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An Examination of the Specificity of Economic Loss and Deprivation and Community Violence on Depressive Symptoms and Aggressive Behavior in Urban, Low-Income Adolescents

Jarrett T. Lewis
jlewis55@depaul.edu

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An Examination of the Specificity of Economic Loss and Deprivation and

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Urban, Low-Income Adolescents

a Thesis

Presented to

The Department of Psychology

DePaul University

By

Jarrett Lewis

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Abstract

Based on the current literature examining associations of stress and psychopathology in adolescents, several types of stress (e.g., violence exposure, economic-related stress) have been identified as particularly salient in low-income, urban adolescent populations (Grant et al., 2003; Natz et al., 2012). This population also has been shown to be at heightened risk for problems including internalizing and externalizing symptoms. Identifying specific pathways through which urban, low-income adolescents develop specific emotional and behavior problems in response to particular stressors would be helpful in the development and selections of as the targets of interventions that disrupt mediators that link particular stressors to particular outcomes. In the present study, 201 urban adolescents completed a battery of questionnaires assessing stressful life events and emotional and behavioral problems in a short-term longitudinal study spanning six months that assessed their emotional and behavioral problems in response to stressors typically experienced in urban, low-income environments. Two stressor-outcome specificity models will be tested to better understand the mechanisms through which depressive symptoms and aggressive behaviors emerge among urban, low-income adolescents in response to economic loss and deprivation and community violence exposure, respectively.

Introduction

A wealth of empirical evidence suggests that the risk for developing serious psychological problems increases with exposure to stressors in childhood and adolescence (Grant et al., 2003; Grant et al., 2004; Voisin et al., 2011). The adolescent transition, in particular, is characterized by increased rates of stressors and the emergence of internalizing and externalizing symptoms (Grant et al., 2004; McMahon et al., 2009). Convergent evidence suggests that elevated levels of stress exposure in adolescence leads to psychosocial and psychopathological problems that are likely to persist into adulthood (Grant et al., 2003; Olino, Klein, Farmer, Seeley, and Lewinshon, 2012). Furthermore, the occurrence of stressful life events and the prevalence of subsequent mental health problems are more common for youth residing in particular environments.

Urban Adolescent's Exposure to Stress

Adolescents in low-income urban settings are disproportionately exposed to particular severe, chronic stressors that may negatively impact their transition to adulthood in ways that are dissimilar to adolescents not residing in these settings (Grant et al., 2003; Kliewer et al. 2006; Natz et al., 2012). This disproportionate exposure to stress places low-income urban adolescents at an increased risk for developing negative mental health outcomes (Flouri & Tzavidis, 2008; Grant et al. 2003).

Based on the current literature examining associations of stress and psychopathology in adolescents, several types of stress (e.g., violence exposure, economic-related stress, loss-related stress) have been identified as particularly

salient in low-income, urban populations (Grant et al., 2003; Natz et al., 2012). Presumably, these types of stress may serve important functions in the development of emotional and behavioral problems in urban, adolescent youth (Allison et al., 1999).

Identifying the specific roles of different types of stressors in the lives of urban adolescents is essential for at least two reasons. First, the examination of potential specificity between particular types of stress and particular types of adolescent emotional and behavioral problems may contribute to the understanding of underlying causal mechanisms leading to negative mental health outcomes in urban adolescents. Second, the identification of specific relations may inform more individualized or specialized treatments and interventions aimed at decreasing the development of psychopathology in urban adolescents. If specific pathways can be identified, these pathways can serve as the target of interventions and disrupt mediators that link particular stressors to particular outcomes.

Associations of Specific Stressors to Psychological Outcomes

Grant and colleagues (2003) and McMahon and colleagues (2003) hypothesize that specific types of stressors predict particular types of outcomes through particular mediators in the context of specific moderators. They acknowledge however, that very few studies have tested full specificity models. So they reviewed studies that tested for specific associations between particular stressors and particular outcomes. McMahon and colleagues (2003) define specificity as "the determination that a particular risk factor is uniquely related to

a particular outcome" and describe Stressor specific, Outcome specific, and Stressor-Outcome specific models utilized in specificity studies. The Stressor specific model includes several stressors and one outcome. This design allows for the identification of specificity of stressor in relation to a particular outcome, but does not allow for determination of specificity of outcome. The outcome could be identified as unique or common to various stressors.

The Outcome specific model includes several outcomes but only one stressor, allowing for the identification of specificity among outcomes but not among stressors. A clear limitation to this design is the inability to determine whether additional stressors may contribute to the various outcomes of interest. The Stressor-Outcome specific model includes a heterogeneous sample of stressors and a range of psychological outcomes, allowing for specificity of both stressor and outcome to be determined (Garber & Hollon, 1991). Each of the stressors can be examined in relation to each of the outcomes. Unlike Stressor specific and Outcome specific models, Stressor-Outcome specific models fully address whether a specific stressor is uniquely related to a specific outcome. Thus, the present study's methodology utilizes the Stressor-Outcome specific approach to examine the associations among particular stressors and particular types of psychopathological symptoms in low-income, urban adolescents.

Present Study

To date, few studies have tested the basic tenets of the more general specificity model proposed by Grant and colleagues (2003; see Figure 1). McMahon and colleagues (2003) argue that in order to test this general specificity

model, particular stressor-mediator-moderator outcome models should be examined. The present study is designed to address this gap/recommendation in the literature by testing two competing specificity models in a sample of urban, low-income adolescents. Following the recommendations of McMahon and colleagues (2003), the present study aims to primarily examine the effects of two specific stressors (economic loss/deprivation, community violence) on two particular domains of psychopathological symptoms, internalizing and externalizing. A related goal of the present study is to determine whether there are specific ways in which adolescents cope with each of these specific stressors and whether those specific coping behaviors may explain the emergence of internalizing or externalizing symptoms. Thus, two types of coping (e.g., shift and persist strategies and active coping) will be tested as mediators of the relation between economic loss/deprivation and community violence to the two outcomes. Also consistent with specificity theory (McMahon et al. 2003), the final goal of the present study is to examine the proposed mediated relations in the context of potential specific moderators, such as ethnicity and gender. These two demographic variables will be examined as potentially specific moderators of the proposed coping-mediated stressor-outcome relations. Thus, two full specificity models will be tested in the present study. The theoretical and empirical evidence and rationale for each of these hypothesized specificity models is provided below.

Economic Loss/Deprivation and Depressive Symptoms

In the context of poverty, adolescents are often faced with a number of events involving economic loss and deprivation (Brooks-Gunn & Duncan, 1997; Grant et al., 2003; Hammack, Robinson, Crawford, & Li, 2004; Wadsworth & Santiago, 2008). For example, youth in financially stressful environments may experience having their power or phone service disconnected, losing their home or apartment, residential instability or insufficient school supplies that may contribute to the development of adjustment problems (Conger et al., 2010).

Specifically, adolescents' experiences of loss and lack have been associated with internalizing symptoms, such as depression (Hammack et al., 2004; Wadsworth & Compass, 2002). Although the bulk of this research has been conducted with adults (Conger et al., 2010), there is some preliminary evidence of a specific association between loss events and depressive symptoms among young people. For example, Hammack and colleagues (2004) found that urban adolescents were more likely to experience depressed mood in response to higher levels of poverty and lack of family income. Takeuchi and colleagues (1991) found that parents who reported not being able to adequately meet the financial needs of their family were more likely to have children who experienced depressive symptoms. In addition, Santiago and colleagues (2011) (using approaches recommended by McMahon and colleagues (2003)), found specificity for the association between economic strain (e.g., having utility services disconnected, not having enough money to buy important things) and heightened levels of depressive symptoms in low-income adolescents (Santiago et al., 2011) .

Taken together, this evidence suggests a direct relationship between economic loss and depressive symptoms in adolescents in low-income environments. However, less is known in regards to potential specific effects for economic loss and deprivation in the context of urban poverty (Grant et al., 2003) . The present study is designed to test the hypothesis that economic loss and deprivation specifically predict depression symptoms among urban adolescents.

Hypothesized mechanisms explaining relation between economic loss and deprivation stressors and depressive symptoms

Although the current literature suggests that there is a direct relationship between economic loss and deprivation and depressive symptoms, the literature examining the mechanisms explaining this relation has not yielded consistent results. However, convergent evidence suggests that adolescents who experience recurrent, heightened levels of stress related to poverty often engage in poor coping strategies that contribute to the development of psychological problems including depression (Santiago et al, 2011; Wadsworth et al, 2002; Wadsworth et al, 2011). The utilization of ineffective coping strategies in combination with adolescents' perceived and actual lack of control over the economic strain that their families experience may contribute to feelings of helplessness and hopelessness (Sanchez, Lambert, & Cooley-Strickland, 2012; Wadsworth & Compass, 2002). Specifically, within the context of urban poverty, McLaughlin, Miller, and Warwick (1996) posit that youth are likely to develop feelings of hopelessness and negative expectations in regards to their current and future life

that may be directly associated with the coping strategies utilized in response to economic stress (e.g., loss, deprivation).

Conversely, emerging evidence suggests adolescents who employ shift and persist strategies in response to the negative effects of poverty are less likely to develop physical and mental health problems (Chen & Miller, 2012; R. D. Conger, Conger, & Martin, 2010). Shift and persist strategies are described as, "engaging in cognitive reappraisal and emotion regulation (i.e., shifting) and finding meaning and retaining optimism, even in the face of obstacles" (i.e., persisting; (Chen & Miller, 2013; R. D. Conger et al., 2010). Chen and Miller (2000) posit that in adverse economic conditions, some adolescents shift themselves and adapt to these circumstances and endure with optimism and meaning making. Presumably, shift and persist strategies may help to explain how some adolescents are resilient in the face of the severe and chronic stressors associated with poverty (Chen & Miller, 2013; Takeuchi, Williams, & Adair, 1991). Wadsworth and colleagues (2011) provide some additional support for the association of these specific coping strategies to depressive symptoms in low-income adolescents' experience economic loss. These authors found adapting oneself to a stressful situation by engaging in active acceptance, cognitive restructuring, and positive thinking predicted fewer adolescent psychological problems including depression in response to poverty-related to stress (Santiago, Wadsworth, & Stump, 2011; Wadsworth, Raviv, Santiago, & Etter, 2011).

The present study hypothesizes that characteristics of shift and persist strategies (e.g., cognitive restructuring, meaning-making, adopting an optimistic

perspective) are antithetical to the hopelessness that adolescents in urban, low-income environments experience in response to economic loss and deprivation. Therefore, it may be that reductions in shift and persist strategies explain a specific association between economic loss and deprivation and depression symptoms in the context of urban poverty. The proposed model will test that hypothesis.

Ethnicity. Ethnic minorities residing in urban, low-income environments are disproportionately affected by the situation-specific stressors (e.g., economic-related stress) that result in psychological problems including depression (Grant et al., 2003; Hammack, Robinson, Crawford, & Li, 2004). Specifically, African Americans and Latino adolescents are at a greater risk of developing depressive symptoms due to their overrepresentation in low-income communities (McLaughlin, Hilt, & Nolen-Hoeksema, 2007; Sanchez, Lambert, & Cooley-Strickland, 2012; Wadsworth et al., 2011; Wadsworth & Compas, 2002). A major review of racial and ethnic differences in the presentation of internalizing disorders found that Latino adolescents generally report higher levels of depressive symptoms across time when compared to their African American, Asian American and European American counterparts (Anderson & Mayes, 2010). In addition, a study examining the patterns of coping in inner-city youth found that Latino adolescents reported significantly higher levels of depression and other internalizing behaviors when compared to African American adolescents (Tolan, Gorman Smith, Henry, Chung, & Hunt, 2002).

Although there appears to be a gap in the literature related to examination of the moderating effect of ethnicity on the specific association between economic loss and deprivation and depressive symptoms between African Americans and Latinos in urban, low-income settings, the evidence above suggests that Latino adolescents may be more likely to report depressive symptoms in response to economic loss and deprivation. What is less clear is the role of ethnicity in the utilization of shift and persist strategies. No study has examined ethnic differences in shift and persist strategies between African American and Latino adolescents specifically in response to economic loss or deprivation. This may be due to the recent development of shift and persist theoretical frameworks (Chen & Miller, 2012). However, based on Latino adolescent report of higher levels of depressive symptoms in low-income, urban environments, the present study hypothesizes that Latino adolescents will report lower rates of shift and persist strategies, which could contribute to higher levels of depressive symptoms in response to economic loss and deprivation when compared to African American adolescents.

Gender. During the adolescent transition, females are generally more likely to report experiencing internalizing symptoms in response to stressors (Anderson & Mayes, 2012, (Daughters et al., 2009)). Specifically, in the context of urban poverty, female adolescents report higher levels of clinical depression in response to stress than their male counterparts (Hammack et al., 2004).

With regard to differences in coping strategies, male adolescents have been found to engage in more active coping styles consistent with shift and persist

strategies, such as cognitive restructuring, and emotion regulation (Gorman Smith, Henry, & Tolan, 2004; McLaughlin et al., 2007). However, no study to date has examined gender differences in the use of shift and persist strategies as a mediator of the association between economic loss and deprivation and depression in urban, low-income adolescents. Therefore, based on gender differences in active coping styles that are consistent with Shift and Persist strategies, the present study hypothesizes that female youth will report more reduced Shift and Persist strategies and more depression symptoms in response to economic loss and deprivation than adolescent males.

Summary. Although empirical evidence suggests there is an association between economic loss and adolescent depressive symptoms, there is lack of literature directly examining the specific mechanisms or processes that result in depressive symptoms in urban, low-income adolescents. The first proposed model aims to examine whether the association of economic loss and deprivation to depressive symptoms is mediated by reduced shift and persist strategies in urban, low-income adolescents. A related aim of this model is to examine whether the proposed mediated relation is moderated by two demographic variables, ethnicity (e.g., African Americans, Latinos) and gender.

Exposure to Community Violence and Aggression

For the purpose of the present study, community violence exposure is defined as a violent act experience by a child or adolescent outside of the home (Fowler et al., 2009). Based on a meta-analysis by Fowler and colleagues (2009), community violence exposure generally exists in three categories: victimization,

witnessing, and hearing about or vicariously experiencing violence outside of the home. Victimization is described as an intentional act of violence by another person onto one's own person (Fowler, et al., 2009). These acts include, but are not limited to being robbed, shot, chased, or assaulted in any way. Witnessing community violence refers to the actual eye-witnessing of the violent act(s) being committed on another person by a third-party perpetrator. Examples of witnessing include seeing someone getting robbed, shot, chased or otherwise, assaulted. Hearing about community violence is centered on the vicarious experience of violence outside of the home. Events subsumed under this category include any form of learning of another person's victimization in one's community (Fowler et al., 2009).

