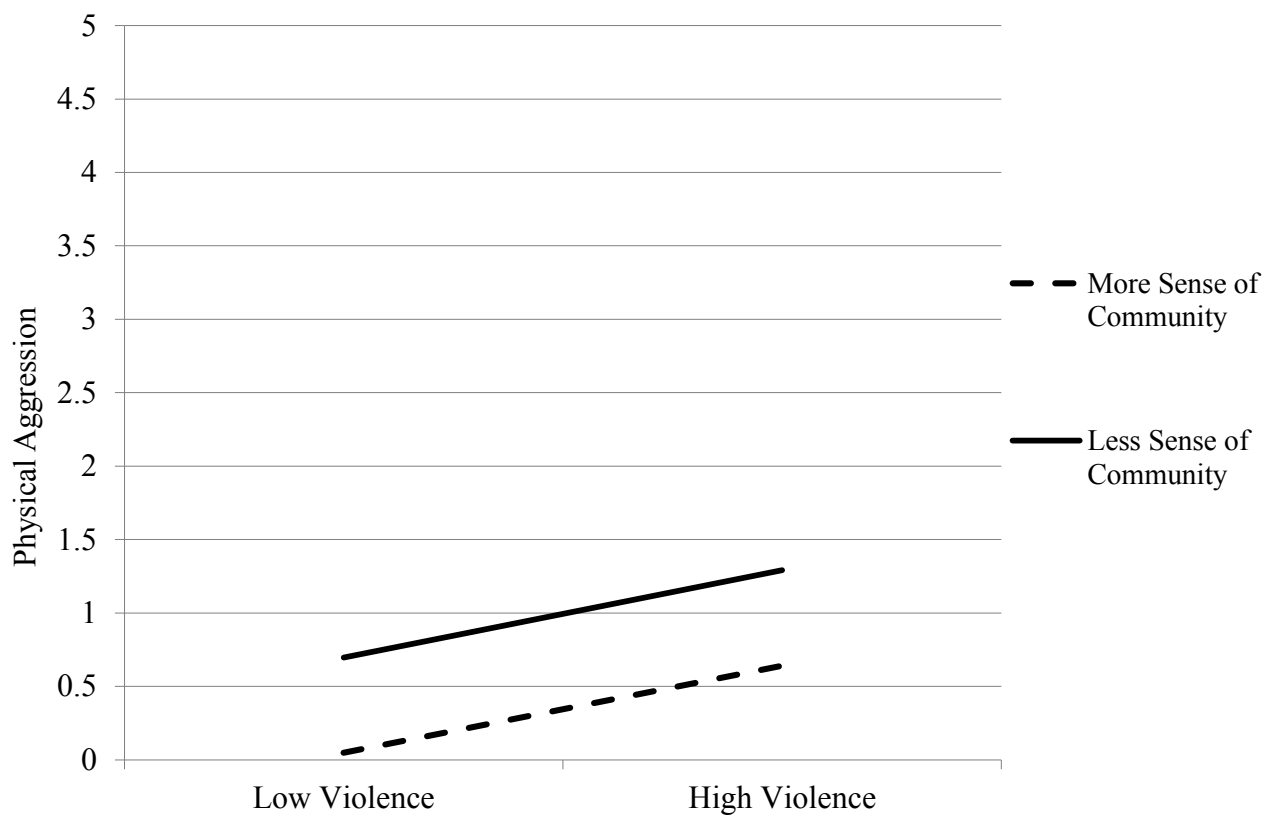


Figure 6. Regression lines for the reported frequency of physical aggression as a function of exposure to community violence and youth sense of community and connectedness.

from the negative outcome associated with exposure. See Figure 7 for an illustration of this effect. All model statistics can be found in Table 9.

The model predicting drug use followed the same pattern of results as the model predicting delinquency. Both the additive and moderator models predicted a significant amount of variance in drug use, but the moderator model revealed a better fit than the additive model and the other models containing control variables. In the moderator model, exposure to community violence was a positive predictor of drug use, sense of community and connectedness was a negative predictor of drug use, and there was a significant interaction between exposure to community violence and sense of community and connectedness.

Tests of simple slopes were conducted to follow-up the significant interaction through analysis of the relationship between exposure and drug use at low ($-1SD$) and high ($+1SD$) levels of the program setting variable sense of community and connectedness. Just as with delinquency, the positive main effect of exposure to community violence on drug use is present for youth who report less of a sense of community and connectedness within the drill team, but nonexistent for youth who report more of a sense of community and connectedness. Thus, there is more support for sense of community and connectedness as a protective-stabilizing factor. See Figure 8 for an illustration of this effect. Model statistics can be found in Table 9.

Neither the additive nor moderator model predicting psychological distress accounted for a significant amount of the variance in distress, but sense of community and connectedness was the only predictor that explained a significant amount of variance in psychological distress. Thus, the additive model was retained and fit the data better than other comparison models. In this model, exposure to community violence was not related to psychological distress, but youth sense of community and connectedness was a negative predictor. Therefore, the more connected that youth felt within the drill team, the less they reported symptoms of anxiety and depression.

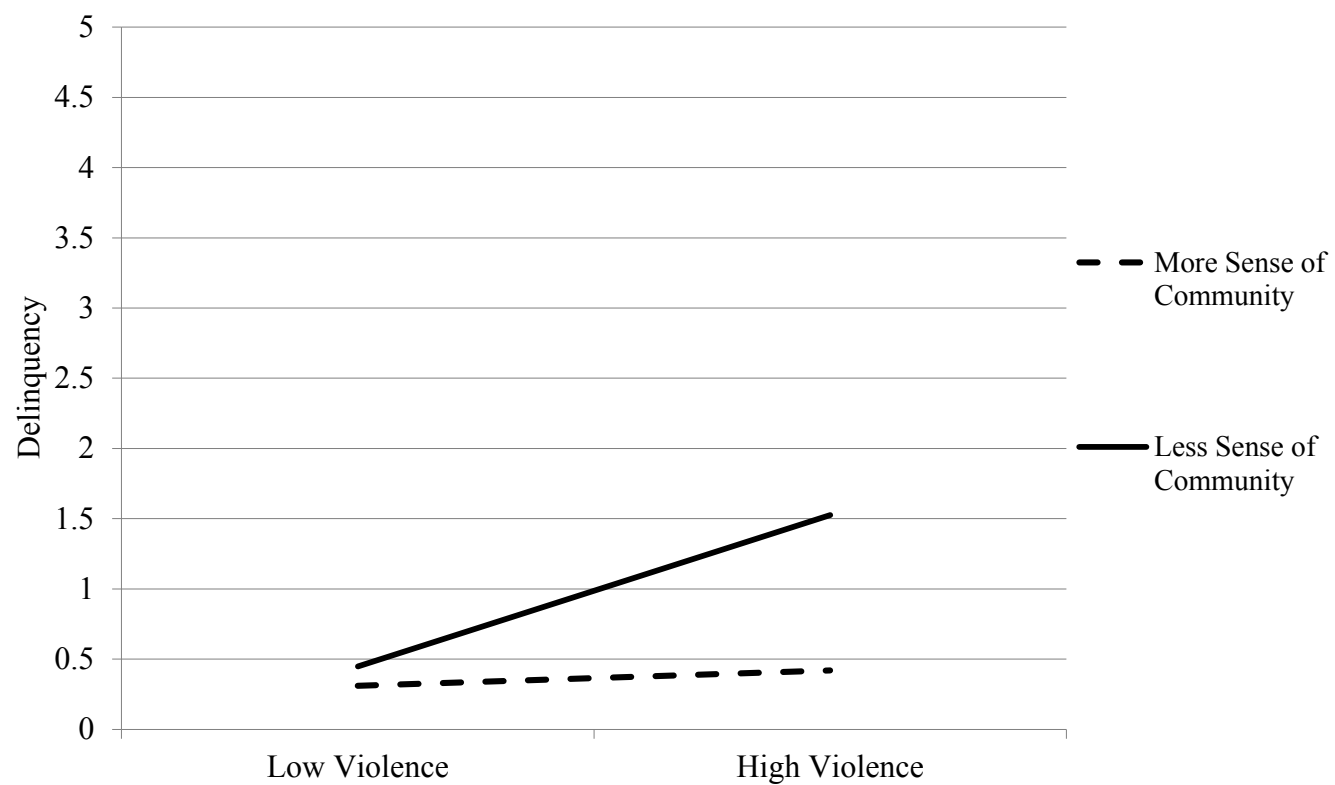


Figure 7. Simple slopes for the reported frequency of delinquent behaviors as a function of exposure to community violence and youth sense of community and connectedness.

