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Positive Peer Pressure Among Black American Youth and the Roles of Ethnic Identity and Gender

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POSITIVE PEER PRESSURE AMONG BLACK AMERICAN YOUTH
AND THE ROLES OF ETHNIC IDENTITY AND GENDER

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ABSTRACT

Peer pressure is a phenomenon that affects many youth due to the importance of peer relations during adolescence (Brinthaupt, 2002). Consequences associated with negative peer pressure have been well documented, but the extant literature on positive peer pressure is sparse though it may be an untapped source of positive development (Padilla-Walker & Bean, 2009). The current study examined whether positive peer association, a form of peer pressure involving the indirect modeling of behaviors, can have a role in promoting healthy youth development longitudinally among African American adolescents living in low-income, urban, high violence neighborhoods. A sample of 316 African American adolescents (mean age = 11.65 years) were recruited from low income, six Chicago public schools. Data were collected during a three-year longitudinal study (6th, 7th, and 8th grade time points) using both questionnaires and the Experience Sampling Method (ESM), a time sampling technique. Hierarchical linear modeling (HLM) revealed that as youth progressed from 6th to 8th grade, the more positive peer association they experienced, the better outcomes they reported over time including increased self-esteem, school connectedness, parental relationship, and less aggression. Additionally, a low sense of ethnic identity appears to account for why some youth experienced a sharper increase in outcomes as positive peer association also increased. Adolescents with a lower sense of ethnic identity appear to be more susceptible to peer association. Gender does not appear to influence youth’s experience of positive peer
relations. Future interventions should consider harnessing the ability of prosocial peers to foster healthy development. Such interventions would be particularly essential for Black youth who do not possess the established protective factor of having a high sense of ethnic identity.
CHAPTER ONE

INTRODUCTION

Peer pressure is a phenomenon that affects many youth due to the importance of peer relations during adolescence. It has been extensively studied in terms of its potential to result in negative outcomes, from delinquency to poorer school performance. Though consequences associated with negative peer pressure have been well documented, the extant literature on positive peer pressure is sparse. Positive peer pressure occurs when youth are encouraged to engage in prosocial behavior or towards adopting socially beneficial outcomes. Due to the significant impact negative peer pressure has been shown to have, positive peer pressure may be an untapped resource for encouraging beneficial outcomes for youth. The current study will examine whether peer pressure, a term normally associated with negative outcomes in youth, can promote positive youth development and deter negative behavior among Black American adolescents living in low-income, urban, high violence neighborhoods.

Positive psychology, a framework for this study, supports a focus on traits or mechanisms that are a part of human functioning and have the potential to lead to desirable outcomes. This is a particularly necessary approach as at-risk samples, such as the one in the current study, have historically only received attention for the problems in their communities, in their families and as manifested by individual youth. However, as many factors also exist for members of such communities that promote resilience to
environmental stressors, the focus of research should continue to be expanded. The current study will examine the relationship between positive peer pressure and the outcomes of self-esteem, school connectedness, normative beliefs about aggression, and parental relationship longitudinally. Additionally, the association between positive peer pressure and the various outcomes will be explored in terms of the influence of ethnic identity, a recognized resilience factor among minority adolescents, and gender, a characteristic that can differentially affect children’s interpersonal development.

**Developmental and Theoretical Frame**

Several developmental theories guide this work. Adolescence is a period that has been well documented as a time when peers start to have a dominant role in one’s life (Kerr et al., 2003). Youth start to gain more independence from their families while the importance of peer relations starts to grow (Brinthaupt, 2002). The further development of brain areas related to social cognitive abilities causes adolescents to increasingly value and seek out peer relations (Brechwald & Prinstein, 2011). Adolescents spend more time with their friends and become more dependent on their friends than at any other previous developmental stage (Crockett, Losoff, & Petersen, 1984; Larson & Richards, 1991; Barry & Wentzel 2006). Consequently, a major part of adolescents’ behavior and well-being is linked to their relationship with their peers (Erdley, Nangle, Newman, & Carpenter, 2001). In a mixed ethnicity, but predominately White sample of 3rd to 5th grade children, those who were more accepted by their peers tended to have friendships that were of higher quality (Parker & Asher, 1993). Children with poor peer relations on the other hand have been shown to demonstrate greater delinquency and antisocial
behavior (Gifford-Smith & Brownell, 2003), as well as increased anxiety and depressive symptoms (Cole & Carpentieri, 1990; Hecht, Inderbitzen, & Bukowski, 1998).