A considerable amount of evidence suggests that there is an association between the experience of community violence in childhood and adolescence and the emergence of externalizing behaviors (Fowler et al., 2009). Specifically, in the context of urban poverty, adolescents are more likely to engage in "acting out" and aggressive behaviors as they are exposed to more community violence (Gorman-Smith & Tolan, 1998; Santiago et al., 2011; Schwab-Stone et al., 1995). Several explanations delineate the association of violence exposure and aggressive behaviors in youth. From a social learning perspective, adolescents chronically exposed to community violence learn that violence is an effective problem solving method through the modeling of this behavior by other community members (Fowler et al., 2009). A longitudinal study that recruited participants from 17 public schools in a major U.S. city found that the use of

violence as an active coping strategy in response to community violence exposure

has been found to perpetuate violence in urban, low-income communities over

time (Gorman Smith et al., 2004). In addition, social information processing

theories suggest that the normalization of beliefs about violence may contribute to

heightened levels of aggression in urban youth when experiencing recurrent

community violence (McMahon, Felix, Halpert, & Petropoulos, 2009). Taken

together, these findings suggest that there is a direct relationship between

community violence exposure and aggression in urban and low-income youth.

Hypothesized mechanisms explaining the relation of community violence

exposure to externalizing symptoms

Although the examination of the relation of community violence and

aggressive behaviors has received considerable attention, less is know about what

specific coping strategies may serve as mediators of this relation (Connor-Smith,

Compas, Wadsworth, Thomsen, & Saltzman, 2000; Guerra, Huesmann, &

Spindler, 2003; Margolin & Gordis, 2000). Recent evidence suggests that some

cognitive factors including self-efficacy and normative beliefs about aggression

(McMahon et al., 2009), delays in cognitive development (Margolin & Gordis,

2000), and the development of cognitive schemas and scripts in the interpretation

of violence (McMahon et al., 2009) have been found to mediate the relation of

community violence exposure and aggression in urban youth, but the literature

currently lacks an examination of specific coping mechanisms that may explain

the association of community violence exposure and aggression in urban, low-income adolescents

Generally, active coping has been associated with an increased risk for aggression, delinquency, and other externalizing behaviors, but there appears to be a gap in the literature in specific measurement of the mediating role of active coping in response to violence exposure resulting in aggression in urban adolescents (McLaughlin et al., 2007). The present study aims to address this gap in the literature through the examination of active coping as a specific mediating process linking community violence exposure and aggression among low-income urban youth.

Gender. Male adolescents tend to report more active coping styles in response to community violence and typically exhibit more aggressive and externalizing behaviors than female adolescents over time (Gaylord-Harden, Cunningham, & Zelencik, 2011; Gorman Smith et al., 2004). Specifically, within the context of urban poverty, male adolescents have been found to engage in aggressive behaviors that perpetuate violence in response to community violence exposure over time, which may be due to a desensitization to violence by the time these youth have reached adolescence (Gorman Smith et al., 2004). The tendency of males to endorse active coping strategies, when experiencing community violence, may represent a specific mechanism that explains the relation of community violence exposure to aggressive behaviors for males in particular. Several studies examining the effects of stress on adolescents in urban low-income settings have found that males are more likely to engage in aggressive and

other externalizing behaviors when compared to their female counterparts

(Aisenberg & Herrenkohl, 2008; Fowler, Tompsett, Braciszewski, Jacques-Tiura,

& Baltes, 2009; Gorman Smith et al., 2004; Gorman-Smith & Tolan, 1998; Grant

et al., 2003; Schwab-Stone et al., 1995). However, less is known about specific

gender differences in the use of active coping strategies associated with the

experience of community violence that result in aggression in urban, low-income

adolescents. A small portion of studies have grouped violence exposure with other

types of stress to determine the overall risk or stress level of urban or low-income

adolescents (Santiago et al., 2011; Wadsworth & Berger, 2006; Wadsworth et al.,

2008; Wolff, Santiago, & Wadsworth, 2009), but there is lack of studies

measuring specific associations between community violence exposure, active

coping strategies and aggression in adolescents residing in urban, low-income

settings. The present study aims to test the moderation effect of gender on the

relation between community violence exposure and aggression mediated through

the use of active coping strategies.

Ethnicity. Research centered on examining the link between community

violence exposure and aggressive behaviors has included mostly African

Americans and Latinos, possibly due to the overrepresentation of these groups in

low-income, high crime areas. However, the literature examining ethnic

differences in aggressive behaviors between African Americans and Latinos in

urban, low-income adolescents in response to violence exposure is limited

(McLaughlin et al., 2007). One study found that in the context of urban poverty,

African Americans were found to be 2.45 times more likely to commit violent

acts in response to community violence exposure when compared to their Latino counterparts (Gorman Smith et al., 2004).

Guerra and colleagues (1995) also found that African American youth were more likely to engage in aggressive behaviors in response to community violence, particularly early in development when compared to Latino and European American youth. Based on this evidence, African American adolescents residing in low-income, urban settings may be more likely to engage in active coping routine behaviors in response to community violence exposure as a method of coping with violence exposure. Thus, the second proposed model will examine the moderating effect of ethnicity on the community violence-aggression relation mediated through active coping with an aim to corroborate and extend previous findings of elevated aggressive behaviors in African American adolescents.

Summary. Although empirical evidence suggests there is an association between community violence exposure and adolescent aggression, there is a lack of literature directly examining the specific mechanism or processes that result in externalizing symptoms in urban, low-income adolescents. The second proposed model aims to examine whether the association of community violence exposure to externalizing symptoms is mediated by active coping behaviors in urban, low-income adolescents. A related aim of this model is to examine whether the proposed mediated relation is moderated by two demographic variables, ethnicity (e.g., African Americans, Latinos) and gender.

Rationale

The examination of specific associations between particular stressors and specific types of psychopathology and the mechanisms through which these associations occur in the context of urban poverty is critical to the design and implementation of community-based interventions to decrease emotional and behavioral problems among urban, low-income adolescents (McMahon, Grant, Compas, Thurm, & Ey, 2002). In order to design interventions that will disrupt the mechanisms through which psychological and behavioral problems emerge in urban, low-income adolescents, specific associations between stressors and outcomes must be examined. The present study aims to test two stressor-outcome specificity models to better understand the mechanisms through which depressive symptoms and aggressive behaviors emerge among urban, low-income adolescents in response to economic loss and deprivation and community violence exposure, respectively. A related aim is to determine if these specificity models are more applicable to certain types of urban, low-income adolescents based on ethnicity and gender. An overarching goal of the present study is to inform interventions that will be tailored to decrease specific types of emotional and behavioral problems (e.g., depression, aggression) in response to particular types of stressors (e.g., economic loss and deprivation, community violence) for urban, low-income adolescents.

Statement of Hypotheses

Hypothesis I. Economic Loss and Deprivation at Time 1 will predict higher levels of depressive symptoms at Time 2, while controlling for Time 1 depressive symptoms.

    A. Reduced Shift and Persist strategies at Time 2 will mediate the relation between economic loss and deprivation at Time 1 and Depressive symptoms at Time 2.

    B. Female gender and Latina ethnicity will moderate the relation between Economic Loss and Deprivation at Time 1 and Depressive symptoms at Time 2 mediated through reduced Shift and Persist Strategies at Time 1, such that increase in Economic Loss and Deprivation at Time 1 will predict higher levels of Depressive Symptoms at Time 2 mediated through Reduced Shift and Persist Strategies at Time 2, while controlling for Depressive Symptoms at Time 1 of Latina females.

Hypothesis II. Community violence exposure at Time 1 will predict higher levels of Aggressive Behavior at Time 2, while controlling for Time 1

    A. Aggressive Behavior. Active coping at Time 1 will mediate the relation between Community Violence Exposure at Time 1 and Aggressive Behavior at Time 2.

    B. Male gender and African American ethnicity will moderate the relation between Community Violence Exposure at Time 1 and

increased Aggressive Behavior at Time 2 mediated through Active Coping at Time 1, such that increases in Community Violence Exposure at Time 1 will predict higher levels of Aggressive Behavior at Time 2 mediated through an increase of Active Coping behaviors at Time 1, while controlling for Aggressive Behavior at Time 1 of African American males.

Method

Data

Data for the present study were collected as part of a larger, longitudinal study including two time points. The overall purpose of the larger study was to examine effects of stress on adolescent psychological and physiological health and learning across time. The time points were approximately six months apart with the first wave of data collection occurring in the Fall of 2012 and the second wave of data collection occurring in Spring of 2013.

Research Participants

The present study includes adolescents who identified as African American and Latino (n =259). Participants were recruited from three diverse urban schools (two K-8th; one high-school) in a large metropolitan area. The sample is approximately 48% Latino (n = 124), 45% African American (n = 116) and 7% of the sample identified as both African American and Latino (n = 19). Participants were between 11 and 18 years of age (M = 14.96; SD = 1.91) at the first time point and 134 (52%) adolescents identified as female. The sample over-represents low-income urban youth of color (81%) to generate stressors not represented on the most well-validated stressor checklists (developed on predominantly white middle class samples, e.g., APES, Compass et al., 1987). Approximately, 121 adolescents returned for data collection at Time 2, including 62 (51%) African Americans (51%), 52 (43%) Latinos, and 7 (6%) adolescents who identify as both African American and Latino. Sixty-five (54%) of the returning adolescents were female.

Materials

  Demographics. Information regarding participants' age, grade, gender, and race or ethnicity was obtained. Questions designed to assess this information were included in a two-page demographic questionnaire.

  Major Life Events Measure. Stressful life events involving exposure to community violence were assessed using the Major Life Events Measure (MEM; Grant et al., 2013). The MEM was designed to assess stressors on four dimensions: loss, threat, humiliation, and conflict. Items assessing violent victimization and threat of violence to oneself and the witnessing of victimization and threat of violence to others in the community will be used to assess community violence exposure. Respondents were asked to rate the frequency with which they experienced violent acts, threats of violent acts, or witnessed others experience violent acts or threats of violent acts. The response options ranged on a scale from 1 = never to 5 = four times or more. Example items include: "Someone hurt me enough to leave marks" and "I saw someone threatened with a weapon (like a knife or a gun)'. A total of 24 items divided into two subscales will be used to assess exposure to community violence. Twelve items assess violence towards oneself and 12 items assess the witnessing of violence towards another person. In the present sample, internal consistency for all Community Violence exposure was strong on the Major Events Measure was strong. The Cronbach alpha coefficient was .95. The Victimization (《 = .60) and Witnessing (《 = .99) Subscales yielded acceptable and strong internal consistency, respectively.

Community Violence. Exposure to community violence is defined as any stressful event that involves or evokes a sense of threat of violence to one's own body or another person's body or safety. Events involving community violence include, but are not limited to physically harmful acts, sexually harmful acts, and violation of safety acts of violence (Margolin & Gordis, 2000). Examples of exposure to community violence are: "Someone broke into my house or apartment," and "I saw someone get hurt bad enough that they broke a bone or got a scar."

Economic Loss and Deprivation: For the purpose of this study, economic deprivation and loss are defined as any event that represents significant economic or property loss or lack of capacity to purchase and access important resources that most others can secure. Examples of economic loss include the loss of a car, home, or service due to a lack of financial resources. Examples of economic deprivation include the incapacity to purchase adequate housing, food, and school supplies due to a lack of economic resources.

Systems Levels Stressor Measure. The Systems Levels Stressor Measure was developed to assess threat, conflict, loss and humiliation stressors at the systems level. In the loss domain, stressors related to economic deprivation are assessed. A total of 15 items beginning with the stem, "Because of my family not having enough money" and ending with an event that resulted from a lack of money will be used to measure economic deprivation and loss. Economic loss/deprivation items from the Systems Level Stressor Measure include "we were kicked out of our apartment" and "we can't pay the bills". Respondents indicated

the presence or absence of the event following the stem on a 0 = no and 1 = yes

scale. Sum scores will be calculated to determine overall level of economic

deprivation and loss. In the present sample, internal consistency for the economic

loss and deprivation items on the Systems Level Stressor Measure was adequate.

The Cronbach alpha coefficient was .77.

Psychological Symptoms

   Youth Self-Report (Achenbach, 1991). The YSR is the self-report version

of the Child Behavior Checklist (CBCL) and includes 119 items, which the

adolescent rates on a 3-point scale as 0 = *not true*, 1 = *somewhat or sometimes*

true, or 2 = *very true or often true* of himself or herself during the past six

months. Analogous to the CBCL, the YSR consists of two empirically derived

broadband syndromes (internalizing and externalizing) and eight empirically

derived narrow-band syndromes (withdrawn, somatic complaints, anxious-

depressed, social problems, thought problems, attention problems, delinquent

behavior, and aggressive behavior). The present study will only use depression

items from the Anxious-Depressed narrow-band syndrome subscale and items

from the Aggressive Behavior narrow-band syndrome subscale. Sample

depression items include "I am unhappy, sad, or depressed" and "I feel worthless

or inferior." Sample aggressive behavior items include "I get in many fights" and

"I threaten to hurt people." Normative data for the YSR are based on a nationally

representative community sample of children and adolescents with separate norms

for boys and girls (Achenbach, 1991). Reliability and validity are well established

for the YSR (Achenbach, 1991). In the present sample, internal consistency for

depression items on the YSR Depressed/Anxious subscale (α = .88) and the YSR

Aggression subscale (α = .89) was strong.

Coping

   Responses to Stress Questionnaire. To assess active coping in response to

community violence, the Responses to Stress Questionnaire-Violent Stress

Version (RSQ; Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman,

2000) will be used. The RSQ consist of a total of 57 items on a scale from 1 =

none through 4 = a lot. Responses indicated to what degree each coping response

has been enacted in the individual when dealing with stress. An example of a

sample item is "When dealing with the stress of violence, I keep remembering the

violent thing that happened or can't stop thinking about what might happen." This

measure focuses on matching particular types of coping strategies with particular

types of stressors. Active coping behaviors are often associated with problem-

focused or emotion-focused strategies that involve the adolescent proactively

dealing with a stressful situation. Sample items from the active coping items on

the RSQ include "When dealing with the stress of violence, I try to fix the

problems with violence" and "When dealing with the stress of violence, I keep

my feelings under control when I have to, then let them out when they won't

make things worse." In the present sample, internal consistency for active coping

items on the RSQ, Violence Version was adequate. The Cronbach alpha

coefficient was .79.