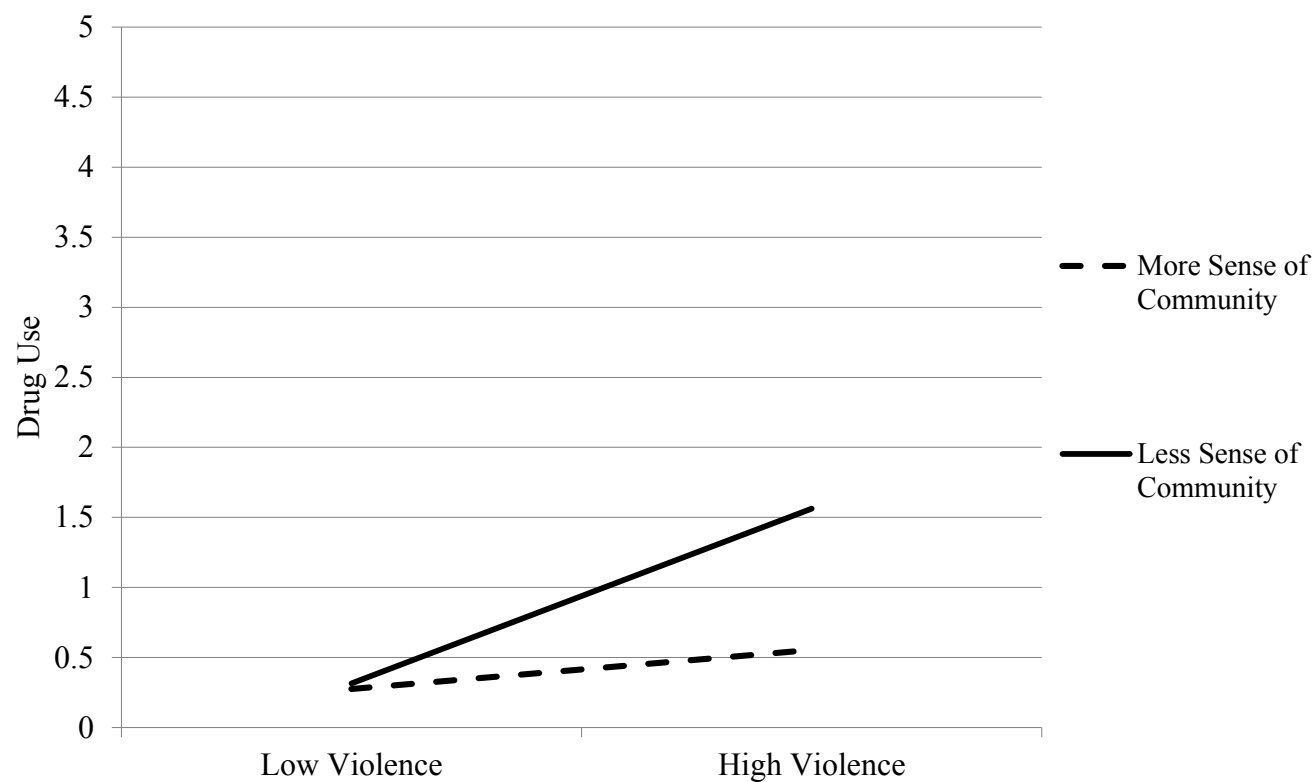


Figure 8. Simple slopes for the reported frequency of drug use as a function of exposure to community violence and youth sense of community and connectedness.

Regression coefficients, standard errors, and significance for all parameters in each model predicting psychological well-being outcomes can be found in Table 10.

Both the additive and moderator models explained a significant amount of the variance in global self-esteem, but the additive model was retained as the better fit. Follow-up model comparisons revealed that the model achieved a better fit when including time on drill team over other models. This model explained a significant amount of the variance in global self-esteem. In the model, time was not a significant predictor of global self-esteem, nor was exposure to community violence. Sense of community and connectedness, however, was a positive predictor of global self-esteem.

Both the additive and moderator models predicted the same amount of variance in global self-efficacy. The amount was significant and therefore, the additive model was retained as the better fit. The simple additive model was retained as the best fitting model over the other models including control variables. The model indicated that exposure to community violence was not a predictor of global self-efficacy, but sense of community and connectedness was significantly and positively predictive of global self-efficacy. Thus, the more connected that youth felt to the drill team, the greater their sense of being in control over their life.

3. Perception of Peer Norms for Behavior

a. Prosocial Norms

The prosocial norms model did not predict a significant amount of the variance in delinquency, but both the additive and moderator models indicated a negative relationship between prosocial norms and delinquency. Therefore, the additive model was examined as the better fitting model of the two although it only explained a small portion of the variance in delinquency. Follow-up model comparisons revealed the simple additive model was the best

TABLE X. SUMMARY OF MULTIPLE LINEAR REGRESSION ANALYSES RELATING EXPOSURE TO COMMUNITY VIOLENCE AND SENSE OF COMMUNITY AND CONNECTEDNESS IN DRILL TEAM TO PSYCHOLOGICAL WELL-BEING

Model/Predictor	Psychological Distress				Global Self-Esteem				Global Self-Efficacy			
	R^2	β	SE	p	R^2	β	SE	p	R^2	β	SE	p
Model	0.10			0.33	0.37			0.001	0.30			0.001
Time spent on drill team						0.00	0.02	0.99				
Exposure to community violence		0.13	0.22	0.55		0.00	0.01	0.95		0.01	0.01	0.19
Sense of community		-0.47	0.12	0.05		0.63	0.10	0.001		0.52	0.1	0.001

fitting model of those including control variables. As with other models explaining delinquency, exposure to community violence was positively associated with delinquency. Youth perception of prosocial peer norms was a negative but marginally significant predictor of delinquency. Therefore, the more positive youth's perceptions that their drill team peers endorsed prosocial behaviors, the lesser the amount of self-reported delinquent behaviors, regardless of degree of exposure to community violence. Thus, there was an overall protective effect of youth perception of prosocial norms in the relationship between exposure to community violence and physical aggression. Variance explained, regression coefficients, standard errors, and significance for all parameters in the models including youth perception of prosocial peer norms can be found in Table 11. See Figure 9 for an illustration of this effect.

Both the additive and moderator models explaining drug use accounted for the same amount of variance in drug use. The amount was significant and the additive model was retained as the better fitting model over the moderator model and the model including time spent on drill team. The model explained a significant amount of the variance in drug use. As with other models explaining drug use, exposure to community violence was a positive predictor. Perception of prosocial peer norms was not a significant predictor of drug use.

Both the additive and moderator prosocial norms models explained a similar and significant amount of variance in global self-esteem. Thus the additive model was retained as the better fitting model. The additive model was improved most by including separate models for each gender and the variable time spent on drill team. The model that included time accounted for a significant amount of the variance in global self-esteem for males, but not for females. While exposure to community violence was not related to global self-esteem for females, it positively predicted global self-esteem for males. Youth perception of prosocial norms, however, positively predicted self-esteem for both males and females. Thus, especially for males, there

TABLE XI. SUMMARY OF MULTIPLE LINEAR REGRESSION ANALYSES USING EXPOSURE TO COMMUNITY VIOLENCE AND YOUTH PERCEPTION OF PROSOCIAL PEER NORMS

Model/Predictor	Delinquency				Drug Use				Global Self-Esteem				Global Self-Efficacy			
	R^2	β	SE	p	R^2	β	SE	p	R^2	β	SE	p	R^2	β	SE	p
Model	0.12			0.13	0.12			0.03					0.32			0.001
Time spent on drill team																
Parental monitoring and involvement														0.31	0.10	0.002
Exposure to community violence		0.02	0.01	0.01		0.02	0.01	0.01						0.004	0.005	0.46
Perceived prosocial peer norms		-0.2	0.11	0.06		-0.16	0.11	0.11						0.53	0.09	0.001
Female									0.17			0.11				
Time spent on drill team										-0.02	0.03	0.49				
Exposure to community violence										-0.01	0.01	0.2				
Perceived prosocial peer norms										0.37	0.16	0.02				
Male									0.50			0.001				
Time spent on drill team										0.05	0.04	0.18				
Exposure to community violence										0.02	0.01	0.04				
Perceived prosocial peer norms										0.49	0.15	0.001				

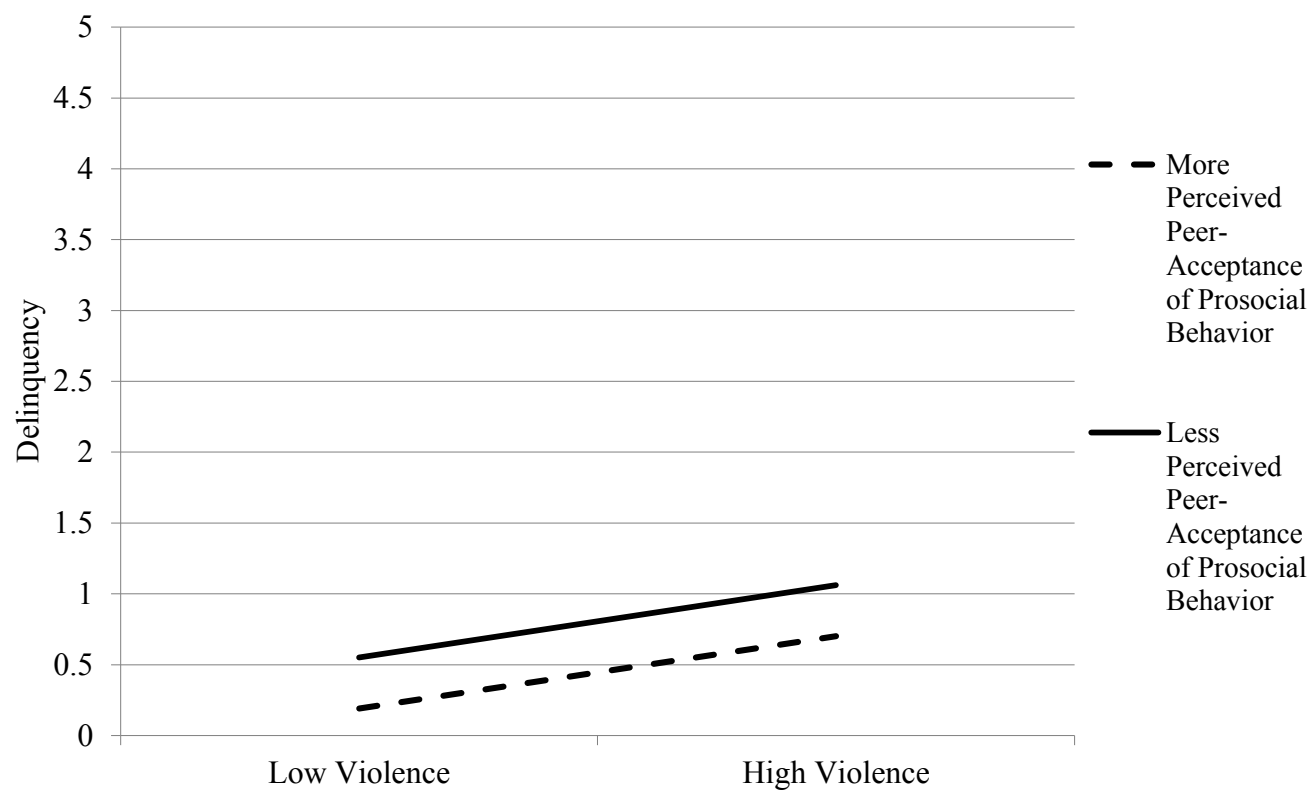


Figure 9. Regression lines for the reported frequency of delinquency as a function of exposure to community violence and youth perception of prosocial norms.

was an overall protective effect of perception of prosocial norms in the relationship between exposure to community violence and global self-esteem. Females' report of global self-esteem was not impacted by exposure to community violence, but perception of prosocial norms still revealed a benefit. Global self-esteem was positively associated with males' report of exposure to community violence. Time spent on drill team was not related to global self-esteem for either group. Figure 10 depicts the relationship between exposure to community violence, youth perception of prosocial norms, and global self-esteem for both groups.