Two popular learning theories, social learning theory and primary socialization theory, capture the importance of peers during adolescence. Social learning theory suggests that adolescents are able to adopt a behavior by merely perceiving that their peers accept and view the behavior as desirable (Petraitis, Flay & Miller, 1995). Adolescents embrace certain views and behaviors if they are rewarded for imitating the actions they observe. Acceptance from one’s peers can result in such a sense of reward. Similarly, primary socialization theory states that though a biological basis to behavior is undeniable, all social behaviors have components that are learned (Oetting & Donnermeyer, 1998). Socialization is this process of learning social norms and behaviors. The theory posits that this takes place mainly through an individual’s active interaction with primary socialization sources, which includes main figures in a person’s life such as family, school or peers. For adolescence, one of the critical socialization sources during this developmental period is peers from which adolescents adopt various patterns of normative and deviant behavior. Many of the patterns established during this early developmental stage tend to persist throughout an individual’s life (Lerner & Steinberg, 2004).

The concept of primary socialization sources is in line with ecological system theory which describes the interactive and complex factors involved in a child’s development. Bronfenbrenner’s theory suggests that children are influenced by a combination of internal characteristics and different levels of environment factors ranging
from more immediate processes such as family, to macrolevel factors like culture (Bronfenbrenner, 1979). Those found at a proximal level to the individual have a more prevailing and dominant impact (Bronfenbrenner, 1994). In addition to family, peers emerge as an immediate level of influence in an adolescent’s life and in shaping adolescents’ behavior.

In keeping with the principles of positive psychology (Benson, Scales, Hamilton, & Semsa, 2006; Larson, 2000), the current study will investigate the beneficial influence of peers. Positive psychology attempts to enhance our knowledge of human development by switching the focus of scientific investigation from deficits in problematic individuals to strengths and virtues in healthy functioning people (Seigleman 2005; Sheldon, 2001). According to this approach, identifying and building upon assets in people, as opposed to attempting to correct flaws, are the most effective ways to prevent negative outcomes (Seigleman, 2002). It is important to examine factors that create resilience amidst adversity in order to promote healthy development. Youth who interact with other prosocial individuals may begin to adopt similar values as their appropriately developing peers.

Despite their potential influence, peers may be less central to the development of Black American youth as they continue to spend a substantial amount of time with their family even in adolescence (Giordano, Cernkovich, & DeMaris, 1993). In a time budgeting study of urban Black American 5th to 8th graders, youth did not experience the same drop in time spent with family as their White American counterparts (Larson, Richards, Sims, & Dworkin, 2001). The Black American youth, however, spent time with
families at rates similar to adolescents in collectivist societies such as India. Though significant to all adolescents, the centrality of peers in the development of Black American youth may be less conclusive. Most other studies involving peer pressure in adolescence have dealt with predominately White American samples. In order to capture the unique experience of Black American youth, a specific examination of this group is necessary.

The current study will include in this examination, an analysis of the influence of ethnic identity due to its high salience among Black American youth. Ethnic identity is considered the extent to which one identifies with an ethnic group and how much one’s ethnic group influences one’s behaviors, thoughts, and feelings (Swenson & Prelow, 2005). This is an essential aspect of adolescence, a time of identity formation and rapid maturation (Marcia, 1994; Phinney & Chavira, 1992). The sense of self that will follow an individual throughout one’s life and shape how one interacts with the world begins to be constructed at this time. For minority adolescents, ethnic identity is of particular importance as they are faced with additional stressors that come from belonging to groups that lack power in society, face discrimination, and are underrepresented in mainstream culture (Shin, Daly, & Vera, 2007). More so than their White American counterparts, minority adolescents must make sense of their group’s place in society and develop a sense of self in which their connection (or lack of connection) to their ethnicity plays a central role. Consequently, Black American adolescents tend to report high ethnic identity scores and salience of ethnicity (Roberts et al., 1999). The key role ethnic
identity plays in Black American youth’s development may also extend to having an impact on how such youth experience peer socialization.