   Shift and Persist Strategies Questionnaire (Chen et al., unpublished) To

assess the use of Shift and Persist strategies, the Shift and Persist Questionnaire

was administered at Time 2 only. The SAPQ consist of 20 coping strategies that involve engaging in cognitive reappraisal and emotion regulation (i.e., shifting) and finding meaning and retaining optimism, even in the face of obstacles" (i.e., persisting). Responses indicate to what extent adolescents engage in each shift or persist strategy on 4-point Likert scale (0 = Not at all; 4 = A lot). Sample shift items include, "I keep my feelings under control and only let them out when they won't make things worse" and I think about the positive aspects or the good that can come from the situation." Sample persist items include, "I think that things will get better in the future" and "I tell myself that everything will be all right." In the present sample, internal consistency for all items on the Shift and Persist Questionnaire was strong. The Cronbach alpha coefficient was .92.

Procedure

Data collection for present study spanned a total of six months. The DePaul University's and the Chicago Public Schools' Institutional Review Boards approved the larger longitudinal study that the data from the present study come from. The first data collection occurred in Fall 2012 and the second and final data collection occurred in Spring 2013. On 1 of 5 consecutive Saturdays, study participants completed clinical interviews, online surveys, and physiological measures of stress responses. At Time 1 and Time 2, participants were in grades 6 through 12.

At each time period, participants completed a battery of questionnaires assessing stressful life experiences, psychological symptoms, and coping and response-style behaviors. All questionnaires were completed using an online

survey system and took approximately an hour and a half to complete. Parent

report measures of adolescent's psychological symptoms were distributed prior to

the survey administration at both time points, but parent reports were not used in

the present study

Results

In the present study, specificity analyses as recommended by Mesman and Koot (2000) were conducted to assess the specificity of the hypothesized relations. Additionally, PROCESS models (Preacher and Hayes, 2008) were used to test the proposed coping strategies (i.e., primary control engagement coping, shift and persist strategies) as mediators and demographic variables (e.g. gender, ethnicity) as moderators of the two hypothesized stressor-psychopathology relations. According to Preacher and Hayes (2013), mediation occurs when the independent variable (X) predicts the proposed mediator (M), which in turns, predicts the outcome (Y). The indirect effect of the predictor (X) on the outcome (Y) through an intervening variable (M) constitutes mediation when there is a statistically significant effect of X on M and a statistically significant effect of M on Y. Contrary to historical approaches to mediation analyses, Preacher and Hayes (2013) argue that the existence of a direct association between X and Y is not a precondition to examining the underlying effect of X on Y, which may include some intervening (M) variable(s).

Moderation of the effect of X on Y is achieved if the "size, sign, or strength depends on or can predicted by M" (moderator; Preachers & Hayes, 2013). According to Preacher and Hayes (2013), moderation helps establish the contingent conditions of the effect of a predictor (X) on an outcome (Y). Specifically, moderation identifies the circumstances, stimuli or types of people by which an effect's magnitude varies (e.g., large versus small, positive versus negative, absent versus present, etc.).

Descriptive Statistics

The mean number of economic loss/deprivation events reported by

adolescents at Time 1 was 2.47 ($SD = 2.04$) and adolescents reported an average

frequency (0 = Never, 1 = Once, 2 = Twice, 3 = Three times, 4 = four or more

times) of community violence events of 1.17 ($SD = .67$) at Time 1. The present

sample reported using a mean number of 2.12 ($SD = .63$) Primary Control

Engagement coping skills (1 = None, 4 = A lot) at Time 1 and using a mean

number of 1.44 ($SD = .38$) Shift and Persist Strategies at Time 2. The use of Shift

and Persist strategies was not assessed at Time 1. The mean of depressive

symptoms reported by adolescents at Time 1 was .30 ($SD = .40$) and .24 ($SD =$

.35) at Time 2. The mean amount of aggressive behavior endorsed at Time 1 was

5.84 ($SD = 5.50$) and the mean of aggressive behavior at Time 2 was 4.44 ($SD =$

4.32). Means and Standard Deviations for all study variables split by gender and

ethnicity are reported in Table 1.

Frequency Analysis

In order to better understand the types of economic loss and deprivation

and community violence events endorsed by this adolescent sample, a frequency

analysis was performed. Results of the frequency analyses suggest that the most

frequently endorsed economic loss/deprivation events following the item stem

"Because of my family not having enough money,": "We get food

stamps/government checks" (25.1% endorsed), "We can't do fun things" (21.6%

endorsed), "An adult in my family has to work two jobs" (15.1% endorsed), "We

can't pay our bills" (14.7% endorsed), and "My family has had to move" (13.9% endorsed). Results of the frequency analysis indicated that the most frequently endorsed community violence items were "I saw someone get pushed, kicked, or hit" (29.8% endorsed), "I saw someone's body threatened in real life" (24.3% endorsed) "I saw someone's things stolen or messed up" (22.1% endorsed), "Someone stole from me or messed up my things" (21.6% endorsed), and "Someone pushed, hit or kicked me" (16.9% endorsed).

With regard to the endorsement of Shift and Persist strategies, adolescents reported the following items most frequently: "I feel my life has a sense of purpose" (43.2% endorsed), "I think about the future" (42.9% endorsed), "I do something to calm myself down" (42.1% endorsed), "I think about the positive aspects or the good that can come from the situation." (42.1% endorsed), and "I believe that there is a larger reason or purpose for my life" (41.7% endorsed). On the Responses to Stress Questionnaire-Violent Stress (Connor-Smith, 2000) Adolescents most frequently endorsed the following Primary Control Engagement Coping skills, "I let someone or something know how I feel" (12% endorsed), "I do something to calm myself down when I'm dealing with the stress of violence" (11.5% endorsed), "I let my feelings out." (11.2% endorsed), "I try to think of different ways to change or fix the situation" (11.2% endorsed), and "I get sympathy to calm myself down when I'm dealing with the stress of violence" (10.5% endorsed).

Results of tests for Gender and Ethnic Group Differences

To detect possibly gender differences on each of the stressor, coping, and outcome variables, *t*-tests were conducted. Results of the *t*-tests indicated significant gender differences in Time 1 Depressive Symptoms ($t = -3.12$, $p < .01$). Mean scores for Time 1 Depressive Symptoms was .21 (N = 103, $SD = .31$) for males and .38 (N = 116, $SD = .45$) for females. Depressive symptoms at Time 2 also significantly differed ($t = -3.35$, $p < .01$) between adolescent males (N = 57, $M = .13$ $SD = .20$) and females (N = 66, $M = .33$ $SD = .43$). No other gender differences were found for the remaining study variables. In addition, no ethnic differences were found on any of the study variables.

Correlation Analyses

Pearson's *r* correlations were performed to determine the specific associations between each of the predictor, outcome and proposed mediating variables for each of the hypothesized models. Correlations were computed for the entire sample (See Table 2) and for all variables of interest across both time points, separately for boys and girls (See Tables 3 and 4) as the relationships were expected to vary by gender. For the entire sample, correlations indicated that economic loss/deprivation items were significantly related to community violence events, depressive symptoms at Time 1 and Time 2, and aggression at Time 1. Events involving community violence were significantly related to economic loss/deprivation items, depression at Time 1 and aggression at Time 1.

Missing Data Analyses

Data were assessed for accuracy, missing data, outliers, normality, linearity, homoscedasticity, and multicollinearity. Sample attrition over the year-

long period resulted in some missing data for the sample (Time 1 = 259; Time 2 = 121). Approximately 98% of the participants was missing at least 1 data point. Primary Engagement coping at Time 1 was found to be missing the highest proportion of data (84%) and Depressive symptoms at Time 1 was missing the lowest proportion of data (15%). The most common pattern of missingness in the present sample, accounting for approximately 15% of the sample, included participants who had one missing value for Primary Engagement Control Coping, but had data points for each of the other scaled variables. Such a large amount of missing data for the Community Violence and Primary Control Engagement variables was partially due to a skip pattern in the electronic surveys through which the data were collected. If participants responded "no" to the items, "Has anyone ever hurt or threatened your body or taken your things?" or "Have you ever seen anyone get hurt or threatened or their things taken in real life?", they did not receive an opportunity to answer the items that were used to compute the Community Violence (Major Events Measure, Grant et al., in preparation) or the Primary Control Engagement coping (Connor-Smith et al., 2000) variables. Given that these participants were never presented items that were used to compute these two variables, the sample for Model 2 was significantly smaller than the sample for Model 1.

Logistic regression was used to determine whether key study variables (predictors, outcomes, and proposed mediators) significantly predicted participants' likelihood to have missing data. The outcome variable was a binary variable coded (0 = Not Missing and 1= Missing) for missingness of any key

study variables. This approach helps to detect and eliminate any potential biases associated with patterns of missingness among particular participants (Taylor, personal communication). Results from the logistic regression indicated that none of the key study variables were significant predictors of the missingness variable, which suggests that there was not a detectable consistent pattern of missing that was attributable to adolescents' responses on any on the study variables.

In addition to these analyses, patterns of missingness among the data were assessed using the Analyze Patterns function of Multiple Imputation function analysis in SPSS. Approximately, 15% (Depressive symptoms at T1) to 83% (Primary Control Engagement Coping) of each of the study variables were missing. Although there is not yet a consensus in the research literature with regard to amount of missing data for which the application of imputation efforts is inappropriate (Schlomer, Bauman, and Card, 2010), the authors elected to use imputation efforts for variables included in Model 1, but not Model 2. All participants did not receive all of the items that were comprised of the hypothesized mediation in Model 2 including the Community Violence and Primary Control Engagement control variables because of a skip pattern in the electronic data collection. If participants responded "no" to the items, "Has anyone ever hurt or threatened your body or taken your things?" or "Have you ever seen anyone get hurt or threatened or their things taken in real life?", they did not receive an opportunity to answer the items that were used to compute the Community Violence (Major Events Measure, Grant et al., in preparation) or the Primary Control Engagement coping (Connor-Smith et al., 2000) variables.

Given the possibility that participants were never presented items that were used to compute these two variables and the nature of missingness for the Community Violence and Primary Control Engagement Coping variables, Multiple Imputation was deemed inappropriate for Model 2 of the current study (Taylor, personal communication).

<div align="center">Specificity</div>

To test for specific associations, a two-part analysis strategy proposed by Mesman and Koot (2000) was used. First, a between-subjects test was conducted. This involves the use of Cohen and colleagues' (2002) equation to test for possible differences in the strength of Pearson correlations between Economic Loss and Deprivation and Community Violence and Depressive symptoms and Aggressive behaviors. This approach tests for differences between these correlations while controlling for potential inter-correlations between the two predictor (i.e., stressor) variables. Specificity of stressor is considered to be present in the between-subjects method if: (a) a significant correlation is found between the outcome variable and at least one of the stressors and (b) Cohen and Cohen's (2002) test for the difference in correlations is significant.

Results of the between-subjects' method provide evidence of specificity such that Time 1 Economic Loss and Deprivation was specifically associated with Time 2 Depression ($r = .29$, $p < .01$). Evidence of specificity using the between-subjects method was not found for any other associations between each of the predictors, proposed mediators and outcomes.

As recommended by Mesman and Koot (2000), a second, within-subjects method proposed by Weiss and colleagues (1998) was used. To test for specificity using this method, two additional variables were created. The first variable was created by summing the mean item scores for the two stressor scales (e.g., economic loss and deprivation and community violence) to produce an overall stress variable (plus). The second variable was created by subtracting one mean item stress score from the other to produce a contrast stress variable (minus) which represents the difference in scores between the two scales. As recommended by Mesman and Koot (2000), the mean item scores were used to correct for the different number of items that make up the two stress scales. Using this method, an outcome is considered to be a common correlate of both types of stressors if the outcome is: (a) significantly related to each of the stressors individually, (b) significantly related to the overall stressors variable (plus) and (c) significantly and positively related to the contrast variable (minus). This two-part analytic strategy proposed by Mesman and Koot (2000) was used to test specificity for each stressor-outcome, stressor-mediator, and mediator-outcome relation in each of the proposed models.

Zero-order correlations between each of the stressor measures, the coping measures, each of the outcome variables, and the two additional (sum, contrast) variables combined from the Time 2 outcomes are presented in Table 5. Results of the within-subjects method also indicate that T1 Economic Loss and Deprivation is uniquely associated with T2 Depression. Results of both between- and within- subjects tests of specificity are presented in Table 5.

<u>Conditional Process Modeling: Hypothesis I: Economic Loss and Deprivation at</u>
<u>Time 1 will predict higher levels of depressive symptoms at Time 2, while</u>
<u>controlling for Time 1 depressive symptoms. Shift and Persist strategies at Time 2</u>
<u>will mediate the relationship between Economic Loss and Deprivation at Time 1</u>
<u>and depressive symptoms at Time 2. Latino ethnicity and female gender will</u>
<u>moderate the predicted mediation.</u>

In the first model, it was hypothesized that Economic Loss and
Deprivation at Time 1 would predict higher levels of Depressive Symptoms at
Time 2, while controlling for Time 1 Depressive symptoms. In addition, we
predicted that Shift and Persist strategies at Time 2 would mediate the relation of
Time 1 Economic Loss and Deprivation to Time 2 Depressive symptoms, such
that a significant relationship between Economic Loss and Deprivation and
Depressive symptoms would be accounted for by Shift and Persist strategies.
Based on the current review of the literature, it was hypothesized that increases in
Economic Loss and Deprivation events would predict decreases in the use of Shift
and Persist Strategies and that reduced Shift and Persist strategies would predict
increases in Depressive symptoms. Furthermore, it was hypothesized that gender
and ethnicity would moderate these associations such that conditional indirect
effects would be stronger for girls than boys and stronger for Latino than African
American adolescents. The moderating effect of the interactions (i.e., gender x
ethnicity) of the proposed moderators was not tested in the present study due to
sample size limitations. Thus, two separate moderated-mediation models were

conducted to test the individual conditional indirect effects of gender and ethnicity on the proposed mediating effect of Shift and Persist Strategies on the association between Economic Loss and Deprivation and Depressive symptoms.