Both the additive and moderator models predicting global self-efficacy predicted a significant amount of the variance in self-efficacy. The additive model emerged as the better fitting model, and was improved by the model including parental monitoring and involvement. Parental monitoring and involvement was a positive predictor of global self-efficacy. Exposure to community violence was not associated with global self-efficacy. Finally, youth perception of prosocial peer norms was a positive predictor of global self-efficacy. As with self-esteem, the more youth felt their peers approved of positive behavior, the higher their report of self-efficacy.

b. Deviant Norms

The additive and moderator models that included youth perception of deviant peer norms predicted similar amounts of variance in physical aggression; therefore, the additive model was retained as the better fit. The simple additive model fit the data better than the comparison model, that included time spent on the drill team. The results indicated a marginal relationship between exposure to community violence and physical aggression, but a significant and positive predictor of physical aggression, however. Accordingly, the more youth believed that deviant behaviors were acceptable by program youth, the more physical aggression they reported. Regression coefficients, standard errors, and significance for all parameters for the models

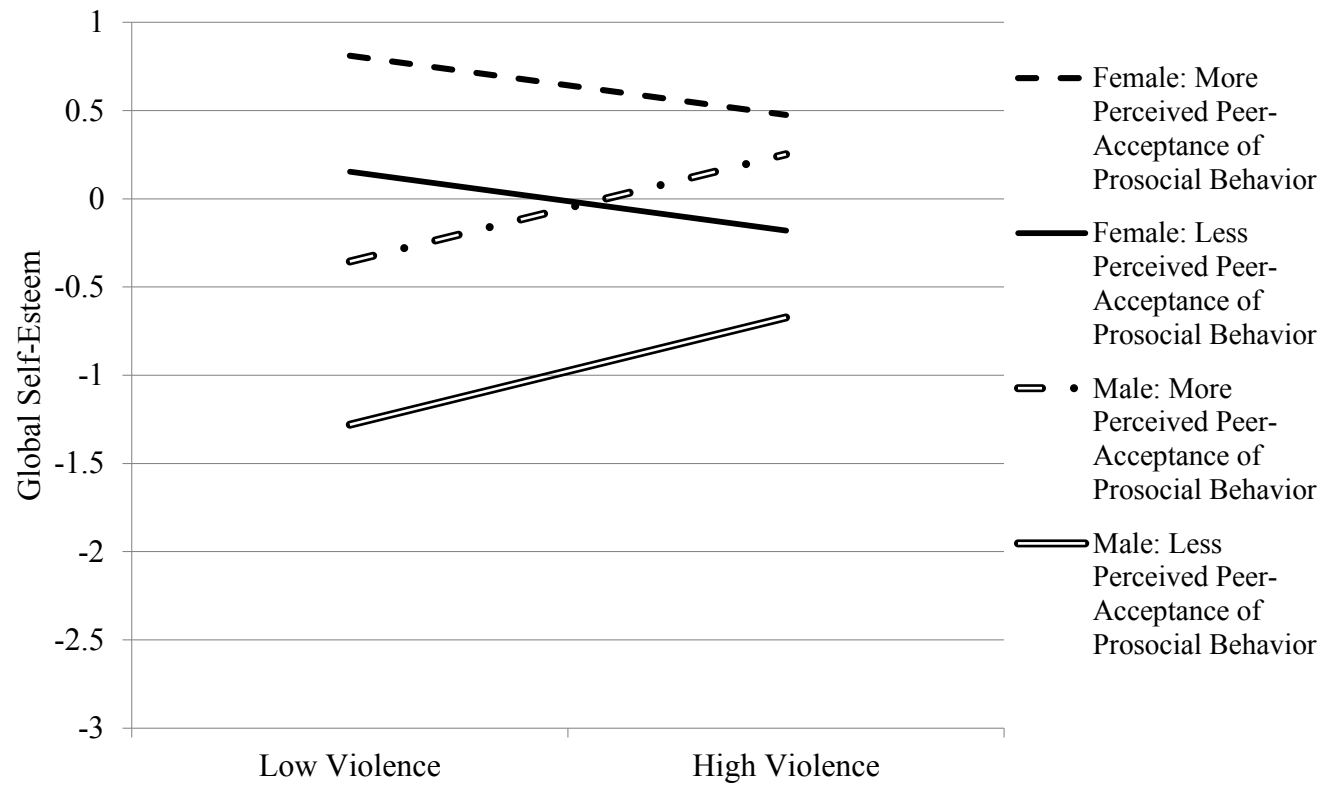


Figure 10. Regression lines for global self-esteem as a function of exposure to community violence and youth perception of prosocial norms for both females and males.

including youth perception of prosocial peer norms, can be found in Table 12. Figure 11 illustrates this effect.

The model explaining drug use followed a similar pattern of results as the model including perception of prosocial peer norms. Both the additive and moderator models explaining drug use accounted for the same amount of the variance in drug use. The amount was significant and therefore, the additive model was the better fitting model when compared to the moderator model. The simple additive model was also a better fit than the comparison models. As with other models explaining drug use, exposure to community violence was a positive predictor. As with perception of prosocial norms, perception of deviant peer norms was not a significant predictor of drug use.

The moderator model including perception of deviant norms accounted for a marginally significant amount of variance in global self-esteem, while the additive model was not significantly predictive of global self-esteem. The moderator model that included parental monitoring and involvement and gender fit the data better than the simple moderator model and the other comparison models. The model predicted a significant amount of the variance in global self-esteem. In the model, there was a marginally significant gender difference in which females reported higher global self-esteem than males. Parental monitoring and involvement positively predicted global self-esteem. There was no relationship between exposure to community violence and global self-esteem, nor between youth perception of deviant norms and global self-esteem, however, the interaction was significant.

Tests of simple slopes were conducted to follow-up the significant interaction through analysis of the relationship between exposure and drug use at low (-1 SD) and high (+1 SD) levels of the program setting variable perception of deviant norms. Results suggest a positive relationship between exposure to community violence and global self-esteem for youth

TABLE XII. SUMMARY OF MULTIPLE LINEAR REGRESSION ANALYSES USING EXPOSURE TO COMMUNITY VIOLENCE AND YOUTH PERCEPTION OF DEVIANT PEER NORMS

Model/Predictor	Physical Aggression				Drug Use				Global Self-Esteem			
	R^2	β	SE	p	R^2	β	SE	p	R^2	β	SE	p
Model	0.16			0.01	0.15			0.02	0.28			0.005
Gender										-0.42	0.22	0.05
Parental monitoring and involvement										0.29	0.11	0.01
Exposure to community violence		0.01	0.01	0.07		0.02	0.01	0.004		0.003	0.01	0.71
Perceived deviant peer norms		0.33	0.10	0.004		0.15	0.11	0.14		-0.14	0.09	0.41
Exposure x Perceived deviant peer norms										-0.01	0.00	0.01
Exposure to community violence at less perceived peer-acceptance of deviant behavior										0.21	0.20	0.29
Exposure to community violence at more perceived peer-acceptance of deviant behavior										-0.13	0.27	0.63

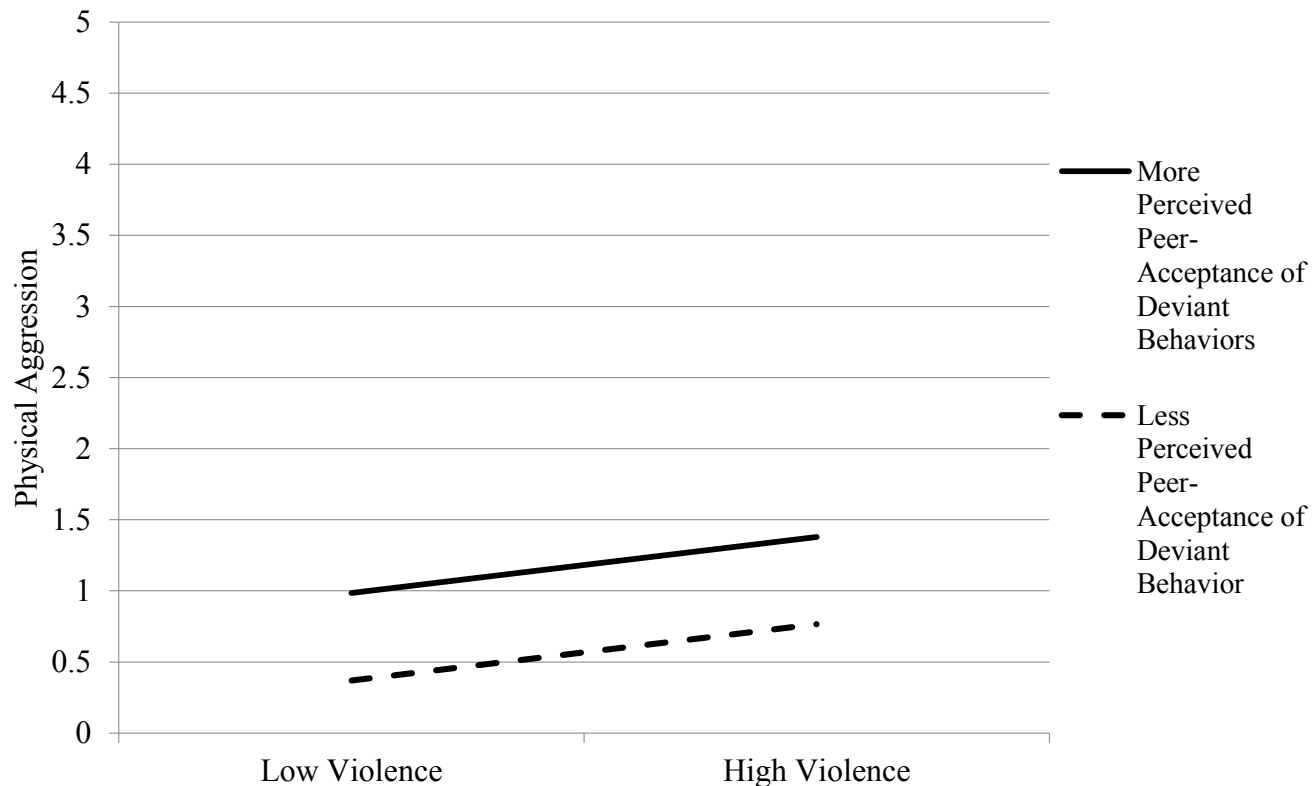


Figure 11. Regression lines for the reported frequency of physical aggression as a function of exposure to community violence and youth perception of deviant norms. *Note:* To remain consistent with other graphs, the line for low deviant peer norms is dashed to signify it as the more positive perception of the program.

reporting perceptions that peers are less accepting of deviant behaviors, but a negative relationship between exposure to community violence and global self-esteem for youth reporting perceptions that peers are more accepting of deviant behaviors. Neither slopes significantly differ from zero, however. The trend found suggests a potential protective-enhancing effect of youth perception of deviant norms in the relationship between exposure to community violence and global self-esteem. The results indicate that the more that youth perceived their drill team peers as rejecting deviant behaviors the less negatively they were impacted by exposure to community violence compared to their peers who tended to think that drill team peers accepted deviant behaviors. See Figure 12 for an illustration of this effect.