**Peer Pressure**

The centrality of peers to an adolescent’s development has led to the extensive exploration of the role of peer pressure at this life stage (Brechwald & Prinstein, 2011). Peer pressure has been defined as the “pressure to think or behave along certain peer-prescribed guidelines” (Clasen & Brown, 1985, p. 452). It is a way of transmitting a group’s attitudes so that a person is encouraged to be consistent with the group’s norms. In order to fit in and be accepted, adolescents often succumb to this influence. Peer relations differ from simply friendship relations as they involve larger group dynamics and are less personalized. Despite this lack of an intimate atmosphere, peer group approval has a more powerful connection to an adolescent’s self-worth and self-esteem than approval from friends (Wentzel, 1999). Examining peers additionally may provide more insight into an adolescent’s experience as, unlike friend designation, broader peer membership tends to be more stable (Brechwald & Prinstein, 2011)

This pressure is of particular importance in early adolescence when youth tend to be more easily influenced by their peers. In one study that longitudinally examined an ethnically and socioeconomically diverse sample of youth, resistance to negative peer pressure began to grow during the age range of 14 to 18 (Steinberg & Monahan, 2007). However, adolescents in the 10 to 14 range, the target population for this study, appeared to be more susceptible to their peers. This vulnerability to peer pressure in early adolescence is of particular concern in urban, low-income communities where gangs are
prevalent. In as early as ages 10-12, researchers have been able to predict gang involvement partially based on peer relations as youth may turn to groups of anti-social peers for acceptance and respect (Dishion, Nelson, & Yasui, 2005; Hill, Howell, Hawkins, & Battin-Pearson, 1992). Future gang members typically start associating with a gang at age 12 or 13, and join the gang by ages 13 to 15 (National Crime Prevention Council, 2012). Youth usually join a gang willingly as they are attracted to its social benefits including respect, protection and enhancement of friendships (Howell, 2011).

Peer pressure can be conceptualized in four different ways: direct peer pressure, indirect peer association, normative regulation, and the structuring of opportunities (Brown, 2004). Direct peer pressure, the manifestation of peer pressure that has received the most attention, refers to express efforts to influence the attitudes and activities of others. Indirect peer association is when peers model certain behaviors without intentionally effecting change in others. Normative regulation occurs when conversation, such as teasing, reinforces group norms. Finally, structuring of opportunities is when peers create contexts where certain behaviors can occur. This type of peer pressure could include throwing a party, which provides the opportunity for behaviors like drug use. Though the most commonly studied, research has not demonstrated direct peer pressure to be the most prevalent or impactful form of peer pressure on adolescent’s behaviors (Padilla-Walker & Bean, 2009; Velleman, Templeton, & Copello, 2005). The indirect modeling of behaviors, however, appears to be the most significant form of peer influence as it has been consistently related to the behavior of adolescents (Padilla-
Walker & Bean, 2009). Consequently, the current study will examine peer pressure using a measure of positive peer association.

The phenomenon of peer pressure that leads to anti-social or delinquent behavior has been well studied (Shader, 2001). Across ethnically and socioeconomically diverse samples, researchers have linked negative peer pressure to a multitude of adverse outcomes such as lower academic achievement, increased sexuality, and increased substance abuse (Santor, Messervey, & Kusumakar, 2000; Allen, Porter, & McFarland, 2006). Another study looking at a mixed ethnicity sample of young adolescents (ages 9 to 12) found peer pressure to be related to increased delinquency (Sullivan, 2006). Researchers found peer pressure to be a stronger predictor of delinquency than emotional and behavioral problems. The widely recognized negative consequences of peer pressure has led to the development of a multitude of interventions and public health campaigns that address negative outcomes in adolescence through resistance to negative peer pressure (Botvin, 2000; Brechwald & Prinstein, 2011). These include various programs aimed at reducing sexual risk behavior (Pedlow & Carey, 2004) and drug use (Tobler et al., 2000).