A two-stage hierarchical multiple regression was conducted to assess the predictive power of Economic Loss and Deprivation at Time 1 on Depressive Symptoms at Time 2, while controlling for Time 1 Depressive symptoms. Depressive Symptoms at Time 1 was entered at stage one to control for depressive symptomology prior to the start of the present study. At stage two, Economic Loss and Deprivation at Time 1 was entered. The hierarchical multiple regression revealed that at Stage one, Time 1 Depressive symptoms contributed significantly to the regression model, $F(1, 71) = 121.32, p < .01$ and accounted for 63.1% of the variation in Time 2 Depressive symptoms. Introducing the Economic Loss and Deprivation variable explained an additional 1.3% of the variation in Time 2 Depressive symptoms and this change in R^2 was nonsignificant, $F(1, 70) = 2.60, p = .11$. With the addition of the Economic Loss and Deprivation variable, Time 1 Depressive symptoms was still a significant predictor of Time 2 Depressive symptoms. Results of the two-stage hierarchical multiple regression are displayed in Table 6.

To test the proposed moderated-mediation path, PROCESS (Preacher & Hayes, 2013) was used. PROCESS is a statistical tool for path analysis-based mediation, moderation, and conditional process analysis that uses ordinary least squares (OLS) or maximum likelihood logistic regression to estimate unstandardized model coefficients, standard errors, t statistics, p values, and

confidence intervals (Hayes, 2013). Using this tool, conditional process modeling estimates the direct effect of Economic Loss and Deprivation on Depressive symptoms, as well as the indirect effect of Economic Loss and Deprivation on Depressive symptoms through Shift and Persist strategies with both direct and indirect effects moderated by ethnicity and gender. Edwards and Lambert recommend generating 95% bias-corrected bootstrapped confidence intervals to assess the conditional indirect effect of a hypothesized mediated relation (i.e., moderated mediation). According to Hayes (2013), 95% bootstrap confidence intervals are the default used in PROCESS models containing a mediation component. The generation of these bias-corrected bootstrap confidence intervals is preferred for statistical inference because this analysis, in comparison to the Sobel test, does not make the assumption that the shape of the sample distribution is normal (Hayes, 2013).

With regard to the mediation path assessing the relation of Economic Loss and Deprivation to Depressive symptoms through Shift and Persist strategies, results were inconsistent with the predictions as a reduction in Shift and Persist Strategies did not mediate the relation between Time 1 Economic Loss and Deprivation and Time 2 Depressive Symptoms, while controlling for Time 1 Depressive Symptoms. Although the overall model was statistically significant $F(5, 66) = 26.38, p<.01$), the model did not indicate that Shift and Persist was a mediator of the stressor-pathology relation according to the Preacher and Hayes' (2013) criteria for mediation. According to Preacher and Hayes (2013), this lack of mediation was evident by the lack of a significant effect of Economic Loss and

Deprivation on Shift and Persist Strategies (β = -.05, p = .10) and a lack of

significant effect of Shift and Persist Strategies on Depressive symptoms at Time

2 (β = .00, p = .47). Gender and ethnicity did not moderate the indirect effect of

Economic Loss and Deprivation at Time 1 on Depressive symptoms at Time 2

through the proposed mediation, Shift and Persist Strategies. However, there was

a marginally significant direct effect of Economic Loss and Deprivation at Time 1

on Depressive Symptoms at Time 2 for female adolescents ($t(5, 66)$ = 1.98, p =

.05). Results from the present conditional process model are presented in Tables 7

and 8.

Given the relatively small sample size (n=71) and the high proportion of

missing data among the variables in Model 1, Multiple Imputation procedures

were employed using SPSS to impute missing values. This procedure resulted in a

total sample of 250 participants with complete data for Model 1. According to

Hayes (2015), PROCESS models cannot be conducted in SPSS or SAS due to the

inability of the statistical programs to run analyses on split-case designs. Once

SPSS imputes data via the Multiple Imputation procedure, the newly created

dataset contains a number (up to 10) versions of the original dataset with which

additional analyses are performed on data from each of those datasets and

automatically derived pooled estimates from aggregated data from each of the

imputed datasets using a split-group approach. Since PROCESS mediation and

moderation models cannot be conducted with imputed data, the first hypothesized

moderated-mediation model could not be tested with the imputed data. However,

an additional two-stage hierarchical regression model was performed on the

pooled data. In Stage 1, Time 1 Depressive Symptoms was entered as a predictor of Time 2 Depressive Symptoms. In Stage 2, Economic Loss and Deprivation was entered along with Time 1 Depressive Symptoms to determine the unique variance explained in Time 2 Depressive symptoms by Economic Loss and Deprivation. Results from the hierarchical multiple regression using pooled data revealed that at Stage one, Time 1 Depressive symptoms significantly predicted Time 2 Depressive symptoms ($b = .79$, $p < .01$). At Stage two, the Economic Loss and Deprivation variable was introduced and was not a significant predictor of Time 2 Depressive symptoms ($b = .00$, $p = .94$, ns). Time 1 Depressive symptoms remained a significant predictor of Time 2 Depressive symptoms in Stage two, ($b = .79$, $p < .01$). SPSS does not provide model-level statistics for regression analyses using imputed datasets. Results of the hierarchical regression analyses with the imputed data indicate that mediation analyses using PROCESS (Hayes, 2013) will likely be nonsignificant based on the requirement of significant associations between the predictor and mediator and between the mediator and outcome.

Conditional Process Modeling: Hypothesis II: Community Violence at Time 1 will predict higher levels of Aggression at Time 2, while controlling for Time 1 Aggression. Primary Control Engagement coping at Time 2 will mediate this relationship between Community Violence exposure at Time 1 and Aggression at Time 2 for African Americans and boys.

In the second hypothesized model, it was predicted that Primary Control Engagement coping would mediate the relation of Community Violence to Aggression, such that a significant relationship between Community Violence and Aggression would be accounted for by Primary Control Engagement coping. Based on the current review of the literature, it was hypothesized that increases in Community Violence events would predict increases in the use of Primary Control Engagement coping and that Primary Control Engagement coping would predict increases in Aggression. Furthermore, it was hypothesized that gender and ethnicity would moderate these associations such that effects would be stronger for boys than girls and stronger for African American than Latino adolescents. Thus, two separate moderated-mediation models were conducted to test the individual conditional indirect of effects of gender and ethnicity on the proposed mediating effect of Primary Control Engagement coping on the association between Community Violence and Aggression.

A two-stage hierarchical multiple regression was conducted to assess the predictive power of Community Violence at Time 1 on Aggression at Time 2, while controlling for Time 1 Aggression. Aggression at Time 1 was entered at stage one to control for Depressive symptomology prior to the start of the present study. At stage two, Community Violence at Time 1 was entered. Summary statistics for this hierarchical regression model are reported in Table 9. The hierarchical multiple regression revealed that at Stage one, Time 1 Aggression contributed significantly to the regression model, $F (1, 76) = 68.20$, $p < .01$ and accounted for 47.3% of the variation in Time 2 Aggression. Introducing the

Community Violence variable explained an additional 0.3% of the variation in

Time 2 Aggression and this change in R^2 was nonsignificant, $F(1, 75) = .45$, $p =$

.50. With the addition of the Community Violence variable, Time 1 Aggression

was still a significant predictor of Time 2 Aggression.

To test the proposed moderated-mediation path, conditional process

modeling was used via PROCESS to generate estimates of the direct effect of

Community Violence on Aggression, as well as the indirect effect of Community

Violence on Aggression through Primary Control Engagement Coping with both

direct and indirect effects moderated by ethnicity and gender. With regard to the

mediation path assessing the relation of Community Violence to Aggression

through Primary Control Engagement Coping, our results were inconsistent with

our predictions such that, an increase in Primary Control Engagement Coping did

not significantly mediate the relation between Time 1 Community Violence and

Time 2 Aggression, while controlling for Time 1 Aggression, $F(3, 10) = 4.86$, p

$<.05$). It is important to note that the sample size dropped to an *n* of 14, which

places constraints on this type of analysis to accurately detect mediation and

moderation. In addition, results indicated that there was no evidence of mediation

due to a lack of a significant effect of Community Violence on Primary Control

Engagement Coping ($\beta = .08$, $p = .20$) and a lack of significant of effect Primary

Control Engagement Coping on Aggression at Time 2 ($\beta = .83$, $p = .55$).

Regarding the conditional direct and indirect effects of gender and

ethnicity on the association between Community Violence at Time 1 and

Aggression at Time 2, results indicated a nonsignificant direct effect of gender

and ethnicity on the relation between Community Violence and Aggression at Time 2. In addition, there was no evidence of the moderation of gender or ethnicity on the proposed mediation path for Model 2. Results for the the conditional process analysis of Model 2 are presented in Tables 10 and 11.

Given the relatively small sample size ($n=14$) and the high proportion of missing data among the variables in Model 2 (up to 84%), we explored Multiple Imputation as an alternative to increasing the sample size to provide a more solid foundation for testing the conditional process model. However, since the pattern of missing for the Community Violence and Primary Control Engagement Coping variables was due to participants not receiving an opportunity to answer items that correspond with these two variables because they responded "no" to a question inquiring about whether or not they had personal experiences with community violence, Multiple Imputation was deemed inappropriate. Imputation efforts are typically employed when data are missing due to complications following data collection including participants not attending time points in a longitudinal study, data entry errors or participants skipping items (Taylor, personal communication). Since participants were not provided with an option to answer items for the Community Violence and Primary Control Engagement Coping variables, it was deemed inappropriate to employ any imputation procedures for Model 2.

Discussion

The goal of the present study is to better understand the mechanisms through which urban, low-income ethnic minority adolescents experience and cope with two specific stressors, and how the coping strategies selected in response to specific stressors may contribute to the development of symptoms of psychopathology. Specifically, the author used conditional process analysis to test two competing stressor-outcome specific models and delineate the particular underlying mechanisms of two stressor-psychopathology relations in urban, ethnic minority low-income adolescents. In the first specificity model, the author aimed to test whether the experience of economic loss and deprivation predicts a reduction in the use of Shift and Persist strategies resulting in a higher endorsement of Depressive symptoms. It was predicted that the hypothesized mediated relations in Model 1 would be stronger for female adolescents when compared to their male counterparts. The hypothesized relations in Model 1 were also predicted to be stronger for Latino adolescents in comparison to African American adolescents. In Model 2, the author tested whether experiences with Community Violence contribute to a higher use of Primary Control Engagement Coping (i.e., active coping) skills resulting in a higher endorsement of Aggressive behavior in urban, ethnic minority low-income adolescents. It was predicted that the hypothesized relations in Model 2 would be stronger for male adolescents when compared to their female counterparts and stronger for African American adolescents in comparison to Latino adolescents.

As recommended by previous researchers, there is a need for the examination of stressor-outcome specific moderated mediation models to more accurately capture the developmental trajectories of emotional and behavioral problems in children and adolescents (McMahon et al, 2002). Consistent with previous research on the impact of stress exposure on urban, low-income adolescents, findings of the current study provide preliminary evidence for specificity of the relation of Economic Loss and Deprivation on future Depressive symptoms. This relation was found to be particularly strong for adolescent females. However, the results of the current study provide no evidence for the specific association between Community Violence and Aggression for urban adolescents. Also, there was no evidence found for the hypothesized mediated relations in Models 1 and 2.

Results of the preliminary analyses revealed that adolescents' experiences of economic loss and deprivation events were related to future depressive symptoms. This is consistent with prior literature examining the psychological effects of economic-related stress on low-income, urban adolescents (Grant et al., 2003; Hammack et al., 2004; Natz et al., 2012; Santiago et al., 2011). The preliminary finding of an association of economic loss and deprivation with future depression provided a base for further exploration of the specific mechanism through which these variables are related. Bivariate correlations between Economic Loss & Deprivation and Depressive symptoms explored by males and females separately yielded additional evidence of specificity. Economic Loss and Deprivation was related to Depressive symptoms at Time 1 and Time 2 for female

adolescents only, suggesting a potentially salient effect for adolescent females, but not for their male counterparts.

Specificity analyses, as recommended by Mesman and Koot (2000), further corroborated the finding that the relation of Economic Loss and Deprivation contributes to future depressive symptoms in adolescent girls. While controlling for potential inter-correlations between Economic Loss/Deprivation and Community Violence Exposure, Economic Loss/Deprivation was significantly related to Depressive Symptoms in adolescent girls only, providing evidence for between-subjects specificity. In addition, Economic Loss and Deprivation was related to Time 2 Depressive symptoms, related to an Overall Stressors variable (sum of Economic Loss/Deprivation and Community Violence measures), and significantly and positively related to the Contrast between Stressors variable (difference of Economic Loss/Deprivation and Community Violence), which provided evidence of within-subjects specificity according to Mesman and Koot's (2000) criteria.

Mediation analyses were conducted in an effort to reveal processes that account for these specific effects. Support was not found for the first conditional process model in which Shift and Persist strategies were hypothesized to mediate the relation of Economic Loss and Deprivation to future depressive symptoms, while controlling for previous Depressive symptoms. Although the overall model fit the data well and the omnibus F was significant, mediation was not found according to the criteria set by Preacher and Hayes (2013). Results indicated a lack of significant association of Economic Loss and Deprivation events with

Shift and Persist strategies, as well as a lack of significant relation of Shift and Persist Strategies to Time 2 Depressive symptoms, while controlling for Depressive symptoms at Time 1. Gender and Ethnicity were not found to moderate the proposed mediation, suggesting that the proposed indirect path does not differ between adolescent females and males or between African American and Latino adolescents (consistent with results of specificity analyses). However, for female adolescents only, a statistically significant direct effect of Economic Loss and Deprivation on Depressive symptoms at Time 2 emerged, suggesting that female adolescents who experience high levels of Economic Loss and Deprivation events reported an increase in depressive symptoms in the future, when controlling for previous Depressive symptoms. No ethnic group differences were found regarding the direct association of Economic Loss and Deprivation and Depressive symptoms.

The lack of finding that Shift and persist strategies mediates the relation of Economic Loss/Deprivation to Depression may be related to the methodological design of the present study. In previous research, Chen and colleagues (2013) have conceptualized Shift and Persist strategies as a moderator of the relation of stress and health outcomes, which is conceptually and methodologically different from the way this form of coping has been conceptualized in the present study. Unlike moderation, mediation is inherently associated with assessing change over time. Proposed mediating or intervening variables are hypothesized to explain the association between two variables over time in an effort to explain the underlying mechanism through which an independent variable and dependent variable are

related. Utilizing this methodology, researchers are better able to test whether coping strategies, such as Shift and Persist strategies, provide an explanation for the development of future psychopathology in response to economic stressors.