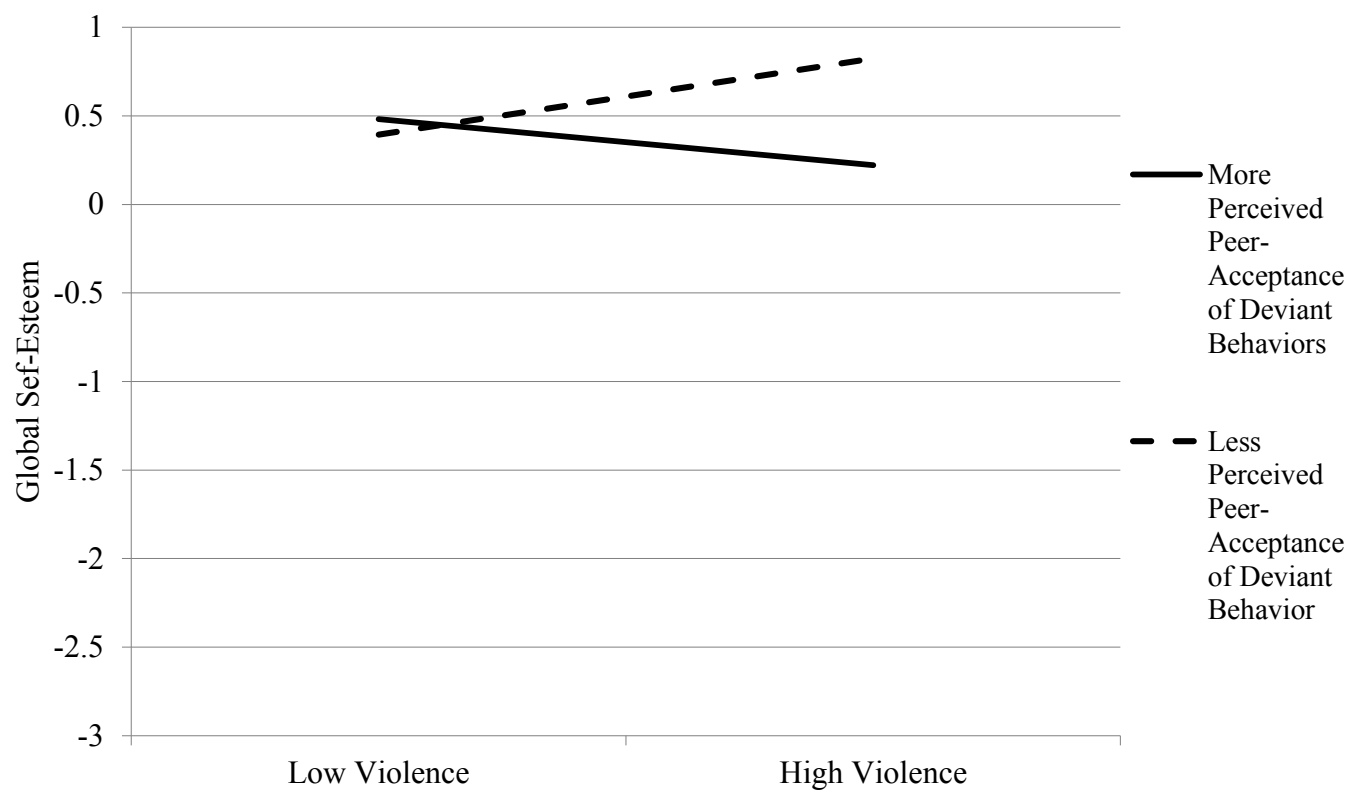


Figure 12. Simple slopes for global self-esteem as a function of exposure to community violence and youth perception of deviant norms.

VIII. DISCUSSION

A lot of research has documented the many negative outcomes associated with exposure to community violence for youth (e.g., Brenner, Zimmerman, Bauermeister, & Caldwell, 2013; Colder, Mott, Levy, & Flay, 2000; Gonzalez, Jones, Kincaid, & Cuellar, 2012; Hardaway et al., 2012; McMahon et al., 2012; Molnar, Cerda, Roberts, & Buka, 2005; Overstreet & Braun, 2000; Richters & Martinez, 1993; Wilson & Rosenthal, 2003). In the current study, participants, all from African American backgrounds, reported high levels of exposure to community violence in their communities. For example, half of participants witnessed someone getting shot and more than half saw someone beaten up in their neighborhood. One in five of youth reported being a shooting-victim, and more than a third reported being the victim of a beating or an attempted beating. Finally, almost all youth were targets or witnesses of violence-related activity.

Given such high levels of exposure to community violence and in accord with previous research, all youth development outcomes were expected to be negatively affected. Findings from the current study lent some support to this hypothesis. Specifically, greater exposure to community violence was related to greater delinquency and drug use. The expected positive association between exposure to community violence and physical aggression was only marginal for the overall sample, however, and emerged for youth 16 and younger but not for those 17 and older in certain models. Also unexpected, in light of previous research linking exposure to anxiety and depression, community violence exposure showed no relationship to such psychological outcomes as distress. One potential explanation for these unexpected findings is that, traditionally, community violence exposure research has assessed exposure in terms of whether youth were victimized or witnessed violence and additionally, in terms of the relationship of the victim to the youth (Fitzpatrick & Boldizar, 1993; Lynch & Cicchetti, 1998;

Martinez & Richters, 1993). These factors, however, were not examined in the current study. Thus, perhaps the aggression of younger (13-16 years) adolescents is more affected by general community violence exposure than that of older adolescents (17-20 years). These findings directly contradict previous research, which has found the opposite where the exposure and violence (aggression; e.g., Fowler et al., 2009) link was found for older, but not younger, youth. More research is needed to further understand differences in the impact of community violence exposure for youth of different age groups.

The absence of any relationship between violence exposure and psychological outcomes is understood from a different perspective. In the current study, youth's feelings or perceptions about violence might be muted or dampened. That is, the pervasiveness of violence in these youths' communities may have the effect of normalizing violence, essentially desensitizing youth and no longer provoking stress or anxiety (e.g., Fitzpatrick & Boldizar, 1993; Horn & Trickett, 1997; Ng-Mak, Salzinger, Feldman, & Stueve, 2004). The normalization of violence might also lead to youth becoming morally disengaged, in effect dulling their response to violence. The process of moral disengagement has explained how violence exposure might beget physical aggression (Ng-Mak et al., 2002).

Echoing the findings on psychological distress, there was very limited support observed for the relationship of community violence exposure with psychological well-being, including global self-esteem and self-efficacy. Previous research has found that community violence diminishes these personal resources, such as through decreased hopelessness, among groups living in neighborhoods with high rates of violence and poverty (Stoddard et al., 2011), for example. Although poverty levels were not indexed at a community level in the current study, the majority of these youth came from households ranging from 130-185% of the poverty

guideline (as per free- and reduced- price lunch status). Theory and research attribute the relationship between neighborhood and self-efficacy in disadvantaged neighborhoods to the lack of exposure residents have to activities that promote mastery and lead to efficacy (i.e., Bandura, 1986; e.g., Boardman & Robert, 2000). Individuals living in neighborhoods with higher income levels have more opportunities to participate in experiences that lead to a greater sense of self-efficacy. Given exposure to community violence had no association with self-efficacy in the current sample, it could be that participation in the drill team, which has several opportunities for building efficacy, contributes to youths' self-perceptions in a way that diminishes any impact of exposure to community violence (e.g., Larson, Eccles, & Gootman, 2004). To answer this question, additional research would need to compare the self-perceptions of youth participating in organized youth activities that build self-efficacy with a control group, while considering youths' level of exposure to community violence.

Ironically, there was one model in the current study that found that more exposure to community violence was associated to more positive global self-esteem for boys. Some researchers have found varying effects of exposure based on sex, but they are most often a negative impact of exposure for one sex and not the other (e.g., Farrell & Bruce, 1997; Fitzpatrick & Boldizer, 1993; Jenkins & Bell, 1994; White, Bruce, Farrell, & Kliewer, 1998). Still, no studies were found that showed a positive relationship between exposure and psychological well-being for males. Though positive, the effect of exposure on global self-esteem is very small in this study, and sex does not emerge in any other models as leading to significant differences in the outcome. Thus the relationship between exposure to community violence and self-esteem needs to be investigated more thoroughly to understand differences.

In view of the toll that violence exposure takes on youth, this study aimed to identify an avenue of potential intervention for protecting African American youth against negative effects. Specifically, this study examined the protective potential of organized youth activity settings, in particular, the specific features of the setting, for youth exposed to community violence in a highly engaging and relevant setting for this population – the community-based dancing drill team. Research has documented the relevance of community- and arts-based programming for African American youth living in risky neighborhoods, and the influence of youth activity setting features on youth developmental outcomes (e.g., Heath & McLaughlin, 1993; Tseng & Seidman, 2007; Yakin & McMahon, 2003). It was hypothesized that supportive relationships with adult staff, sense of community and connectedness, and norms for behavior would attenuate the impact of exposure to community violence for youth who had more positive perceptions of these setting features in the drill team setting.