**Positive Peer Pressure**

Peer pressure, an established force in human development for deviant outcomes, has rarely been viewed in a beneficial light (Brechwald & Prinstein, 2011). Positive peer pressure, however, may be a missing link in our understanding of human development. Similar to the abilities of its negative counterpart to promote anti-social behavior, positive peer pressure may be part of the explanation for how youth develop healthy and
pro-social behaviors (Wentzel, 2014). In their well-cited study, Brown, Clasen, and Eicher (1986), found that adolescents, surprisingly, tend to report more positive than negative peer pressure. In this study of a predominately White, middle class sample of youth from 6th to 12th grades, researchers found positive peer pressure to be a strong deterrent against misconduct, such as drug use, and a facilitator of socially acceptable behavior. Additionally, in predominately White samples of youth, researchers have demonstrated friends that exhibit positive behavior to be a protective factor for youth and a motivator to act prosocially (Haselager, Hartup, van Lieshout & Riksen-Walraven, 1998; Barry & Wentzel, 2006). Other research has shown positive peer pressure to be associated with less sexual risk taking in a predominately White sample of 7th to 12th grade youth (Brown, Lohr, & McClenahan, 1986); motivation for higher academic achievement (Wentzel, 1999), as well as higher social initiative, self-esteem, and empathy in a mixed ethnicity sample of 9th to 12th grade youth (Padilla-Walker & Bean, 2009). Though some findings have indicated that negative peer influence is a stronger force than positive (Haselager et al, 1998), research such as this highlights the potential benefit of peer pressure. However, as most of the research has been conducted in predominately White, middle class samples (Wentzel, 2014), it is not certain whether the benefits of positive peer pressure manifest similarly for Black American youth especially if these youth live in highly violent, low income areas.

**Daily Experience of Peer Relations**

In addition to questionnaire data, this study will identify positive peer pressure with a time sampling technique by using the experience sampling method (ESM) which
allows investigators to collect information on the daily experience of youth (ESM; Csikszentmihalyi & Larson, 1987). Previous research has relied upon traditional questionnaire data to represent the construct of peer pressure. However, many youth may not be able to provide a completely accurate account of such influences when asked about this information retroactively. Additionally, the fact that peer relations in adolescence often fluctuate causes peer pressure to be a concept that is difficult to capture fully. Not only can adolescents experience peer pressure of varying intensity over time, but they may be faced with different types of influences from their peers (Brown, 2004). The ESM data will help to better account for such complexities of peer pressure, as fluctuations in positive peer pressure (measured through standard deviations) will be examined and used to represent the daily experience of peer relations. ESM will enhance the survey design and offer evidence of daily pressure towards pro-social behavior that is free from recall bias and a more comprehensive representation of the youths’ experience.

Though daily time sampling methods have seldom been used to examine peer pressure, a few studies have linked daily interactions with peers to various negative and positive outcomes. For instance, in a time sampling study of Asian American college students, social motives (such as wanting to bond with other peers) had a stronger association with the number of cigarettes smoked on a given occasion than coping motives (Otsuki, 2008). Spending time with peers appeared to be a common reason for increased daily smoking behavior. In another study examining a sample of middle school youth of various ethnicities, being around peers was a factor in fostering better attitudes towards their daily experiences with homework and the participation in after-school
activities (Shernoff & Vandell, 2007). The presence of peers helped facilitate the engagement in, and completion of pro-social activities.

**The Relationship of Peer Pressure to Outcomes**

The current study will examine the association between positive peer pressure and the outcomes of self-esteem, school connectedness, parental relationship, and normative beliefs about aggression. Ecological system theory describes a child’s development as shaped by the interplay of various processes occurring at levels ranging from the immediate environment to broader patterns of culture (Bronfenbrenner, 1994).

Normally developing youth need to be exposed to an interplay of prosocial processes. According to positive youth development theory, youth will develop healthy trajectories with the appropriate internal and external developmental strengths (Benson et al., 2006). The Search Institute has identified 40 developmental assets that align with different internal and external categories (Benson, 2007). Developmental assets refer to a variety of contextual and relational strengths that have been demonstrated to improve educational and health outcomes for youth (Benson, 2007). The categories they are grouped in include commitment to learning, positive values, social competencies, and positive identity on the internal level, and support, empowerment, boundaries/expectations, and constructive use of time on the external level. Both these internal and external forces contribute to a child’s development. Research has demonstrated that across ethnic groups and socioeconomic levels, the more developmental assets children and adolescents experience the more likely they will demonstrate a decrease in deviant behaviors and an increase in healthy behaviors.
(Benson, 2007). However, there have been differences among ethnic groups in the particular types of categories that lead to better outcomes. For Black American youth, the target ethnic group in the current study, the category of social competencies was related to less school problems, antisocial behavior, and more thriving behaviors, while the category of positive identity was related to less depression, and support was linked to more thriving behavior (Sesma Jr., Roehlkepartain, Benson, & Van Dulmen, 2003). Other ethnic groups had a different set of relations between high risk or thriving behaviors and developmental asset categories (Sesma Jr. et al., 2003).