Chen's line of research suggests that as adolescents are more frequently confronted with chronic stressors, the quality of their health outcomes is contingent upon the amount of Shift and Persist strategies they use (Chen & Miller, 2013). As a result, the more Shift and Persist strategies are used, the less likely adolescents are to develop health problems when faced with multiple chronic stressors associated in the context of urban poverty (Chen & Miller, 2013). Given that a reduction in the use of Shift and Persist Strategies did not explain the specific association between Economic Loss and Deprivation and Depressive symptoms, we must consider alternative explanations. As the effects were also specific to females, we must consider why economic loss events would specifically predict depression for females in particular.

Although there is a wealth of literature that suggests adolescent girls are more likely to report depressive symptoms in response to chronic and acute stressors than adolescent boys (Hammack et al., 2004; McLaughlin et al.., 2007), limited research has focused primarily on adolescent girls' responses to economic stressors (Conger et al., 1993). Several studies note the negative impact on children's emotional and social adjustment in response to economic-related stress and hardship (Conger et al., 1993; Mistry et al., 2002; Santiago et al., 2011; Wadsworth et al., 2011). However, it is less clear whether or not the negative impact of economic-related stress is specifically heightened for adolescent

females when compared to their male counterparts. One study found that to be the case. Conger and colleagues (1993) examined the specific effect of economic-related stress on adolescent females and found that experiences with economic stress lead to depression in adolescent girls due to disruptions in skillful parenting and marital discord. In addition, experiences with economic stressors were also damaging to adolescent girls' psychosocial development due to parental depression and parental change in affect as a consequence of economic hardship (Conger et al., 1993). This particular study suggests that negative impact on maternal affect and depression consequently disrupts normative social interactions between mothers and their daughters and contributes to adolescent girls' emotional problems. Although this finding was stronger for mothers, increased depressed mood for mothers and fathers in response to economic stress was predictive of marital conflict and parenting behavior, which was specifically associated with adjustment problems in adolescent girls Conger et al., 1993).

Other research in this area has found that although symptoms of depression are likely preceded by economic-related stress, the magnitude of this effect is similar for boys and girls (Mistry et al., 2002). Specifically, Mistry and colleagues (2002) found that parents of families experiencing economic hardship also experience low levels of economic well-being that negatively impacted child-parent relationships, which were related to increased behavioral problems in adolescent girls and boys. Additionally, Reising and colleagues (2013) found that economic disadvantage and parental depression contributed to disrupted parenting, which placed children of these parents at a much higher risk for

developing depressive symptoms. This particular finding was not reported to differ by gender.

What is consistent in previous research aimed at delineating the particular association of economic stress with adolescent depression is the negative impact of economic stress on the family system and more specifically, on the parent-child relationship (Conger et al., 1993; Mistry et al., 2002). In response to economic pressure and hardship, parents are often faced with a multitude of additional stressors that negatively impact their social availability to their children and their parenting skills (Conger et al., 1993; Mistry et al., 2002; Reising et al., 2013). The lack of attention given to children of families affected by economic hardship coupled with decreased positive social interactions between parents and children can contribute to adolescent's feelings of sadness and hopelessness (Wadsworth et al., 2013).

In addition, adolescent females have been found to be especially likely to develop depressive symptoms in response to stressors involve interpersonal relationships (Hammen, 2005) or when stressors will have consequences for their interpersonal relationships (Cyrano ski, 2000). Given previous research findings that suggest disruptions in parent-child relationships accompany familial responses to economic stressors (Conger et al., 1993), it is likely that adolescent girls are more strongly negatively impacted by theses stressors due to their higher proclivity to develop depressive symptoms in response to stressful events involving interpersonal relationships. In addition, previous research also indicates that adolescent girls tend to develop their sense of self in relation to their

interpersonal relationships (Kirshner, 1994). Perhaps economic stress that negatively impacts adolescent girls' interpersonal family relationships also negatively influences their self-view, which places them at risk for depression.

In order to fully delineate the impact of economic-related stress on adolescents, and particularly adolescent girls, future research should consider a number of factors in examining this specific stressor-psychopathology relation. As noted previously, there is a common finding in previous research that the impact of economic-related stress is inherently associated with family-level factors. In addition, these factors are multifaceted, involving parental factors (e.g., parental depression, economic well-being), parental relationship factors (marital discord, communication patterns), and parent-child relationship factors (social availability, parenting skills; Conger et al., 1993; Mistry et al., 2002; Reising, et al., 2013). In order for researchers to fully examine the complexity of the stressor-specific mechanism tested in Model 1, researchers must include family-level factors that may also explain the relation of economic stress to depression in adolescence in theoretical and statistical models.

Methodologically, Hayes (2013) provide a means through which these complex mechanisms may be practically tested through the use of multiple moderator and multiple mediator models. By testing multiple moderators in combination with mediators in stressor-outcome specificity models, researchers are afforded the opportunity to further explore multilayered, complex relations which may be contingent upon and/or explained by more than one intervening variable (McMahon et al., 2002). Based on previous research (Conger et al., 1993;

Reising et al., 2013), it is likely that particular family-level factors including family cohesion, quality of parent-child relationship, parental psychopathology, and parental warmth may serve as potential moderators and/or mediators of this relationship and provide more evidence for the ways in which these family-level variables may explain and/or alter the relation of economic stress to not only increase depressive symptoms in adolescents, but specifically increase the likelihood of depression for adolescent girls. McMahon and colleagues (2002) assert the need for the methodological complexity of including multiple mediators and moderators in theoretical and statistical models to more clearly delineate the mechanisms through which adolescents experience stress and subsequently develop psychopathology. For example, future research could examine whether levels of parental mental health alter (i.e., moderate) the relationship between economic loss and depressive symptoms and if the use or lack of use of Shift and Persist strategies could also simultaneously explain (i.e., mediate) the same relation. Moderated mediation models as described by McMahon and colleagues (2002) provides researchers with guidance for testing these complex relations.

Our findings also suggest that experiences of economic loss and deprivation by African American and Latino adolescents may be more similar than different. Previous research is consistent with this finding. Due to similar exposure to chronic life stressors, such as economic deprivation, urban, minority adolescents are often at a higher risk for developing depressive symptoms when compared to White adolescents (Wight et al., 2005). Saulsberry and colleagues (2013) posit that urban, low-income ethnic minority adolescents are likely to live

in similar neighborhood settings that are oftentimes plagued by high rates of crime and poverty that present similar challenges for African American and Latino adolescents. Among these challenges include limited availability of and access to adequate mental health care (Saulsberry et al., 2013). This particular challenge is often complicated by the stigma associated with seeking mental health treatment due to a historical distrust of health care systems by urban minority families of color because of discrimination and abusive healthcare systems (Breland-Noble et al., 2006). As a result, many urban African American and Latino adolescents often receive little to no treatment for depressive symptoms that may result from chronic stressors, such as Economic Loss and Deprivation. These shared experiences may explain the nonsignificant finding of ethnicity as a moderator in the present study. In addition, due to shared experiences, African American and Latino adolescents may engage in similar coping strategies in response to stress that results in emotional and behavioral problems (e.g., depression, aggression) that resemble one another, which suggests that stressor-psychopathology relations in these populations may be explained by shared mediating variables and contingent upon shared moderating variables.

Results of preliminary analyses of Model 2 indicated that adolescent experiences of community violence were not significantly related to future aggression. Bivariate correlations revealed that Community Violence exposure at Time 1 was significantly related to Time 1 Aggression, but unrelated to Aggression in the future (Time 2). Specificity analyses, as recommended by Mesman and Koot (2000) were consistent with this finding. No evidence of

within-group or between-group (for gender and ethnicity) specificity was found

for the relation between Community Violence Exposure and future Aggression

Despite nonsignificant correlations between predictor and outcome

variables in Model 2, Hayes (2013) recommends moving forward with mediation

analyses. From these authors theoretical perspective, correlation does not equate

causation and thus, mediation analyses are still plausible. Given this

recommendation (Hayes, 2013), a conditional process analysis was conducted in

an effort to more clearly delineate the mechanism through which Community

Violence may predict future Aggression in adolescents. Evidence of the mediating

effect of Primary Control Engagement Coping on the relation of Community

Violence to future Aggression, while controlling for previous aggression, was not

found for Model 2. Neither gender nor ethnicity was found to moderate the

proposed mediation in Model 2. Consistent with the between-group specificity

analysis as recommended by Mesman and Koot (2002) no gender or ethnic group

differences were found regarding the direct effect of Community Violence

exposure on future Aggressive behavior.

Although our findings are inconsistent with previous research that

suggests a significant association between violence exposure and aggression

urban adolescents (Fowler et al., 2009), there are a few notable factors that may

have impacted the results of the present study. First, there were a couple

methodological factors that negatively impacted the present study's longitudinal

results including the considerable amount of attrition. Only 46.7% of the sample

from Time 1 returned for data collection at Time 2. The decreased sample size

likely impacted the level of statistical power to test moderated-mediation using variables that were missing a considerable amount of data. Given the present design, these methodological factors likely negatively impacted our ability to test longitudinal and conditional effects in Model 2. Secondly, the methodological design of Model 2 does not consider whether particular protective factors may counteract the emergence of aggressive behaviors for adolescents in the current sample. Protective factors, specifically those associated with family dynamics, are likely to buffer the detrimental effects of violence for urban adolescents. Gorman-Smith and colleagues (2004) found that positive family functioning serves as a protective factor from future violence perpetuation in urban adolescents exposed to community violence. Specifically, family relationship characteristics, including cohesion, and effective parenting strategies, are protective of adolescents' engagement in future violent acts when previously exposed to community violence as compared to adolescents with poor family functioning (Gorman-Smith, Henry & Tolan, 2004). The availability of family support, including the presence of a parental figure in home and family size, have been found to buffer the negative effects of community violence on children's emotional problems (Overstreet et al., 1999). Consistent with recommendations by McMahon and colleagues (2002), in order to identify the specific trajectories through which adolescents experience chronic stressors and develop emotional problems, researchers should include moderator and mediators in future theoretical models. Based on previous research and the findings of the current study, the inclusion of family-level protective factors as moderators and adolescent coping styles as

mediators may provide researchers with a foundation for better understanding the nuances that may contribute to the development and prevention of future adolescent aggressive behavior in response to community violence exposure.

Additionally, the inherent complexity of community violence exposure is not entirely assessed in the current study. The presence and frequency of a range of violent events, including being hit or shot to being sexually abused or violated, were collected to obtain a cumulative community violence exposure score. In order to fully assess the dynamics of community violence exposure, researchers must consider not only the types of violence adolescents may be exposed to, but also the mode through which the violence is experienced. Specifically, types of violence exposure refer to sexual, physical, interpersonal, or group-level violence, while the mode of violence exposure refers to witnessing, victimization, or vicarious (i.e., being notified or hearing of violence) exposure to violence. Given that previous research suggests that the experience of specific types of violence may elicit particular coping strategies in response to violence and contribute to particular emotional and behavioral outcomes in adolescence (Margolin & Gordis, 2000), the assessment of the impact of specific types of violence and the modes through which these types of violence are experienced may further outline the trajectories that contribute to future aggression. With regard the impact of the mode of violence exposure on outcomes, there is a corroborated finding that violence exposure that include one's own victimization appears to much more impactful on child and adolescent emotional and behavioral functioning than witnessing or being vicariously exposed to community violence (Fowler et al.,

2009). What is less clear in the current literature is the delineation of the effect of the interaction of various types of violence (e.g., sexual, physical) with differing modes of violence (e.g., victimization, witnessing) on future emotional problems, such as aggression. Future research should examine whether the effect of types of violence (predictor) on aggressive behavior (outcome) mediated through coping strategies is contingent on the mode (moderator) through which the violence was experienced. This level of methodological and statistical sophistication not only accounts for the complexity of violence exposure, but will presumably provide researchers with clarity about the specific mechanisms through which urban adolescents experience, respond to, and are subsequently impacted by community violence exposure.

Lastly, the lack of consideration of specific types of coping that correspond with specific types of violence and modes of violence exposure may explain why Primary Control Engagement Coping did not mediate the relation of Community Violence exposure to future aggressive behavior. Previous research suggests the types of coping styles that children use in response to violence exposure are contextually driven (Boxer et al., 2013). Specifically, children and adolescent′s coping behaviors in response to violence are commonly associated with their perception of controllability of the violent event and the actual contextual factors associated with the violence exposure (e.g., type of violence, mode of violence exposure; Tolan & Grant, 2009). Male adolescents have been found to engage in more aggressive behaviors in response to violence when compared to their female counterparts (Gorman Smith et al., 2004; McLaughlin et

al., 2007). This finding has been corroborated in the literature with violence events being specifically associated with forms of active coping. According to Gaylord-Harden and colleagues, male adolescents have a stronger proclivity to engage in more active forms of coping (consistent with Primary Control Engagement Coping) in response to stress, which may manifest as anger-related behavior (2011). However, our findings indicate that gender did not moderate the direct relation of the Community Violence at Time 1 to Aggression at Time 2, which is inconsistent with current evidence in the literature. Our lack of this finding is likely be due to a reduction in variability in the sample due to the decrease in sample size to 14 at Time 2 for Model 2.

It was also hypothesized that exposure to violence would lead to active self-protective responses, which in turn, would lead to aggression, but our results do not support our hypotheses. In fact, Primary Control Engagement coping was not associated with either exposure to violence or aggression at either Time 1 or Time 2. This may be due to large percentages of missing data for the variables included in Model 2, which greatly impacts the statistical power needed to detect conditional process effects. Perhaps adolescents use less active styles of coping in response to their lack of perceived control over the exposure to violence. For example, adolescents may be less likely to employ active forms of coping when they perceive a violent event to be uncontrollable (e.g., sexual abuse by an older adult). In this instance, we hypothesize that adolescents are more likely to distance themselves physically and psychologically from these types of violent events and engage in more avoidance and disengagement coping styles. Future

research aimed at delineating the specific stressor-psychopathology relation of Community Violence exposure to Aggression should test the mediating effect of different coping strategies especially non-active types of coping. Additionally, the adolescent′s perceived controllability of the violence exposure could potentially be tested as a moderator of this proposed mediated relation to clarify the impact of perceived control on adolescent′s use of coping strategies in response to violence. Given that some previous research suggests that primary control engagement coping contributes to less aggression (Wadsworth & Santiago, 2008), a growing body of research posits that effective coping strategies are comprised of matching particular strategies with particular stressors to predict certain outcomes rather than the primary use of a particular coping strategy that consistently predicts a certain outcome (Bettis et al., 2015). Future research should examine the particular coping strategies that are most well-matched with various types and modes of violence exposure and and contribute less aggression in urban, ethnic minority adolescents.