One important feature of the drill team setting that proved important in youths' experience of community violence was relationships with adult staff. It was expected that supportive relationships with drill team adult staff would protect youth exposed to higher levels of community violence from negative behavioral outcomes, including delinquency and drug use. The hypothesis was supported for the outcome delinquency. When factoring in youths' relationships with drill team staff, greater exposure to community violence was related to greater delinquency, only for youth who perceived less support from drill team staff. Exposure to community violence was not associated with delinquency for youth who perceived more support from drill team staff. Thus among youth exposed to higher levels of community violence, youth who also perceived less support from drill team staff reported significantly more delinquent behavior than their peers who perceived more support from drill team staff. Furthermore, youth

exposed to higher levels of community violence looked similar to their peers exposed to lower levels of community violence in terms of their report of delinquent behavior (protective-stabilizing). At the same time, youth who perceived more support from program staff also reported more parental involvement from their parents. Thus, these findings suggest the unique importance of supportive relationships with adult staff beyond that of parental relationships.

The hypothesis about supportive relationships with adult staff was not supported in the case of drug use. The literature reveals mixed findings about the relationship between drug use and supportive relationships that may explain this finding. One study, for example, found mentor support to be associated with less illicit drug use and cigarette use, but not alcohol use (Beier, Rosenfeld, Spitalny, Zansky, & Bontempo, 2000). Other studies, however, have not found an adult support-drug use link for youth (e.g., DuBois & Silverthorn, 2005). DuBois and Silverthorn (2005) suggest that adult mentors may not be effective at decreasing youth drug use because they may unintentionally display approval of drug use, by drinking alcohol for example, a lawful activity for adults. In addition, certain forms of drug use may be normative among older adolescents (e.g., drinking wine or beer) and therefore, be less likely to change even with support from adults.

Although results varied for the relationship between exposure to community violence and aggression, youths' positive perceptions of supportive relationships were expected to be associated with less aggression. Yet youths' perceptions of support from adult staff were not related to youths' aggressive behavior, rejecting this hypothesis. The absence of this finding may be related to the fact that while the drill team program targets problem behavior such as school suspension and expulsion, teenage pregnancy, or the consequences of delinquent behaviors, it does not target aggressive behavior. Perhaps if such a mandate was explicit, aggression might be

more likely to decrease. Research suggests that behavior change is in part related to program staff's specific communication of behavioral norms (e.g., Eccles & Templeton, 2002). Youths' investment in the drill team experience may motivate them to heed an anti-aggression mandate.

Youths' perceptions of supportive relationships were also not related to psychological and well-being outcomes. This finding contradicts both the study hypothesis and a wide body of research (Dubois & Silverthorn, 2005; Roffman et al., 2001; Smoll, Smith, Barnett, & Everett, 1993; Taylor & Brunner, 2012). For example, this research indicates that praise and support for achievement would be expected to lead to the well-being outcome of enhanced self-esteem (e.g., Colchico, Zybert, & Basch, 2000). In the context of the current study, however, praise and support may be weakened or even nullified by the inherently evaluative nature of the drill team context involving training and preparation for performance and competitions.

Another important feature of activity settings is the sense of community and connectedness that might be cultivated. Consistent with the literature, this study predicted that youth who perceived a greater sense of community and connectedness would be protected against the negative behavioral outcomes associated with exposure to community violence, including delinquency and drug use. Furthermore, in accord with results of previous studies, youth exposed to less community violence were expected to benefit more from such a sense of connectedness compared to their counterparts. This anticipated protective-reactive effect, however, was not found. Instead, sense of community and connectedness followed a protective-stabilizing pattern, similar to that found for supportive relationships, in the case of both delinquency and drug use outcomes. Level of community violence exposure had no bearing on delinquency and drug use outcomes for youth with a greater sense of community and connectedness in the drill team, despite the association, which remained for youth with a lesser

sense of community and connectedness. Thus among youth exposed to higher levels of community violence, those with a lesser sense of community and connectedness reported significantly higher delinquency levels and greater drug use than their peers with a greater sense of community and connectedness in the drill team. Youth exposed to higher levels of community violence reported similar lower levels of delinquency and drug use as their peers exposed to lower levels of community violence (protective-stabilizing). In addition, youth with a greater sense of community and connectedness reported lower levels of aggressive behavior and better psychological well-being than youth with a lesser sense of community and connectedness, regardless of community violence exposure level. Each of these findings are inconsistent with Battistich and Hom's (1997) research suggesting that less vulnerable youth stand to benefit more from a sense of community and connectedness. Despite the lack of support for this hypothesis, findings are compelling and signify the importance of connectedness for youth exposed to high levels of community violence, and for African-American youth living in urban communities regardless of the level of community violence.

Gaining a sense of community and connectedness is thought to be one of the most important outcomes of participating in organized youth activities, in particular given its relevance to psychological well-being (Baumeister & Leary, 1995). Previous studies have found that youth from minority and disadvantaged backgrounds are at-risk for interacting in settings where there is less opportunity for feeling a sense of belonging and ultimately, for the sense of "mattering" that connectedness affords (Baumeister & Leary, 1995; Eccles & Gootman, 2002; Hahn, Leavitt, & Aaron, 1994; Smith et al., 2013). Stoddard and colleagues (2013) found that youth who experience a high level of exposure to community violence, specifically, develop a greater need for meaning and purpose in their lives. Together, these studies suggest a differential

need for sense of community and connectedness related to exposure to community violence. The findings differentiating the negative behavior of youth exposed to high levels of community violence, suggest this. As was shown, outcomes did not vary with perceptions of connectedness for youth with low exposure to community violence. Indeed, youth exposed to higher degrees of community violence have better outcomes if they also have more positive perceptions of connectedness.

As it relates to the current study, indigenous programs like the dancing drill team have been known to foster a sense of family and a positive sense of self for youth, who may not have a sense of belonging in other contexts (e.g., Heath & McLaughlin, 1993). Consistently, all youth in the current study that reported a greater sense of community and connectedness with the drill team reported less anxiety and depression, greater self-worth, and more positive self-beliefs about control and mastery in life. Greater connectedness was also related to less physical aggression for all youth in the study, regardless of their level of exposure to community violence. Thus, all youth benefitted from positive perceptions of drill team community and connectedness for outcomes in which exposure to community violence was not taken into account.

A final feature of youth activity settings that was examined in this study was peer norms. It was expected that youths' understanding of acceptable and unacceptable behaviors by their drill team peers' standards would protect against the outcomes associated with exposure to community violence (delinquency and drug use). More specifically, youth exposed to high levels of community violence who thought their drill team peers endorsed prosocial behaviors and rejected deviant behaviors were expected to report less delinquency and drug use than those who thought their drill team peers were less endorsing of prosocial behaviors and rejecting of deviant behaviors. This hypothesis was not supported, but youths' perceptions about peer-accepted and –

rejected behavior related to negative outcomes regardless of level of community violence exposure. Specifically, youth who thought their drill team peers were more endorsing of prosocial behaviors reported lower levels of delinquency. In addition, youth who thought their drill team peers were more rejecting of deviant behaviors reported lower levels of physical aggression. The absence of a relationship between perceived peer norms and drug use, and a potential reason the association between exposure to community violence and outcomes was not altered, could be related to the broad spectrum of peer norms investigated. Many studies that have found a link between peer norms and outcomes examine norms in relationship to directly relevant outcomes. For example, studies have found an association between youth perceptions of peer substance use norms and outcomes involving substance use specifically (e.g., Wambeam, Canen, Linkenbach, & Otto, 2013). Given that the current study did not examine perceptions about a particular type of norms, findings thus indicate that youths' aggression and delinquency are related to their perceptions of peer norms in general, rather than to norms about aggression and delinquency, specifically. In terms of drug use, however, given that drug use is unaltered by perceptions of peer endorsement of prosocial behavior or rejection of deviant behavior, while such negative behaviors as aggression and delinquency are, drug use may be more normative among youth. Such an interpretation would be consistent with the other drug use finding in this study where social support bore no relationship to drug use in the case of youth exposed to higher levels of violence.

Beyond associating with outcomes related to exposure to community violence, perceived peer prosocial norms also differentiated psychological well-being. Youth who thought their drill team peers endorsed prosocial behaviors reported higher levels of self-esteem and self-efficacy than their counterparts who thought their peers were less endorsing of prosocial behaviors,

regardless of level of exposure to community violence. This suggests that how youth see themselves is associated with their perception of their peer group. That is, youth have more positive thoughts about themselves when they perceive their peers as endorsing positive behaviors. This is consistent with social identity theory and findings that feelings about one's group impact feelings about self (Turner, Hogg, Oaks, Reicher, & Wetherell, 1987). It could also mean that youth that think more positively of themselves also think their peers are more supportive of prosocial behaviors. The same is true for the association between prosocial peer norms and aggression and delinquency. The study of prosocial peer norms on youths' psychology is a major contribution to this study. There are very few studies that consider the impact of peer norms on youths' psychology. Longitudinal research that permits for the assessment of causality may help explain this relationship.

Overall, youths' positive perceptions of the organized youth activity setting features differentiated outcomes associated with exposure to community violence. Not all setting features interacted in the expected way, however, and perceptions of setting features were generally associated with positive outcomes for youth regardless of level of exposure to community violence. Sense of community and connectedness was associated with diminished negative outcomes for both outcomes associated with high exposure to community violence, delinquency and drug use. Supportive relationships with adult staff, and perceived peer norms, were associated with decreased delinquency. Beyond these potential protective-stabilizing effects, each feature of the youth activity setting provided potential protective effects, suggesting the feature promoted more positive outcomes for youth with more positive perceptions of setting features than youth with less positive perceptions of setting features, regardless of level of exposure to community violence. Physical aggression levels and psychological distress were

lower, and global self-efficacy and global self-esteem were higher, for all African American youth who held more positive perceptions of the activity setting features that were examined.