The target variables were selected in order to evaluate the influence of positive peer pressure on the two primary categories of developmental assets. Internal developmental assets will be measured with the positive mental health construct of self-esteem, which falls under the category of positive identity and the negative mental health construct of beliefs towards aggression, which, though negative, is related to the category of social competencies. School connectedness and parental relationship will allow for an examination of effects on external developmental assets in the category of support. These assets are all related to domains that have been demonstrated to be particularly salient to better outcomes in Black American youth.

The moderating effect of both ethnic identity and gender will additionally be examined in the current study. As not all youth are similarly influenced by peer pressure, it is important to identify why variability can occur. Research has demonstrated that indirect positive peer pressure does not have the same relationship for minority youth as it does for European Americans (Padilla-Walker & Bean, 2009). Though it is unclear
why this is the case, given the importance of ethnic identity in minority youth outcomes (Swenson & Prelow, 2005), the current study will explore whether ethnic identity can account for some of the differences in responses to peer pressure specifically among Black American youth. Furthermore, given the possibility of different types of interacting styles for boys and girls (Gavin and Furman, 1989), ones gender might affect one’s response to peers. Since boys and girls may perceive and experience relationships differently, they also may be differently impacted by peer pressure.

**Self-Esteem**

Self-esteem or a person’s evaluation of one’s self is a concept that is integral to one’s wellbeing. Researchers have linked it to a multitude of components of adaptive functioning such as buffering against anxiety, coping with stressors, having self-efficacy, developing effective behavioral functioning, and generally maintaining positive affect (Pyszczynski et al., 2004). Self-esteem development may be particularly important in Black American communities as it has the potential to serve as a protective factor amidst environmental stressors. Among Black American youth, the construct has been negatively correlated with such detrimental outcomes as cigarette smoking (Botvin et al., 1993) and internalizing symptoms (Youngstrom, Weist, & Albus, 2003; Fitzpatrick, Piko, Wright, & LaGory, 2005).

Self-esteem is a construct often seen in peer relations literature. Studies of mixed ethnicity samples of adolescents have demonstrated that self-esteem can protect against susceptibility to negative peer pressure though it is unclear whether low-or high self-esteem is the stronger buffer (Wild, Flisher, Bhana & Lombard 2004; Zimmerman,
Copeland, Shope, & Dielman, 1997). People with low self-esteem may be more isolated from friends and peers and therefore have fewer chances to be involved in delinquent behavior. Alternatively, youth with high self-esteem may be more resistant to negative peer influences as it provides them with the psychological resources needed to cope with pressure. For some youth, researchers found higher peer acceptance and having friends, concepts that can be motivators for susceptibility to peer pressure, to be related to higher self-esteem (Gifford-Smith & Brownell, 2003). Additionally, increased popularity among peers in a predominately White sample of youth (M= 13.05 years) (de Bruyn & van den Boom, 2005) and better quality relationships in a sample of adolescents 11 to 18 years old (Walker & Greene, 1986) have been related to higher self-esteem among youth. Though seldom studied as an outcome, and not a predictor or moderator, for peer pressure, self-esteem has been demonstrated to be negatively related to negative peer pressure and positively related to positive peer pressure in a mixed ethnicity sample of youth ages 11-19 (Padilla-Walker & Bean, 2009).

**School Connectedness**

School connectedness refers to youth’s perception of support and sense of investment in school. It is a comprehensive concept that includes a student’s sense of safety, support, belonging, and engagement within school (McNeely & Falci, 2004). School connectedness has been extensively linked to school success (Battin-Pearson et al., 2000; National Research Council, 2003). Studies have shown school connectedness to be related to less drug use and delinquent behavior (Battistich & Hom, 1997) and better emotional health as well as less violence, substance use, and sexuality (Resnick et al.,
1997) in mixed ethnicity samples of adolescents. Additionally, research has demonstrated that not all types of school connectedness protect against the development of negative health outcomes. One study found that only conventional school connectedness, which involves connections to peers (and teachers) who engage in prosocial behaviors, serves as a protective factor (McNeely, & Falci, 2004). Research has shown that an adolescent’s level of connectedness to school depends on the ability of the school’s environment to meet his or her developmental needs (McNeely, Nonnemaker, & Blum, 2002). As previously discussed, one of the main developmental needs of adolescents is having appropriate peer socialization. In line with this idea, peer relationships have been shown to affect youth’s sense of school connectedness. In one study, positive peer norms, characterized by how much participants reported that their friends engaged in behavior such as completing their homework, was linked to higher school engagement in a sample of 7th and 8th grade students of various ethnicities (Shin, Daly, & Vera, 2007). Research has presented mixed findings on peer support with some studies indicating that positive peer support led to more engagement in school (Brophy, 1999; Walker & Sprague, 1999), while others have shown no relationship between peer support and school engagement (Shin, Daly, & Vera, 2007).