With regard to the lack of moderation findings for ethnicity, there is scant literature comparing African Americans' and Latinos' aggression in response to community violence. As noted previously, experiences of and reactions to chronic stress, such as community violence, may be more similar than different for African American and Latino youth. According to McLaughlin and colleagues (2007), African American and Latino adolescents are often not only disproportionately affected by violence in urban areas due to their overrepresentation in areas most plagued by violence, but also cultural similarities

in the perception of aggression in response to violence may also exist. For example, aggression or anger in response to violence is often viewed as protective and more powerful among adolescents of color (Watts, Griffith, & Abdul-Adil, 1999). This may likely be a result of urban, low-income minority adolescents' experiences of frustration with various compromised systems including discrimination, neighborhood disadvantage, and economic-related stress. These factors may help explain the finding that ethnicity does not moderate the direct effect of community violence exposure on aggression, as well as the indirect effect through the use of active coping strategies.

Strengths and Limitations

Despite limited findings, there are a number of strengths related to the conceptual framework, methodological design and analytic methods of the present study. One notable strength is the use of conditional process analysis to test both mediators and moderators of specific stressor-psychopathology relations in urban adolescents. McMahon and colleagues (2002) assert that the use of moderated mediation and mediated moderation models are needed to fully examine the specific mechanisms through which adolescents experience stressors and develop emotional and behavioral problems. The use of this sophisticated methodological design and statistical analysis is certainly a strength in testing specificity in adolescent stress-psychopathology relations. Secondly, the ethnically diverse participant sample is also a strength of the present study. The diverse sample

allows researchers to determine for what populations of adolescents' specific mechanisms may be particularly salient.

With regard to measurement, a strength of the present study is the comprehensive assessment of Community Violence exposure in Model 2. As mentioned previously, Community Violence exposure was conceptualized as a range of violent events including being, hit or shot to being sexually abused or violated. This comprehensive assessment of violence has been lacking in previous research examining the impact of violence exposure on adolescent emotional and behavioral problems. In a comprehensive review of the literature on child and adolescent exposure to community violence, Fowler and colleagues (2009) found there is a lack of studies comprehensively assessing the impact of different types of violence on children and adolescent mental health (Fowler et al., 2009). Few studies have examined the differing effects of various types of violence exposure on outcomes using a comprehensive assessment of violence in the same sample study. Although we assert the importance of assessing the effect of various types of violence exposure on adolescent behavior, few studies have done so using a comprehensive assessment of violence exposure. As a result, the use of a comprehensive assessment of violence is particularly helpful when examining specificity because of the flexibility afforded to researchers in assessing particular associations between types of violence and associated outcomes.

Although the present study has a number of strengths, these strengths are also met with a few notable limitations. One limitation was the methodological differences between the two proposed conditional process models. This difference

was mainly due to a difference in time at which data for the two mediating variables were collected. In the first model, the proposed mediation, Shift and Persist strategies, was collected at Time 2 while the proposed mediator in Model 2, Primary Control Engagement coping, was collected at Time 1. It is difficult to draw statistical inferences from the data with regard to competing specificity models given that the proposed mediators were collected at different times. This is certainly a limitation of the present study and impacts the researchers' ability to delineate stressor-outcome specificity across time due to the mediator and outcome data being collected during the same time point. Future stressor-outcome specific studies with ideal methodological designs should include predictors, mediators, and outcomes collected at different time points (a total of three time points).

The difference of measurement of each of the stressor variables also contributes to a limitation of the present study. The Economic Loss and Deprivation stressor was measured using a stressor checklist of events experienced by adolescents. The use of this particular type of measurement poses several limitations alone as it does not account for the chronicity of the stressor or the magnitude or impact of stressor on the adolescent. Future research should include the examination of stressor characteristics (e.g., chronicity, intensity, magnitude, etc.) to contribute to a more comprehensive measurement of adolescents' experiences of stressors and how these specific experiences (e.g., specific types of economic loss, etc.) vary by the particular coping strategies used in responses to them. The Community Violence stressor was measured using a

Likert scale to determine the frequency of adolescents' experience of particular

violence events and not simply the mere experience of violence that is captured

via a stressor checklist. Due to these differences in the measurement of the

stressor variables, it is difficult to test the two proposed conditional process

models as competitive models as the variables are measured differently, which

could influence the statistical results.

Additionally, it was difficult to assess the hypothesized mediation in

Model 1 due to the data collection strategies mentioned in the present study.

Participants in the current study completed measures for Shift and Persist

strategies at the same time as the outcome variable in Model 2, which limits the

methodological rigor of the conditional process model. It is difficult to

conceptually determine if the use of Shift and Persist strategies is predictive of

future Depressive symptoms, when the proposed mediator and observed outcome

are measured at the same time point. Given Hayes' (2013) requirement of a

significant predictive effect of the mediator on the outcome in order to constitute

mediation, this lack of methodological rigor is especially impactful in the present

study's analyses. Ideally, the measurement of the predictive power of a reduction

of Shift and Persist strategies on Depressive symptoms in the future would be

tested using data for an observed outcome collected at at time point after the

proposed mediator (for the present study, at Time 3). Perhaps the collection of

data on the use of Shift and Persist strategies across time (e.g., at Time 1 and

Time 2 in a study design with three time points) before the observed outcome may

have yielded different results based on the adolescents' potential variations in the use of these strategies over time.

Implications

Despite the limitations, the present study contributes to the current body of literature by emphasizing the utility of mediation and moderated mediation models using conditional process modeling to examine the associations of specific stressors with specific coping strategies that result in particular psychopathological outcomes for urban adolescents. The finding that the association between Economic Loss/Deprivation and Depressive symptoms differ by gender provides a foundation for future research centered on specifying particular coping strategies and/or response styles that may contribute to the endorsement of more depressive symptoms by female adolescents when compared to their male counterparts.

In addition, the present study provides the field of developmental psychopathology with additional markers that aid in the mechanisms through which urban adolescents develop psychological and emotional problems. Our findings provide additional evidence for the pervasiveness of family economic problems on the social and emotional development of children and adolescents. Specifically, the present findings suggest that the impact of economic-related stressors is stronger for adolescent girls when compared to adolescent boys. These findings indicate a need for better understanding gender-specific developmental pathways through which urban adolescents are impacted by economic-related stress. Additional information regarding the moderating effect of gender on

specific stress-psychopathology trajectories will aid in the development of clinical and community-based interventions tailored to addressing specific stressors including those involving Economic Loss and Deprivation. Also, future research should aim to examine the diversity among the types of broad-level stressors, such as community violence, to determine the specific effects of various types of violence and modes of violence exposure on urban adolescents' psychological well-being. For example, adolescents' experiences of community violence related to sexual violence and physical violence may elicit the use of differing coping strategies that result in particular outcomes. Research centered on continuing to delineate the developmental trajectories of psychopathology in urban adolescents would certainly inform future community and clinical interventions aimed at improving adolescent mental health.

References

Aisenberg, E., & Herrenkohl, T. (2008). Community violence in context: Risk and resilience in children and families. *Journal of Interpersonal Violence*, *23*(3), 296–315. doi:10.1177/0886260507312287.

Allison, K. W., Burton, L., Marshall, S., Perez-Febles, A., Yarrington, J., Kirsh, L. B., & Merriwether-DeVrie, C. (1999). Life experiences among urban adolescents: Examining the role of context. *Child development*, *70*, 1017–1029.

Anderson, E. R., & Mayes, L. C. (2010). Race/ethnicity and internalizing disorders in youth: A review. *Clinical Psychology Review*, *30*(3), 338–348. doi:10.1016/j.cpr.2009.12.008

Bettis, A. H., Forehand, R., McKee, L., Dunbar, J. P., Watson, K. H., & Compas, B. E. (2015). Testing specificity: Associations of stress and coping with symptoms of anxiety and depression in youth. *Journal of Child and Family Studies*, 1-10.

Boxer, P., & Sloan-Power, E. (2013). Coping with violence A comprehensive framework and implications for understanding resilience. *Trauma, Violence, & Abuse 14*(3), 209-221. doi: 1524838013487806.

Breland-Noble, A. M., Bell, C., & Nicolas, G. (2006). Family first: The development of an evidence-based family intervention for increasing participation in psychiatric clinical care and research in depressed African American adolescents. *Family Process, 45*(2), 153–169.

Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. The Future of children / Center for the Future of Children, the David and Lucile Packard Foundation, 7(2), 55–71.

Busby, D. R., Lambert, S. F., & Ialongo, N. S. (2013). Psychological symptoms linking exposure to community violence and academic functioning in African American adolescents. *Journal of Youth and Adolescence*, *42*(2), 250–262. doi:10.1007/s10964-012-9895-z

Chen, E., & Miller, G. E. (2012). "Shift-and-Persist" strategies: Why low socioeconomic status isn't always bad for health. *Perspectives on Psychological Science*, *7*(2), 135–158. doi:10.1177/1745691612436694

Chen, E., & Miller, G. E. (2013). Socioeconomic status and health: Mediating and moderating factors. *Annual Review of Clinical Psychology*, *9*(1), 723–749. doi:10.1146/annurev-clinpsy-050212-185634

Chen, E., Miller, G. E., Lachman, M. E., Gruenewald, T. L., & Seeman, T. E. (2012). Protective factors for adults from low-childhood socioeconomic circumstances: The benefits of shift-and-persist for allostatic load. *Psychosomatic Medicine*, *74*(2), 178–186. doi:10.1097/PSY.0b013e31824206fd

Conger, R. D., Conger, K. J., Elder, G. H., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1993). Family economic stress and adjustment of early adolescent girls. *Developmental Psychology*, *29*(2), 206.

Conger, R. D., Conger, K. J., & Martin, M. J. (2010). Socioeconomic status, family processes, and individual development. *Journal of Marriage and*

Family, *72*(3), 685–704. doi:10.1111/j.1741-3737.2010.00725.x

Conger, R. D., Wallace, L. E., Sun, Y., Simons, R. L., McLoyd, V. C., & Brody, G. H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology*, *38*(2), 179–193. doi:10.1037//0012-1649.38.2.179

Connor-Smith, J. K., Compas, B. E., Wadsworth, M. E., Thomsen, A. H., & Saltzman, H. (2000). Responses to stress in adolescence: Measurement of coping and involuntary stress responses. *Journal of Consulting and Clinical Psychology*, *68*(6), 976–992. doi:10.1037//0022-006X.68.6.976

Daughters, S. B., Reynolds, E. K., MacPherson, L., Kahler, C. W., Danielson, C. K., Zvolensky, M., & Lejuez, C. W. (2009). Distress tolerance and early adolescent externalizing and internalizing symptoms: The moderating role of gender and ethnicity. *Behaviour Research and Therapy*, *47*(3), 198–205. doi:10.1016/j.brat.2008.12.001

Epstein-Ngo, Q., Maurizi, L. K., Bregman, A., & Ceballo, R. (2013). In response to community violence: Coping strategies and involuntary stress responses among Latino adolescents. *Cultural Diversity and Ethnic Minority Psychology*, *19*(1), 38–49. doi:10.1037/a0029753

Flouri, E., & Tzavidis, N. (2008). Psychopathology and prosocial behavior in adolescents from socio-economically disadvantaged families: the role of proximal and distal adverse life events. *European Child & Adolescent Psychiatry*, *17*(8), 498–506. doi:10.1007/s00787-008-0693-9

Fowler, P. J., Tompsett, C. J., Braciszewski, J. M., Jacques-Tiura, A. J., & Baltes,

B. B. (2009). Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development and Psychopathology*, *21*(01), 227. doi:10.1017/S0954579409000145

Garber, J., & Hollon, S. D. (1991). What can specificity designs say about causality in psychopathology research? *Psychological Bulletin*, *110*, 1–8.

Gaylord-Harden, N. K., Cunningham, J. A., & Zelencik, B. (2011). Effects of Exposure to Community Violence on Internalizing Symptoms: Does Desensitization to Violence Occur in African American Youth? *Journal of Abnormal Child Psychology*, *39*(5), 711–719. doi:10.1007/s10802-011-9510-x

Gorman Smith, D., Henry, D. B., & Tolan, P. H. (2004). Exposure to community violence and violence perpetration: the protective effects of family functioning. *Journal of Clinical Child and Adolescent Psychology 33*(3), 439–449. doi:10.1207/s15374424jccp3303_2

Gorman-Smith, D., & Tolan, P. (1998). The role of exposure to community violence and developmental problems among inner-city youth. *Development and Psychopathology*, *10*(1), 101–116.

Grant, K., Poindexter, L., Davis, T., Cho, M. H., McCormick, A., & Smith, K. (2000). Economic stress and psychological distress among urban African American adolescents. *Journal of Prevention & Intervention in the Community*, *20*(1-2), 25–36. doi:10.1300/J005v20n01_03

Grant, K. E., Compas, B. E., Stuhlmacher, A. F., Thurm, A. E., McMahon, S. D., & Halpert, J. A. (2003). Stressors and child and adolescent psychopathology:

Moving from markers to mechanisms of risk. *Psychological Bulletin*, *129*(3), 447–466. doi:10.1037/0033-2909.129.3.447

Grant, K. E., Compas, B. E., Thurm, A. E., McMahon, S. D., & Gipson, P. Y. (2004). Stressors and child and adolescent psychopathology: Measurement issues and prospective effects. *Journal of Clinical Child & Adolescent Psychology*, *33*(2), 412–425. doi:10.1207/s15374424jccp3302_23

Grant, K. E., Compas, B. E., Thurm, A. E., McMahon, S. D., Gipson, P. Y., Campbell, A. J., et al. (2006). Stressors and child and adolescent psychopathology: Evidence of moderating and mediating effects. *Clinical Psychology Review*, *26*(3), 257–283. doi:10.1016/j.cpr.2005.06.011

Grant, K., Poindexter, L., Davis, T., Cho, M. H., McCormick, A., & Smith, K. (2000). Economic stress and psychological distress among urban African American adolescents. *Journal of Prevention & Intervention in the Community*, *20*(1-2), 25–36. doi:10.1300/J005v20n01_03

Guerra, N. G., Huesmann, L. R., & Spindler, A. (2003). Community violence exposure, social cognition, and aggression among urban elementary school children. *Child development*, *74*(5), 1561–1576.