A. Strengths and Limitations

Key in this study was the use of measures of perception in indexing degree of community violence and quality of activity setting features. Measures of perceptions, rather than objective measures, have been shown to provide a more accurate picture of youth's experiences in their environment and provide a better predictor of outcomes than demographic neighborhood indicators, such as crime rate data (Shumow, Vandell, & Posner, 1998). As such, the current study was able to identify the aspects of the activity experience that led to developmental outcomes for participants.

Another strength of this study was a design that allowed for the avoidance of selection effects. Selection effects are the most commonly cited limitation of studies analyzing the impact of program participation (e.g., Eccles & Templeton, 2002). The current study focused on a sample in which all participants were involved in the same activity. Thus, findings cannot be accounted for by selection effects, which makes these all the more valid.

Despite these strengths, the current study was hindered by several limitations. For one, the small sample size limited power and the statistical procedures that could be used in data analysis. For example, there was not enough power to include multiple control variables in one model, but step-wise regression was a reasonable alternative, allowing for the test of controls and maintaining parsimony. As in any study, however, there may have been control variables that contributed to some of the variance in study outcomes that were not included in the tested models, as only variables that were correlated with the moderator or outcome variables were included as controls. This technique was chosen to ensure that variables most likely to interfere

with the observed effects would be included. Thus, it is assumed that the observed effects would remain the same if all control variables were included in each model tested. A bigger sample size would allow for more precise testing, however.

One of the data analytic issues created by the small sample size was that it limited model convergence. That is, there were too many items in a scale for the model to converge with the size of the sample in the current study. As a result, a number of independent regressions were used. This was particularly true for the analysis of supportive relationships with adult staff, in which two scales (i.e., youth perception of trust and value, and mentor support), were modeled separately on the outcome in two independent regressions. These two scales were highly correlated, however, and conducting separate models prohibited the possibility of detecting overlapping variance. In light of these issues, research is needed that employs a large enough sample to allow for the test of model convergence in the question of whether or not differing aspects of supportive relationships uniquely protect youth exposed to community violence.

Another potential limitation of the study is its cross-sectional design, which prohibited the determination of causality. In addition, this design did not allow for the assessment of behavioral and mental health prior to exposure to community violence or participation on the drill team. Most studies examining the effects of participation in youth activities have not controlled for prior outcomes, which results in the potential overestimation of the impact of program participation on outcomes (Bohnert, Kane, & Garber, 2008). Future research must be conducted using a longitudinal design in order to allow for the test of causality and to understand the direction and maintenance of the effect of both perceptions of the activity setting and exposure to community violence.

A final limitation to note is the limited generalizability of the findings in this study. The context of the drill team setting is unlike the settings of many other youth activities. The community-based drill team, and the participants it attracts, may be different than the setting of the school-based drill team and its participants, for example. Thus, the relationships found between different variables in the current study should be examined in multiple youth activity contexts to understand the broader relevance of these results. It should be noted that the drill team encompasses many of the “SAFE” features of evidence-based programs outlined by Durlak and Weissberg (2007). That is, the program 1) uses a sequenced set of activities to achieve their goals, 2) uses active learning techniques to help the participants acquire the skills, 3) is at least in part focused on personal or social development, and 4) has explicit objectives for the personal and/or social skills. These researchers found that programs having each of these elements were more likely to lead to positive youth development outcomes than programs that did not. Taking this into consideration, this study found that youth perceptions do matter, at least in a program that has the program features outlined by Durlak and Weissberg (2007). The highly engaging context of the community-based drill team may also add significance to the activity studied. Additional studies that examine multiple programs can further understand the role of these factors in the impact of youth activity setting features.

B. Directions for Future Research

This study highlights the importance of studying youths’ perceptions of organized youth activity settings. Research has recently begun to focus on aspects of youth experiences in activities that contribute to outcomes. Those studies assessing elements of the setting, instead of elements of the activity, have been based on observer reports. Previous research found that youth perceptions of these components vary (Gambone & Arbretton, 1997), and little research has

considered the impact of this variance on youth outcomes. Youths' perceptions could be more important for youth at risk for engaging in negative behaviors or presenting negative mental health outcomes, such as ethnic minority youth exposed to community violence. In the current study, African-American youth were positively impacted by positive perceptions of a program setting that is highly engaging and relevant for this particular group. Future research should assess youth perceptions across multiple youth activity settings and program types, as well as study the impact of perceptions of multiple facets of the setting simultaneously. In addition, a study identifying profiles of youth based on their perceptions of setting features would provide a more comprehensive understanding of both youths' experience and the impact of program features on outcomes. This may lead to understanding the unique effects of particular aspects of the youth activity setting. Furthermore, large studies with the power to account for multiple control variables would help to parse out other effects.

In light of finding little impact of exposure to community violence on youth internalizing problems in this study, more research is needed to understand the impact of exposure on mental health, including the impact of onset of exposure to violence as recommended by others (e.g., Lynch, 2003), the types and salience of violence exposure, and other potential moderators. Given that global self-esteem and efficacy are seen as protective factors of the impact of exposure to community violence on youth outcomes, studies should also examine global self-esteem and efficacy as potential mediators of the relationship between youth perceptions of the activity setting and developmental outcomes. As exposure to community violence was not related to psychological well-being, but youth perceptions of the activity setting were and were also predictive of externalizing behaviors, it could be that psychological well-being explains the

relationship between setting and outcomes. This is suggested by previous research but has not been measured and assessed quantitatively.

C. Implications for Practice

Study findings suggest the importance and benefit of activity settings that foster a sense of community for youth. One way of realizing such a goal through organized youth activities is suggested by the work of Eccles and Gootman (2002). These researchers suggest that programs: 1) should provide youth with opportunities for meaningful inclusion and for sociocultural identity formation; 2) should be socially inclusive, socially engaging, and integrating; and, 3) should provide support for cultural and bicultural competence. Team activities that foster the kind of confidence and self-worth that would be fostered through participation in an activity program, and recognition of team success, may be particularly good for low-income ethnic minority youth (Heath & McLaughlin, 1993). A sense of mattering/belonging is also fostered through allowing older members to teach younger members (Heath & McLaughlin, 1993).

Supportive relationships with adult staff were also important protective factors for youth overall, and even stabilized delinquent behavior for youth exposed to high levels of community violence, in particular. It is important for program leaders to model good behavior, such as guarding against behavior and conversation that indicates drug use (DuBois & Silverthorn, 2005). Based on findings, praise and support may be essential for youth in programs involving high levels of critique, such as in the performance or sports fields. Receiving emotional support, guidance, secure attachment, and responsiveness is extremely important for youth in programs living or engaging in high-risk neighborhoods.

The study found that perceived social norms in an organized youth activity may be youth outcomes, such as the way youth think about themselves. It is a primary responsibility of

program staff to have rules for behavior, expectations, injunctions, ways of doing things, and values and morals that shape norms (Eccles & Gootman, 2002). Those expectations for positive behavior and consequences for negative behavior must be clearly defined and communicated to impact social norms (Roth & Brooks-Gunn, 2003; Kirby, 1997, 2001; Eccles & Templeton, 2002). Perceptions of peer norms were broadly related to positive outcomes for all youth in the study, indicating their importance. Thus, regardless of program participants' backgrounds, programs should make an effort to establish positive peer norms.

Practitioners may also strategize to provide additional support to youth 16 and younger, as these youth reported significantly less supportive relationships with adult staff, and were more influenced by exposure to community violence, particularly as it related to physical aggression. Other considerations include the need for support in the case of youth with weak parental relationships and for males, both through the fostering of higher self-esteem and self-efficacy.

In summary, it is important for indigenous programs is a focus on providing quality programs, attending to youth perceptions of these setting characteristics and assessing correlations with their mental health and behavior. Program efforts to measure program quality will help with the improvement of programs that can positively impact youth, whereas documentation of program quantities (e.g., number served) cannot directly inform program changes.

D. Implications for Policy

The impact of exposure to community violence on children and youth is becoming more and more documented in research. Programs focused on preventing and reducing violence that are culturally-appropriate are needed. Additional support must be provided to disseminate programs to a diverse array of organizations that have wide reach and can serve communities and

populations that experience a high degree of violence. The same is needed for programs serving witnesses and victims of violence, as indicated by the findings of this study, including these youths' increased physical aggression, delinquency, and drug use, regardless age, gender, and parental involvement. Research shows that youth most vulnerable to exposure are the least likely to receive services (e.g., Day & Roberts, 1991); therefore preventive interventions that are easily accessible and are able to address the onset and maintenance of these behaviors must continue to be researched and provided to communities and populations in need.

Participation in an indigenous community-based organized youth activity provided an opportunity for all youth and youth exposed to community violence in this study to have positive experiences that were associated with diminished physical aggression, delinquency, and drug use, and better psychological health outcomes. Organized youth activities, especially those reaching youth in communities affected by community violence, must be supported. Many times programs serving youth deeply impacted by community violence are not found in school settings. Oftentimes, these youth may have adverse school experiences that affect the availability or access to positive support (e.g., Kahne et al., 2001). Youth may find more in common or be more comfortable in activity program settings. But activity program contexts are not without their risks, as this study showed. Specifically, when youth perceived their peers as accepting of deviant behaviors they experienced negative behavioral and psychological outcomes. Thus, funding and support of locally-derived, community-based programs must include the requirement of ongoing monitoring of program quality (e.g., Granger, Durlak, Yohalem, & Reisner, 2007).

IX. Conclusion

Only three studies have previously examined the impact of participation in organized youth activities on the relationship between exposure to community violence and youth developmental outcomes. This study builds on evidence suggesting that participation attenuates the impact of exposure to community violence (Hardaway et al., 2012; Yakin & McMahon, 2003). In addition, this study also contributes to research that participation increases youths' positive developmental outcomes regardless of neighborhood risk. Moreover, this study helps to “unpack” the black box of activity settings by showing that youths' perceptions of the activity setting contribute to outcomes among youth participating in the same program. Youths' perceptions of the activity setting moderated the impact of exposure to community violence on outcomes. The association between supportive relationships with adult staff, sense of community and connectedness, and peer norms, with youth developmental outcomes in the context of exposure to community violence were strong. Organized youth activities serving youth exposed to community violence must take steps to create positive environments for youth that are supportive, engaging, connecting, and have high standards for youth. For African American youth in particular, community-based drill team settings are promising avenues to achieving positive outcomes.