**Parenting Relationship**

Another primary socialization source that has a significant impact on a child’s life is family. Though peers start to compete with the influence of parents during adolescence, the relationship with parents remains a strong factor in youth’s development. In a sample identical to the one used in the current study, positive parent-child relations
emerged as a protective factor associated with fewer anxiety and depressive symptoms despite moderate exposure to violence (Hammack, Richards, Luo, Edlynn, & Roy, 2004). Additionally, researchers have linked perceived support from family to beneficial outcomes such as less internalizing symptoms (Ozer, 2005), and less externalizing symptoms in the midst of increased stress and violence (Quamma & Greenberg, 1994). Furthermore, a better emotional atmosphere with parents has led to less reported anxiety and withdrawal (McCabe, Clarke, & Barnett, 1999) as well as to discourage externalizing behavior (McKee, Colletti, Rakow, Jones, & Forehand, 2008; Vazsonyi, Pickering & Bolland, 2006). The benefit of good parental relations may be especially relevant in the development of Black American adolescents as they continue to spend a large quantity of their time with their parents and do not experience the drop in family time that is characteristic of many adolescents in the Western world (Larson et al., 2001). Positive peer pressure may promote a better relationship with parents among adolescents. In a study by Brown and colleagues (1986), positive peer pressure was shown to be a motivator for getting along with parents in a predominately White sample of 7th to 12th grade youth.

**Normative Beliefs about Aggression**

Aggression is a serious behavior concern that is characterized by hostile interactions with others. Adolescence is an essential time to address this concern as researchers link aggressive acts in early life to negative long-term consequences, such as increased and sustained criminal activity and other antisocial behavior (Babinski, Hartsough, & Lambert, 1999; Loeber & Farrington, 2001). This is of particular concern
for Black American youth from high-risk environments as this population has rates of aggressive behavior higher than the national average (Guerra, Huesmann, Tolan, Van Acker & Eron, 1995). This trend tends to appear early in life and is ingrained in the culture of many low income, urban communities (Henry, Tolan & Gorman-Smith, 2001; Stouthamer-Loeber, Loeber, Wei, Farrington & Wikstrom, 2002). For many Black American youth who reside in such communities, the normative belief or “an individual's own cognition about the acceptability or unacceptability of a behavior” (Huesmann & Guerra, 1997), is supportive towards aggression. Normative beliefs regulate one’s behavior and are, to some extent, typically consistent with the norms endorsed by one’s social group though the influence of the group weakens after sixth grade (Huesmann & Guerra, 1997),

For many individuals, the development of aggression is associated with the negative influence of peers. Youth who have deviant friends have demonstrated more aggressive behaviors (Parker, Rubin, Price, & DeRosier, 1995). Similarly, researchers found individuals who have friends with antisocial peer norms to endorse more aggressive behaviors in a sample of Chilean youth in the 5th to 6th grades (Berger & Rodkin, 2012). Another study measuring attitudes towards delinquent behavior, including aggressive acts like fighting, in a mixed ethnicity sample of males followed from about 10 to 16 years of age, found that those youth who associated with delinquent peers had more favorable attitudes towards delinquent behavior (Pardini, Loeber, & Stouthamer-Loeber, 2005). There is some evidence, however, that group norms can positively affect behavior. In one study examining a mixed ethnicity sample, youth in the 1st through 4th
grades who belonged to classrooms where peers and teachers discouraged aggression displayed more pro-social normative beliefs about aggression over time (Henry et al, 2000).

Instead of directly measuring aggressive behavior, the current study will examine youth’s normative beliefs about aggression, a concept that is highly correlated with an individual’s aggressive acts (Huesmann & Guerra, 1997). Due to the psychological influence of peer pressure, the relationship between the two concepts may be more appropriately demonstrated using this indirect conceptualization of aggression. Though not yet directly studied, positive peer pressure may have the opposite effect of its negative counterpart and serve to ward off the development of aggressive normative beliefs in early adolescence.