Guerra, N. G., Huesmann, L. R., Tolan, P. H., Van Acker, R., & Eron, L. D. (1995). Stressful events and individual beliefs as correlates of economic disadvantage and aggression among urban children. *Journal of Consulting and Clinical Psychology*, *63*(4), 518–528.

Hammack, P. L., Robinson, W. L., Crawford, I., & Li, S. T. (2004). Poverty and depressed mood among urban African-American adolescents: A family stress

perspective. *Journal of Child and Family Studies*, *13*(3), 309–323.

Hammen, C. (2005). Stress and depression. *Annual Review of Clinical Psychology, 1*, 293-319.

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modeling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods 6*(1), 53-60.

Katz, B. N., Esparza, P., Carter, J. S., Grant, K. E., & Meyerson, D. A. (2012). Intervening processes in the relationship between neighborhood characteristics and psychological symptoms in urban youth. *The Journal of Early Adolescence*, *32*(5), 650–680. doi:10.1177/0272431611414060

Kirshner, K. S. (1994). Fostering the sense of self: group psychotherapy for girls in early adolescence. *Journal of Child and Adolescent Group Therapy*, *4*(1), 27-45.

Kliewer, W., Parrish, K. A., Taylor, K. W., Jackson, K., Walker, J. M., & Shivy, V. A. (2006). Socialization of coping with community violence: Influences of caregiver coaching, modeling, and family context. *Child development*, *77*(3), 605–623.

Margolin, G., & Gordis, E. B. (2000). The effects of family and community violence on children. *Annual review of psychology*, *51*(1), 445–479.

Mesman, J. & Koot, H. M. (2000). Common and specific correlates of preadolescent internalizing and externalizing psychopathology. *Journal of Abnormal Psychology 109*(3), 428-437.

McLaughlin, K. A., Hilt, L. M., & Nolen-Hoeksema, S. (2007). Racial/Ethnic

 differences in internalizing and externalizing symptoms in adolescents.

 Journal of Abnormal Child Psychology, *35*(5), 801–816. doi:10.1007/s10802-

 007-9128-1

McLaughlin, J., Miller, P., & Warwick, H. (1996). Deliberate self-harming

 adolescents: Hopelessness, depression, problems and problem-solving.

 Journal of Adolescence, 19, 523–532.

McMahon, S. D., Felix, E. D., Halpert, J. A., & Petropoulos, L. A. N. (2009).

 Community violence exposure and aggression among urban adolescents:

 testing a cognitive mediator model. *Journal of Community Psychology*, *37*(7),

 895–910. doi:10.1002/jcop.20339

McMahon, S. D., Grant, K. E., Compas, B. E., Thurm, A. E., & Ey, S. (2002).

 Stress and psychopathology in children and adolescents: is there evidence of

 specificity? *Journal of Child Psychology and Psychiatry*, *44*(1), 107–133.

Mistry, R. S., Vandewater, E. A., Huston, A. C., & McLoyd, V. C. (2002).

 Economic well- being and children's social adjustment: The role of family

 process in an ethnically diverse low-income sample. *Child development*,

 73(3), 935-951.

Olino, T. M., Klein, D. N., Farmer, R. F., Seeley, J. R., & Lewinsohn, P. M.

 (2012). Examination of the structure of psychopathology using latent class

 analysis. *Comprehensive Psychiatry*, *53*(4), 323–332.

 doi:10.1016/j.comppsych.2011.05.008

Overstreet, S., Dempsey, M., Graham, D., & Moely, B. (1999). Availability of

family support as a moderator of exposure to community violence. *Journal of clinical child psychology*, *28*(2), 151-159.

Reising, M. M., Watson, K. H., Hardcastle, E. J., Merchant, M. J., Roberts, L., Forehand, R., & Compas, B. E. (2013). Parental depression and economic disadvantage: The role of parenting in associations with internalizing and externalizing symptoms in children and adolescents. Journal of child and family studies, 22(3), 335-343.

Sanchez, Y. M., Lambert, S. F., & Cooley-Strickland, M. (2012). Adverse life events, coping and internalizing and externalizing behaviors in urban African American youth. *Journal of Child and Family Studies*, *22*(1), 38–47. doi:10.1007/s10826-012-9590-4

Santiago, C. D., Wadsworth, M. E., & Stump, J. (2011). Socioeconomic status, neighborhood disadvantage, and poverty-related stress: Prospective effects on psychological syndromes among diverse low-income families. *Journal of Economic Psychology*, *32*(2), 218–230. doi:10.1016/j.joep.2009.10.008

Saulsberry, A., Corden, M. E., Taylor-Crawford, K., Crawford, T. J., Johnson, M., Froemel, J., ... & Van Voorhees, B. W. (2013). Chicago Urban Resiliency Building (CURB): An internet-based depression-prevention intervention for urban African-American and Latino adolescents. *Journal of Child and Family Studies*, *22*(1), 150-160.

Schwab-Stone, M. E., Ayers, T. S., Kasprow, W., Voyce, C., Barone, C., Shriver, T., & Weissberg, R. P. (1995). No safe haven: a study of violence exposure in an urban community. *Journal of the American Academy of Child and*

Adolescent Psychiatry, 34(10), 1343–1352. doi:10.1097/00004583-199510000-00020

Takeuchi, D. T., Williams, D. R., & Adair, R. K. (1991). Economic stress in the family and children's emotional and behavioral problems. *Journal of Marriage and the Family*, 1031–1041.

Tolan, P. H., Gorman Smith, D., Henry, D., Chung, K. S., & Hunt, M. (2002). The relation of patterns of coping of inner–city youth to psychopathology symptoms. *Journal of Research on Adolescence, 12*(4), 423–449.

Tolan, P. H., & Grant, K. (2009). How social and cultural contexts shape the development of coping: Youth in the inner-city as an example. In E. A. Skinner & M. J. Zimmer-Gembeck (Eds.), Coping and the development of regulation. New Directions for Child and Adolescent Development, 124, 61-74.

Wadsworth, M. E., & Berger, L. E. (2006). Adolescents coping with poverty-related family stress: prospective predictors of coping and psychological symptoms. *Journal of Youth and Adolescence, 35*(1), 54–67. doi:10.1007/s10964-005-9022-5

Wadsworth, M. E., & Compas, B. E. (2002). Coping with family conflict and economic strain: The adolescent perspective. *Journal of Research on Adolescence, 12*(2), 243–274.

Wadsworth, M. E., Raviv, T., Reinhard, C., Wolff, B., Santiago, C. D., & Einhorn, L. (2008). An Indirect Effects Model of the Association Between Poverty and Child Functioning: The Role of Children's Poverty-Related

Stress. *Journal of Loss and Trauma*, *13*(2-3), 156–185.

    doi:10.1080/15325020701742185

Wadsworth, M. E., Raviv, T., Santiago, C. D., & Etter, E. M. (2011). Testing the

    adaptation to poverty-related stress model: Predicting psychopathology

    symptoms in families facing economic hardship. *Journal of Clinical Child &*

    Adolescent Psychology, *40*(4), 646–657. doi:10.1080/15374416.2011.581622

Wadsworth, M. E., Rindlaub, L., Hurwich-Reiss, E., Rienks, S., Bianco, H., &

    Markman, H. J. (2013). A longitudinal examination of the adaptation to

    poverty-related stress model: Predicting child and adolescent adjustment over

    time, *Journal of Clinical Child & Adolescent Psychology*, *42*(5), 713-725.

Wight, R. G., Aneshensel, C. S., Botticello, A. L., & Sepúlveda, J. E. (2005). A

    multilevel analysis of ethnic variation in depressive symptoms among

    adolescents in the United States. *Social Science & Medicine, 60*(9), 2073-

    2084.

Wolff, B. C., Santiago, C. D., & Wadsworth, M. E. (2009). Poverty and

    involuntary engagement stress responses: examining the link to anxiety and

    aggression within low-income families. *Anxiety, Stress & Coping*, *22*(3),

    309–325. doi:10.1080/10615800802430933

Table 1

Mean and Standard Deviations of all Study Variables split by Gender and

Ethnicity

	Economic Loss & Deprivation	Community Violence Exposure	Shift and Persist Strategies	Primary Contr Engagement Coping
Female	2.46 (2.32)	1.14 (.62)	1.42 (.36)	2.03 (.63)
Male	2.49 (1.71)	1.21 (.72)	1.47 (.40)	2.17 (.63)
African American	2.33 (2.00)	1.09 (.60)	1.41 (.40)	2.10 (.68)
Latino	2.48 (1.88)	1.18 (.64)	1.48 (.37)	2.11 (.63)
All	2.47 (2.04)	1.17 (.67)	1.44 (.38)	2.12 (.63)

	T1 Depression	T2 Depression	T1 Aggression	T2 Aggressio
Female	.38 (.45)	.33 (.43)	6.36 (5.58)	5.04 (4.42)
Male	.21 (.31)	.13 (.20)	5.25 (5.4)	3.72 (4.16)
African American	.29 (.41)	.23 (.37)	6.00 (5.83)	4.68 (4.64)
Latino	.29 (.38)	.25 (.33)	5.36 (4.90)	4.41 (4.18)
All	.30 (.40)	.24 (.35)	5.84 (5.50)	4.44 (4.32)

Note. Means and standard deviations presented are for Economic Loss & Deprivation, Community Violence Exposure, and Primary Control Engagement Coping at Time 1 and Shift and Persist strategies at Time 2.

Table 2

Correlation Matrix for Study Variables

Variable	1	2	3	4	5	6	7	8
1. T1 Economic Loss & Deprivation	-							
2. T1 Community Violence	.12	-						
3. T2 Shift and Persist Strategies	-.18	-.13	-					
4. T1 Primary Control Engagement Coping	-.23	.16	.04	-				
5. T1 Depressive symptoms	.32**	-.05	-.20*	-.10	-			
6. T2 Depression symptoms	.29*	.01	-.07	.28	.76**	-		
7. T1 Aggression	.25**	.03	-.06	-.30	.65**	.34**	-	
8. T2 Aggression	-.02	-.01	.05	.09	.41**	.51**	.57**	

Note. * denotes $p<.05$, ** denotes $p<.01$.

Table 3

Correlation Matrix for Study Variables – Boys Only

Variable	1	2	3	4	5	6	7	8
1. T1 Economic Loss & Deprivation	-							
2. T1 Community Violence	.27	-						
3. T2 Shift and Persist Strategies	-.06	-.03	-					
4. T1 Primary Control Engagement Coping	-.12	.15	.14	-				
5. T1 Depressive symptoms	.16	-.08	-.26	-.05	-			
6. T2 Depression symptoms	-.04	-.02	-.12	.46	.32*	-		
7. T1 Aggression	.16	-.03	-.07	-.17	.76**	.23	-	
8. T2 Aggression	-.17	.19	-.14	.33	.20	.46**	.51**	-

Note. * denotes $p<.05$, ** denotes $p<.01$.

Table 4

Correlation Matrix for Study Variables – Girls Only

Variable	1	2	3	4	5	6	7
1. T1 Economic Loss & Deprivation	-						
2. T1 Community Violence	.02	-					
3. T2 Shift and Persist Strategies	-.28	-.19	-				
4. T1 Primary Control Engagement Coping	-.31	.17	-.87	-			
5. T1 Depressive symptoms	.39**	-.03	-.17	-.10	-		
6. T2 Depression symptoms	.42**	-.03	-.07	.03	.85**	-	
7. T1 Aggression	.31*	.09	-.05	-.47	.59**	.42**	-
8. T2 Aggression	.03	-.16	.20	-.83	.47**	.53**	.62**

Note. * denotes *p*<.05, ** denotes *p*<.01.

Table 5

Within- and Between-Groups Specificity Correlates (N = 259)

Outcome	Time 1 Economic Loss & Deprivation	Time 1 Community Violence	Overall Stressors (Plus)	Contrast Between Stressors (Minus)	Specificity Between	Withi
T1 PCE Coping	-.26	.19	-.19	-.33	Yes p<.01	No
T2 Shift & Persist	-.17	-.11	-.20	-.02	No	No
T2 Depression	.29**	-.03	.66**	.57**	No	Yes
T2 Aggression	-.02	-.01	.22	.11	No	No

Note. * denotes *p*<.05, ** denotes *p*<.01.

Table 6

Hierarchical Multiple Regression for Model 1

Outcome: T2 Depression

Predictor	b	CI$_{95\%}$ for b Lower	Upper	β	R	R^2
Step 1						
T1 Depression	.78	.64	.92	.79	.79	.63
Step 2						
T1 Depression	.76	.62	.90	.77		
T1 Economic Loss & Deprivation	.03	-.01	.06	.12	.80	.64

Note. * denotes $p<.05$, ** denotes $p<.01$.

Table 7

Conditional Process Model – Economic Loss & Deprivation, Shift and Persist

Strategies and Depressive Symptoms (Gender)

		Consequent					
		M (Shift and Persist Strategies)			Y (Depressive Symptoms		
Antecedent		*Coeff.*	*SE*	*p*	*Coeff.*	*SE*	*p*
X (Economic Loss & Deprivation)	a_1	-.05	1.63	.98	-.06	.06	.41
M (Shift and Persist Strategies)					.00	.00	.46
W (Gender)	a_2	.93	2.50	.71	.01	.10	.95
X x W	a_3	-.29	.92	.76	.04	.04	.21
Constant	i_1	24.71	4.24	.00**	-.06	2.00	.77
		$R^2 = .11$			$R^2 = .82$		
		$F(4, 67) = 2.10, p > .05$			$F(5, 66) = 26.37, p < .01*$		

Note. * denotes $p<.05$, ** denotes $p<.01$. Economic Loss & Deprivation was collected at Time 1. Economic Loss & Deprivation collected at Time 1. Shift and Persist Strategies and Depressive Symptoms were collected at Time 2.