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Appendix A

Model Comparison Loglikelihood Values and Scaling Factors

1. Supportive Relationships with Adult Staff: Youth Perception of Trust and Value

Model	Comparison Model	R ²	LL	LL SC	TRd	TRd SC
A. Physical Aggression	Additive	0.11	-79.99	1.31		
	Moderator	0.13	-79.24	1.24	1.55	0.97
	<16 years	0.28*				
	>17 years	0.14	-74.39	1.22	9.88	1.13
	Parental Monitoring	0.12	-79.44	1.39	0.64	1.69
	Time	0.10	-79.02	1.15	3.8	0.51
B. Delinquency	Additive	0.16	-72.05	2.18		
	Moderator	0.24	-69.07	1.0	30.07	0.2
	Age	0.30***	-66.46	1.58	3.69	1.41
	Parental Monitoring	0.30***	-66.47	1.62	6.68	0.78
	Parental Monitoring	0.30***	-66.46	1.58	0.01	1.36
	and Age					
C. Drug Use	Time	0.24*	-68.15	1.62	2.26	0.81
	Additive	0.15*	-76.45	1.21		
	Moderator	0.16**	-75.88	1.13	1.43	0.79
	<16 years	0.42***				
	>17 years	0.17	-71.70	1.91	8.92	1.06
	Parental Monitoring	0.21	-70.41	1.91	4.69	2.58
D. Psychological Distress	Time	0.14*	-75.71	1.15	1.63	0.91
	Additive	0.02				
E. Global Self-Esteem	Moderator	0.03				
	Additive	0.04				
F. Global Self-Efficacy	Moderator	0.05				
	Additive	0.19**	-79.18	1.11		
	Moderator	0.19**	-79.15	1.04		
	<16 years	0.28**				
	>17 years	0.03	-76.45	1.12	4.84	1.13
	Parental Monitoring	0.29***	-74.79	1.29	4.3	2.05
	Time	0.20**	-77.76	1.04	3.76	0.76
	Parental Monitoring	0.31***	-73.45	1.21	3.20	0.83
	and Time					

* p < 0.05, ** p < 0.01, *** p < 0.001

2. Supportive Relationships with Adult Staff: Youth Perception of Mentor Support

Model	Comparison Model	R ²	LL	LL SC	TRd	TRd SC
A. Physical Aggression	Additive	0.11	-79.89	1.31		
	Moderator	0.13	-79.13	1.25	1.49	1.03
	<16 years	0.28				
	>17 years	0.15	-74.26	1.22	8.53	1.32
	Parental Monitoring	0.12	-79.4	1.38	0.59	1.7
	Time	0.10	-79.02	1.15	1.14	1.23
B. Delinquency	Additive	0.17	-72.05	2.18		
	Moderator	0.24*	-68.76	1.77		
	Age	0.24*	-69.07	1.71	0.0	1.41
	Parental Monitoring	0.30***	-66.23	1.60	5.3	0.95
	Time	0.25*	-67.86	1.61	2.22	0.81
C. Drug Use	Additive	0.15*	-76.45	1.21		
	Moderator	0.16**	-75.89	1.12	1.42	0.8
	<16 years	0.30***				
	>17 years	0.16	-71.584	1.14	9.09	1.14
	Parental Monitoring	0.16*	-76.0	1.15	5.89	0.97
	Time	0.14*	-67.86	1.61	2.22	0.81
D. Psychological Distress	Additive	0.02				
	Moderator	0.05				
E. Global Self-Esteem	Additive	0.05				
	Moderator	0.05				
F. Global Self-Efficacy	Additive	0.18**	-79.18	1.09		
	Moderator	0.18**	-79.14	1.03	0.1	0.79
	<16 years	0.27**				
	>17 years	0.03	-76.61	1.12	4.49	1.14
	Parental Monitoring	0.29***	-74.91	1.3	4.04	2.11
	Time	0.20**	-77.74	1.03	3.82	0.75
	Parental Monitoring	0.30***	-73.52	1.21	3.51	0.79
	and Time					

* p < 0.05, ** p < 0.01, *** p < 0.001

3. Sense of Community and Connectedness

Model	Comparison Model	R ²	LL	LL SC	TRd	TRd SC
A. Physical Aggression	Additive	0.09	-80.62	1.12		
	Moderator	0.10	-80.08	1.03	1.57	0.69
	Parental Monitoring	0.10	-80.30	1.26	1.8	0.36
	Time	0.24*	-68.44	1.51	7.94	0.93
B. Delinquency	Additive	0.23*	-69.24	1.67		
	Moderator	0.32**	-65.42	1.40	23.2	0.33
	Parental Monitoring	0.30**	-64.46	1.38	1.25	1.26
	Time	0.32**	-64.71	1.32	1.52	0.93
C. Drug Use	Additive	0.23**	-73.24	1.17		
	Moderator	0.31***	-69.79	1.02	16.53	0.42
	Parental Monitoring	0.31***	-69.71	1.03	1.07	0.14
	Time	0.31***	-68.76	0.97	2.81	0.73
D. Psychological Distress	Additive	0.09				
	Moderator	0.10				
E. Global Self-Esteem	Additive	0.36***	-71.84	1.03		
	Moderator	0.36***	-71.60	1.00	0.53	0.9
	Female	0.33**	-67.92	1.07	7.06	1.11
	Male	0.42***				
	Parental Monitoring	0.38***	-70.41	1.10	2.08	1.38
	Time	0.37***	-69.96	0.98	4.74	0.76
F. Global Self-Efficacy	Additive	0.30***	-74.42	1.04		
	Moderator	0.30***	-74.27	0.92	0.64	0.46
	Parental Monitoring	0.35***	-72.02	1.13	2.33	1.93
	Time	0.31***	-73.10	0.98	1.96	1.19

* p < 0.05, ** p < 0.01, *** p < 0.001

4. Norms for Behavior: Youth Perception of Prosocial Peer Norms

Model	Comparison Model	R ²	LL	LL SC	TRd	TRd SC
A. Physical Aggression	Additive	0.06				
	Moderator	0.08				
	Additive	0.12	-76.41	1.25		
B. Delinquency	Moderator	0.15	-76.16	1.40	0.25	2.01
	Time	0.12	-72.74	1.32	2.07	1.11
	Additive	0.15**	-76.41	1.25		
C. Drug Use	Moderator	0.15**	-76.16	1.40	0.025	2.01
	Time	0.15**	-75.75	1.27	1.34	1.11
	Additive	0.08				
D. Psychological Distress	Moderator	0.09				
	Additive	0.22***	-77.73	0.99		
E. Global Self-Esteem	Moderator	0.23***	-77.49	1.02	0.43	1.1
	Female	0.11	-71.97	0.98	11.81	0.97
	Male	0.48***				
	Parental Monitoring	0.32***	-73.75	1.03	6.36	0.59
	Time	0.24***	-75.86	0.91	6.76	1.18
	Female and Parental Monitoring	0.14	-70.42	0.98	3.21	0.96
	Male and Parental Monitoring	0.51***				
	Female and Time	0.17	-68.25	0.90	12.3	0.56
	Male and Time	0.50***				
	Additive	0.35***	-71.84	0.99		
F. Global Self-Efficacy	Moderator	0.36***	-71.53	0.90	1.19	0.51
	Parental Monitoring	0.32***	-66.97	1.26	4.20	2.32
	Time	0.36***	-70.81	0.95	2.73	0.75

* p < 0.05, ** p < 0.01, *** p < 0.001

4. Norms for Behavior: Youth Perception of Deviant Peer Norms

Model	Comparison Model	R ²	LL	LL SC	TRd	TRd SC
A. Physical Aggression	Additive	0.16**	-77.83	1.16		
	Moderator	0.17**	-77.46	1.19	0.57	1.29
	Time	0.15*	-77.04	1.06	2.4	0.66
B. Delinquency	Additive	0.11	-74.24	1.37		
	Moderator	0.11	-74.24	1.37		
C. Drug Use	Additive	0.15**	-76.5	1.30		
	Moderator	0.15**	-76.34	1.34	1.96	0.51
	Time	0.14*	-81.20	0.89		
D. Psychological Distress	Additive	0.05				
	Moderator	0.06				
E. Global Self-Esteem	Additive	0.06				
	Moderator	0.09*	-82.62	0.92		
	Time	0.07	-82.33	0.98	3.08	0.91
	Gender	0.22***	-75.63	0.93	14.09	0.99
	Parental Monitoring and Involvement	0.20**	-78.85	1.02	9.12	1.1
	Gender and Parental Monitoring	0.29***	-72.953	0.91	6.71	0.8
F. Global Self-Efficacy	Additive	0.09				
	Moderator	0.09				

p < 0.05, ** p < 0.01, *** p < 0.001

VITA

EDUCATION

Ph.D.	Community and Prevention Research, Psychology Dept. Minor: Statistics, Methods and Measurement	The University of Illinois at Chicago Chicago, Illinois	12/2014
M.A.	Community and Prevention Research, Psychology Dept.	The University of Illinois at Chicago Chicago, Illinois	10/2010
B.A.	Psychology	Clark Atlanta University Atlanta, Georgia	05/2007

GRANTS AND CONTRACTS

Evaluator	Evaluation of the Kansas Reading Roadmap, \$349,423 • Kansas Department of Children and Families, Topeka, KS	University of Kansas- Center for Public Partnerships and Research Lawrence, KS	May 2014 – present
Research Analyst	FRIENDS National Center for Community-Based Child Abuse Prevention • FRIENDS National Center for Community-Based Child Abuse Prevention, Chapel Hill, NC • \$214,285 devoted to the development of resources for cost-analysis over 5 years	University of Kansas- Center for Public Partnerships and Research Lawrence, KS	Dec 2014 – present

RESEARCH AND EVALUATION EXPERIENCE

Evaluator	Evaluation of the Kansas Reading Roadmap • Responsibilities include: Revision of logic model and evaluation plan based on program changes; Management and coordination of the evaluation, including oversight of a research assistant and graduate research assistant; Development of a sustainable project management and data collection website; Data collection, maintenance, and analysis of program, site and school data; Develop, conduct and analyze key	University of Kansas- Center for Public Partnerships and Research Lawrence, KS	May 2014 – present
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informant interviews and site visits; Report and publication development and dissemination.