The Role of Ethnic Identity

A sense of ethnic identity is a factor that has been associated with Black-American youth’s development of positive coping strategies, self-esteem, and a sense of belonging in the community as well as lower rates of youth’s depression (Blash & Unger, 1995; Roberts et al., 1999; McMahon & Watts, 2002). An adolescent’s sense of ethnic identity is thought to promote their ability to cope with socioenvironmental stressors (Umaña-Taylor et al., 2008). Researchers have shown that ethnic identity is related to higher peer acceptance and popularity for Black American adolescents yet no relation was found for European American adolescents (Rock et al., 2011). Studies that have considered the effects of peer pressure in mixed ethnic samples of youth have found that positive peer pressure (Padilla-Walker & Bean, 2009) and peer pressure in general
(Unger et al., 2001) do not function the same way for minority youth as they do for European Americans. One study that examined ethnic identity and peer factors’ relationship with school engagement among a sample of predominately Latino and Black American, 7th and 8th grade youth, found that high ethnic identity served as a protective factor, moderating the relationship between negative peer norms and low school engagement (Shin, Daly, & Vera, 2007). Though no work has been done to test the hypothesis, due to the different effects peer pressure has among minority youth and that ethnic identity has been demonstrated to protect against negative peer pressure, a stronger sense of ethnic identity is hypothesized to enhance the already beneficial effects of positive peer pressure among Black American Adolescents. In the current study, ethnic identity will be deemed affirmation and belonging, or the feelings of belonging to and attitudes towards one’s group. This is consistent with previous literature in which affirmation and belonging are considered key aspects of ethnic identity and have shown stronger connections to Black American adolescent’s mental health than other components of ethnic identity (Phinney, 1992; Mandara et al., 2009).

**The Role of Gender**

The literature suggests mixed results on whether males and females tend to differ in their experiences with peer pressure. Most research has demonstrated no difference among boys and girls in the association between negative peer pressure and antisocial or neutral activities (Crockett, Raffaelli, & Shen, 2006; Santor, Messervey, & Kusumakar, 2000). However, studies have shown that males, more than females, conformed to negative peer pressure that encouraged antisocial behavior (Brown, Clasen, and Eicher,
1986) while others have demonstrated peer deviance to be related to delinquent behavior in adolescent girls but not boys (O’Donnell, Richards, Pearce, & Romero, 2012). Though mixed results have been seen for negative peer pressure, few studies have looked at gender differences for positive peer pressure. One, of the few that did, found that girls reported higher positive peer pressure than boys in a mixed ethnicity sample of youth ages 11-19 (Padilla-Walker & Bean, 2009). Additionally, research has demonstrated that girls are more relationship oriented than boys and tend to have more positive, and less negative, interactions with their peers in a predominately White sample of youth in grades 5 through 12 (Gavin and Furman, 1989). Consequently, it is hypothesized that girls will experience more positive peer pressure and stronger benefits from positive peer pressure than boys do.

**Aims and Hypotheses**

The primary purpose of the current study is to examine whether peer pressure, a term normally associated with negative outcomes in youth, can have a role in promoting positive youth development longitudinally among Black American adolescents living in low-income, urban, high violence neighborhoods. The current study has four specific aims and associated hypotheses:

**Aim 1:** The first aim of the proposed study is to examine the association between positive peer pressure, as measured by the Peer Pressure Inventory (PPI), and the outcomes of self-esteem, school connectedness, parenting relationship, and normative beliefs about aggression over time.
Hypothesis 1: It is predicted that higher levels of positive peer pressure will be associated with increased self-esteem, increased school connectedness, increased parenting relationship, and decreased aggression longitudinally (See Figure 1).

Aim 2: The second aim is to examine the association between fluctuations in daily exposure to positive peer pressure, as measured by the time sampling technique, the ESM, and the outcomes of self-esteem, school connectedness, parenting relationship, and normative beliefs about aggression over time.

Hypothesis 2: It is predicted that those who more consistently experienced positive daily peer pressure would have increased self-esteem, school connectedness, and parenting relationship, but decreased aggression longitudinally.
Aim 3: The third aim is to examine whether ethnic identity moderates the relationship between positive peer pressure and the outcomes of self-esteem, school connectedness, parenting relationship, and normative beliefs about aggression.