Table 8

Conditional Process Model – Economic Loss & Deprivation, Shift and Persist

Strategies and Depressive Symptoms (Ethnicity)

Antecedent		M (Shift and Persist Strategies)			Y (Depressive Sympton		
		Coeff.	*SE*	*p*	*Coeff.*	*SE*	
X (Economic Loss & Deprivation)	a_1	2.06	2.46	.41	.01	.11	.
M (Shift and Persist Strategies)					.00	.01	.
W (Ethnicity)	a_2	3.76	3.05	.22	.01	.13	.
X x W	a_3	-1.56	1.33	.25	.01	.06	.
Constant	i_1	18.99	5.07	.00	-.11	.24	.
		$R^2 = .06$			$R^2 = .62$		
		$F(3, 53) = 1.16, p > .05$			$F(5, 61) = 16.58, p < .0$		

Note. * denotes $p < .05$, ** denotes $p < .01$. Economic Loss & Deprivation was collected at Time 1. Economic Loss & Deprivation collected at Time 1. Shift and Persist Strategies and Depressive Symptoms were collected at Time 2.

Table 9

Hierarchical Multiple Regression for Model 2

Outcome: T2 Aggression

Predictor	b	CI$_{95\%}$ for b Lower	Upper	β	R	R^2
Step 1						
T1 Aggression	.60	.45	.74	.69	.69	.47
Step 2						
T1 Aggression	1.77	.46	.75	.70		
T1 Community Violence	-.03	-.11	.06	-.06	.69	.48

Note. * denotes *p*<.05, ** denotes *p*<.01.

Table 10

Conditional Process Model – Community Violence, Primary Control Engagement

Coping and Aggression (Gender)

		Consequent					
		M (PC Engagement Coping)			Y (Aggression)		
Antecedent		*Coeff.*	*SE*	*p*	*Coeff.*	*SE*	*p*
X (Community Vio-lence)	a_1	.08	.06	.20	-.45	.27	.14
M (PC Engagement Coping)					.83	1.36	.56
W (Gender)	a_2	1.29	.88	.18	-3.93	3.99	.35
X x W	a_3	-.07	.05	.19	.39	.22	.12
Constant	i_1	.88	1.07	.43	2.60	4.55	.58
		$R^2 = .18$			$R^2 = .75$		
		$F(3, 10) = .73, p > .05$			$F(5, 8) = 4.71, p > .05$		

Note. * denotes *p*<.05, ** denotes *p*<.01. Community Violence and Primary
Control Engagement Coping were collected at Time 1. Aggression was collected
at Time 2.

Table 11

Conditional Process Model – Community Violence, Primary Control Engagement

Coping and Aggression (Ethnicity)

		Consequent					
		M (PC Engagement Coping)			*Y* (Aggression)		
Antecedent		*Coeff.*	*SE*	*p*	*Coeff.*	*SE*	*p*
X (Community Violence)	a_1	.03	.11	.78	-.33	.41	.5
M (PC Engagement Coping)					-3.95	2.08	.2
W (Ethnicity)	a_2	.70	.99	.52	2.29	3.48	.5
X x *W*	a_3	-.02	.06	.75	-.10	.20	.6
Constant	i_1	1.35	1.61	.45	-.01	5.85	.9
		$R^2 = .13$			$R^2 = .89$		
		$F(3, 4) = .20, p > .05$			$F(5, 2) = 2.37, p > .05$		

Note. * denotes *p*<.05, ** denotes *p*<.01. Community Violence and Primary Control Engagement Coping were collected at Time 1. Aggression was collected at Time 2.
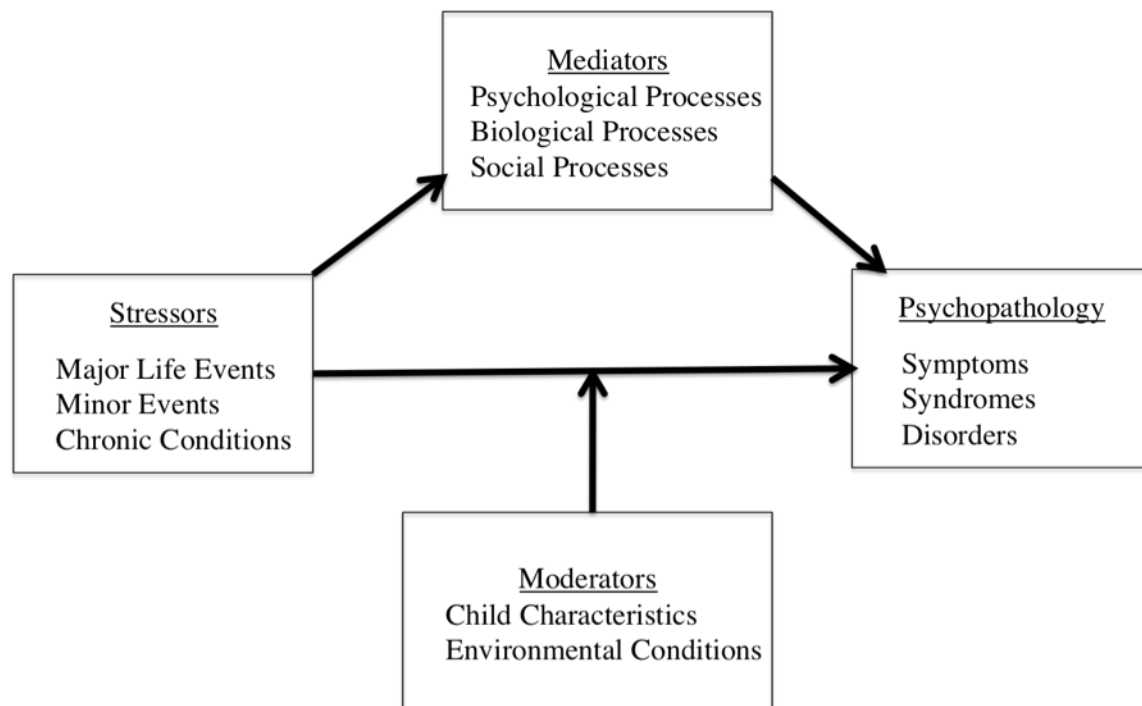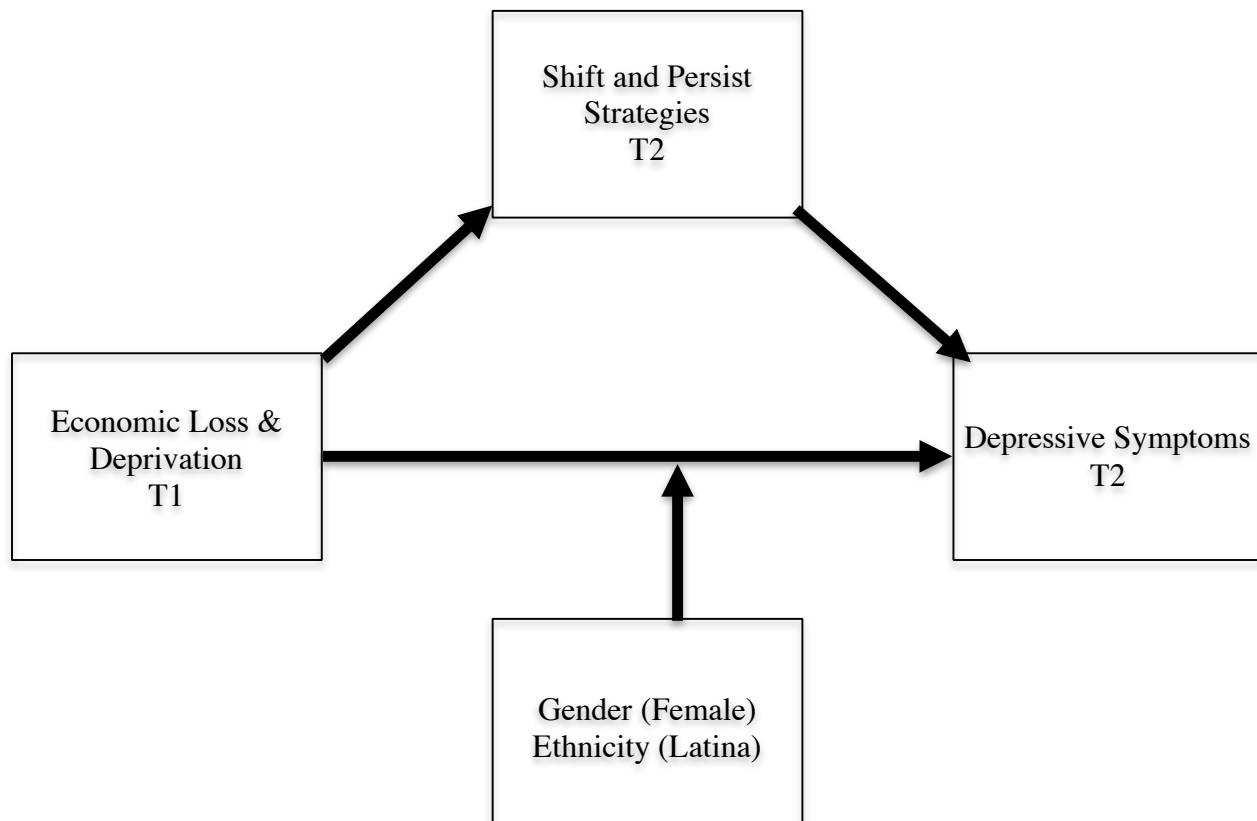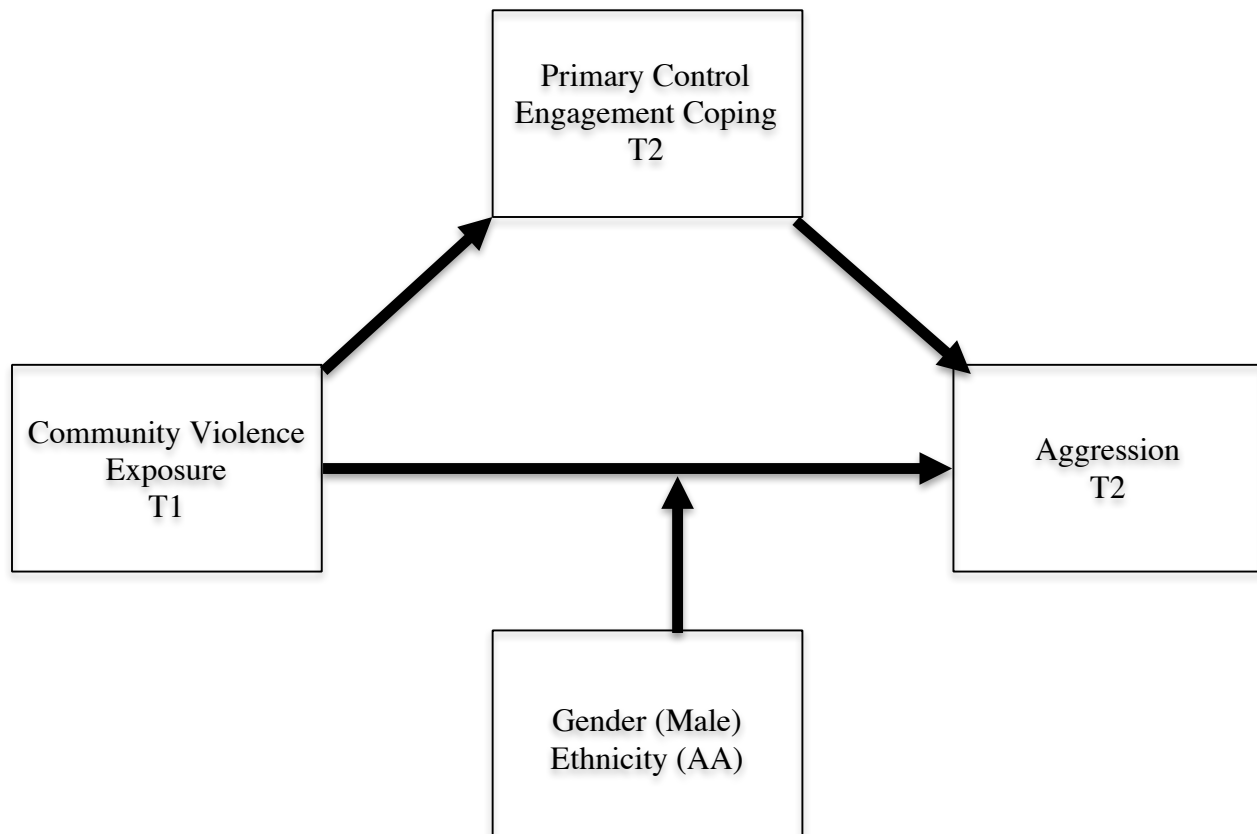
Figure 1. General Specificity Model

Figure 2. Specificity Model 1

Model 1: Economic Loss and Deprivation is associated with increased

internalizing behaviors mediated through reduced shift and persist strategies

moderated by female gender and Latina ethnicity.

Figure 2. Specificity Model 2

Appendix A. Shift and Persist Strategies Questionnaire

1. I feel my life has a sense of purpose.

2. My life feels worthwhile.

3. When I think about live, I ask myself why I exist at all.

4. I believe that there is a larger reason or purpose for my life.

5. I think things will get better in the future.

6. I feel my life is going nowhere.

7. I think about the future.

8. I have too many things to think about today to think about tomorrow.

9. I think about what I can learn from the situation.

10. I work to change the problem for better.

11. I do something to calm myself down.

12. I think about the positive aspects, or the good that can come from the situation.

13. I try to think of different ways to change the problem or fix the situation.

14. I tell myself that everything will be all right.

15. I keep my feelings under control and only let them out when they won't make things worse.

16. I think about other new goals that I could pursue.

17. I think about what good things could come from the situation.

18. I tell myself everything will be all right.

19. I start working on other new goals.

20. I think about what I can learn from the situation.

Appendix B. Responses to Stress Questionnaire – Violence Stress Version,

Primary Control Engagement Coping Subscale

1. I try to think of different ways to change or fix the situation.

2. I let someone or something know how I feel.

3. I ask other people or things for help or for ideas about how to make things better.

4. I let my feelings out.

5. I get help from other people or things when I'm trying to figure out how to deal with my feelings.

6. I do something to try to fix the problems with violence.

7. I get sympathy, understanding or support from someone.

8. I do something to calm myself down when dealing with the stress of violence.

9. I keep my feelings under control when I have to, then let them out when they won't make things worse.