Research Analyst	FRIENDS National Center for Community-Based Child Abuse Prevention – Cost Analysis	University of Kansas- Center for Public Partnerships and Research Lawrence, KS	Dec 2014 – present
	<ul style="list-style-type: none"> Responsibilities include: Review existing state CBCAP programming, policies, and practices; Develop, conduct, and synthesize 10 state CBCAP lead interviews on current funding, budgetary, and data practices; Conduct and produce a comprehensive literature review of cost analysis methodologies and research; Develop technical assistance briefs that outline cost analysis methodologies and cost collection tools. 		
Associate Researcher	Various evaluation projects that include a cost analysis component	University of Kansas- Center for Public Partnerships and Research Lawrence, KS	June 2007 – Dec 2012
	<ul style="list-style-type: none"> Responsibilities include: Staying up-to-date with current cost-analysis methodology and practice in the social service sector; Assist in conducting and/or provide recommendations to conduct cost-analysis for various projects at the Center. 		
Graduate Research Assistant	Sabine French Research Lab, Psychology Dept.	University of Illinois at Chicago Chicago, IL	Aug 2006 – May 2012
	<ul style="list-style-type: none"> Responsibilities included: Conducted data analysis on factors affecting minority student academic achievement and psychological well-being in high school and college; Supervised 5-10 undergraduate students each semester; Conducted various research tasks at all stages of research, including managing data in SPSS and developing research protocols. 		
Research Assistant	Cultural Predictors Project	Howard Brown Health Center Chicago, IL	June 2008 – Sept 2008
	<ul style="list-style-type: none"> Responsibilities included: Recruited participants in the community to be interviewed and uploaded data to web client. 		
Research Assistant	Cool Girls Evaluation, Psychology Dept.	Georgia State University Atlanta, GA	Aug 2005 – May 2007
	<ul style="list-style-type: none"> Responsibilities included: Administered surveys in elementary & middle schools; Entered data into SPSS; Assisted in development of Evaluation Report. 		

Research Assistant	Girl Power Evaluation, School of Public Health	University of Illinois at Chicago Chicago, IL	Summer 2006
	<ul style="list-style-type: none"> Responsibilities included: Collected school and missing participant data; Performed observations to evaluate implementation of program. 		

PROFESSIONAL EXPERIENCE

Evaluation Specialist and Data Analyst	Community Schools Initiative, Chicago Public Schools	Chicago, IL	Oct 2009 – May 2014
	<ul style="list-style-type: none"> Responsibilities included: Analyzed program data to ensure compliance with federal guidelines; Designed and implemented a qualitative process evaluation with school and community stakeholders that included recommendations to increase program implementation and sustainability. The resulting framework now guides implementation and support for the district's 100+ community schools; Supported district and school-based stakeholders through the creation and facilitation of targeted professional development, including the use of standardized instruments (e.g., YPQA & NYSAN), to support adherence to policy; Designed, created, and managed the production of community school profiles, which summarize data annually for internal stakeholders to inform planning and practice; Designed, created and conducted multiple presentations, workshops, and materials highlighting research and evaluation for local, state, and national dissemination. 		
Undergraduate Internship Supervisor	Department of Psychology	University of Illinois at Chicago Chicago, IL	Jan 2011 – May 2014
	<ul style="list-style-type: none"> Responsibilities included: Supervised 10-20 undergraduate student field research projects each semester, to ensure that student work exceeded the internship site's expectations, and that culminating projects were relevant, sustainable, and delivered in a timely fashion. 		
Research Team Leader	Summer Research Opportunities Program (SROP)	University of Illinois at Chicago Chicago, IL	Summer 2009, Summer 2010
	<ul style="list-style-type: none"> Responsibilities included: Developed and implemented summer workshop series for undergraduate students from diverse backgrounds. Workshops focused on the phases of research, writing, and presenting, to guide students toward the completion of a summer research project; Acted as a liaison between SROP program staff and students/faculty; Served as a graduate student mentor. 		

Teaching Assistant	Psychology Department	University of Illinois at Chicago Chicago, IL	Aug 2007 – Dec 2010
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- Responsibilities included: Instructed weekly discussion sections consisting of 20-30 students every semester for Introduction to Psychology, Writing in Psychology, Undergraduate Statistics, and Advanced Undergraduate Statistics courses.

GRANT WRITING

University of Illinois at Chicago: Hip-Hop Acculturation Study. (2007). *Research project*. Awarded: \$20,000

TECHNICAL REPORTS

Edwards*, E. & Lazarus, J. (2014). Kansas Reading Roadmap: Interim Evaluation Report.

Edwards*, E. & Lazarus, J. (2014). Kansas Reading Roadmap: Pittsburg School District Case Study.

Zander, K.J., **Burnside, E.**, & Poff, M. (2010). The development of an implementation and sustainability process strategy (ISPS) for the Chicago Public Schools Community Schools Initiative: Findings and recommendations. Chicago Public Schools. Chicago, IL.

PUBLICATIONS

Edwards*, E. (under preparation). Features of an organized youth activity setting that serve as protective factors against exposure to community violence.

SELECTED PRESENTATIONS

Burnside, E., Ray, A., Egner, C., Mendoza, G., Ortega, E., & Seelig, M. (2014, April). Using Data to Create Greater Educational Equity: Sharing Strategy from the Chicago Public School Community Schools Initiative. Workshop conducted at the biennial national forum for the Coalition of Community Schools.

Burnside, E., Naftzer, N., Ray, A., & Seelig, M. (2014, April). Addressing Implementation Quality to Assess Educational Equity: An Introduction to the Chicago Public School Community Schools Initiative's Self Assessment Quality Improvement Rubrics. Workshop conducted at the biennial national forum for the Coalition of Community Schools.

Zander, K., **Burnside, E.**, Ray, A., Naftzer, N., & Diehl, D. (2013, May). Understanding Chicago Public Schools Community School Implementation and Its Relationship to Outcomes: Our Past and Present Evaluations. Paper presented for the quarterly Research Affinity Group meeting for the National Coalition of Community Schools.

*Published under married name, Edwards.

- Burnside, E.** (2012, June). Can Schools Empower Families? Implications of Empowerment in a Context of Engagement. Paper presented at the biennial International Conference of Community Psychology, Barcelona, Spain.
- Burnside, E.,** Ray, A., & Berg, A. (2012, May). Planning to Succeed: How the Chicago Public School Community Schools Initiative Uses Non-Academic Data to Inform Practice. Workshop conducted at the biennial national forum for the Coalition of Community Schools.
- Zander, K., Poff, M., **Burnside, E.,** Ray, A., Naftzer, N., & Norbury, H. (2012, April). Development of a Framework and Accompanying Rubric to Assess Community School Implementation and Sustainability Processes. Paper presented at the annual meeting for the American Educational Research Association, Vancouver, BC, Canada.
- Burnside, E.** (2011, June). Exploring the School's Capacity to Empower Marginalized Families: A Critical Literature Review. Paper presented at the annual National Black Graduate Conference in Psychology, Miami, FL.
- Burnside, E.,** Zander, K., Poff, M., Ray, A., Shwehdi, N., Moralde, J., & Berg, A. (2011, June). Implementing and Sustaining Community-School Partnerships: Implications of an Evaluation of the Chicago Community School Initiative. Roundtable conducted at the biennial meeting for the Society of Community Research and Action, Chicago, IL.
- Zander, K., **Burnside, E.,** & Poff, M. (2011, May). Community School Initiative Evaluation. In L. Daley (Chair), *Evaluating Chicago Public School Programs: Perspectives of Internal and External Evaluators*. Symposium conducted at the annual meeting for the Midwestern Psychological Association, Chicago, IL.
- Zander, K., Poff, M., **Burnside, E.,** Ray, A., Shwehdi, N., Moralde, J. (2010, October). Collaborative Development of an Implementation and Sustainability Process Strategy for the Chicago Community Schools Initiative. Symposium presented at the annual meeting for the Midwestern Ecological Community Psychology Conference, Champaign, IL.
- Burnside, E.,** & French, S. (2010, May). Understanding minority pathways to degree attainment: Implications for research. In **E. Burnside** (Chair), *A context of academic persistence for ethnic minority students*. Symposium conducted at the annual meeting for the Midwestern Psychological Association, Chicago, IL.
- Burnside, E.,** & French, S. (2009, June). The influence of racial and ethnic identity on minority academic disengagement. Poster presented at the Society for Community Research and Action Biennial meeting, Montclair, NJ.
- Burnside, E.,** French, S. (2008, March). Ethnic differences in the relationships between identity, socialization, and academic disengagement. Paper presented at the Society for Research in Adolescence Biennial meeting, Chicago, IL.

Burnside, E., Broomfield, K. (2007, June). The effects of a mentoring program on substance use. Poster presented at the Society for Community Research and Action Biennial meeting, Pasadena, CA.

Burnside, E. (2006, November). Community based participatory research and the development of youth mentoring programs. Powerpoint presented at the national NIMH-COR meeting, D.C.

PROFESSIONAL AFFILIATIONS

Society for Community Research and Action (SCRA, APA Div. 37)

Society for Cost Benefit Analysis

PROFESSIONAL SERVICE

University of Illinois at Chicago – Midwestern Ecological Community Psychology Conference Planning Committee

Society for Community Research and Action – Biennial Conference Presentation Submission reviewer

University of Illinois at Chicago – Psychology Department Diversity Recruiter

DATA ANALYSIS AND SOFTWARE

Proficient in Microsoft Office Suite (Word, Excel, Powerpoint); Completed formal training in ANOVA, regression, structural equation modeling (SEM), hierarchical linear modeling (HLM), and Rasch modeling using SPSS, SAS, MPLUS, and HLM; Survey software: Qualtrics, REDCap