Hypothesis 3: It is predicted for individuals with higher ethnic identity there will be a stronger positive relationship between positive peer pressure and self-esteem, school connectedness, and parenting relationship, as well as a stronger negative relationship with aggression (See Figure 2).

![Figure 2. Hypothesized ethnic identity as a moderator model](image)

Aim 4: The final aim is to examine whether gender moderates the relationship between positive peer pressure and the outcomes of self-esteem, school connectedness, parenting relationship, normative beliefs about and aggression.

Hypothesis 4: It is predicted that for girls there will be a stronger positive relationship between positive peer pressure and self-esteem, school connectedness, and
parenting relationship, as well as a stronger negative relationship with aggression (See Figure 3).

Figure 3. Hypothesized gender as a moderator model
CHAPTER TWO

METHODS

Participants

A sample of 316 Black American adolescents (mean age = 11.65 years, 60% female) were recruited from six public schools located in low income, urban Chicago neighborhoods. Chicago Police Department crime statistics obtained in the year prior to data collection characterize the recruitment schools as being located in high-crime areas. Data were collected during a three-year longitudinal study aimed at examining students’ exposure to violence from 6th grade (1999-2000 school year) to 8th grade (2001-2002 school year). Consistent with previous studies using similar samples (Cooley-Quille & Lorion, 1999), 58% of youth recruited during the first year of the study agreed to participate. Two hundred ninety nine students or 94.78% of the original sample (M = 12.57 years, 59% female) continued into the second year of the study, and 261 students or 82.84% of the original sample were retained in the eighth grade (M = 13.58, 59% female). No significant group differences were found between the retained sample and the group of participants lost due to attrition in parental education, annual household income, or parents’ marital status (Goldner et al., 2011).

The majority of participants lived in low-income households with a median family income between $10,000 and $20,000 as reported by parents or guardians. Almost half (48%) of participants lived in single parent households. Though 10% of parents
reported having a college or graduate/professional degree, most parents of participants (83%) had achieved a high school degree.

**Procedure**

Researchers obtained student assent and parental consent prior to data collection from all those who agreed to participate. Youth completed questionnaires administered by trained research staff over the course of five consecutive days for each time point in the study. Staff collected data when the students were in 6th grade (Time 1), 7th grade (Time 2) and 8th grade (Time 3). This study will analyze self-report data from all three years of data collection.

Youth data on current location, activity, companionship, thoughts, and feelings was obtained using the Experience Sampling Method (ESM). This technique required participants to carry a programmed watch and notebook for one week. When signaled by an alarm, youth completed brief questionnaires in the notebook. Alarms occurred twice per school day, and every 1.5 hours outside of school time. Each submission took approximately two minutes to complete and involved recording where one was, what one was doing, and whom one was with. Trained research staff taught participants how to complete forms properly and went to the schools each day to answer questions and ensure that participants complied with ESM standards. To be included in the study, participants were required to respond to at least 15 signals out of a maximum of 51 possible signals (Kohl et al., under review). The sample’s median response total of 42 or 82% of the total conforms to established satisfactory levels of ESM responding (see Larson, 1989). Youth
were notified at the start of the study of games, gift certificates, and other forms of compensation they would receive as compensation for participation.

**Measures**

Self-Esteem

Self-esteem was assessed using data from the ESM procedure. At different points through the day, youth responded to the question “How were you feeling when you were signaled?” Respondents answered on a scale ranging from 1 (not at all) to 4 (very much) how important, respected, and prideful they felt at the time. The ESM was used to assess self-esteem as it is considered more sensitive to changes in adolescence as compared to dispositional measures (Moneta, Schneider, & Csikszentmihalyi, 2001). The scale yielded an alpha of .75 at Time 1, .85 at Time 2, and .86 at Time 3. Reliability and validity were established in previous research (Mandara et al., 2009).

Parental Relationship

In order to assess parental relationship, participants completed a brief questionnaire using the parent component taken from an intimacy measure created by Blyth and Foster-Clark (1987). This scale was used in a previous study of this sample by Hammack and colleagues (2004). Youth responded to items (i.e. “Do you go to your mother for advice?” or “Do you share your inner feelings with your mother?”) using a 5-point scale ranging from 1 (not at all) to 5 (very much). Questions were asked for both mother and father. Both maternal closeness and paternal closeness will be examined in the current study. The maternal closeness scale yielded an alpha of .85 at Times 1, 2, and 3 while paternal closeness yielded an alpha of .92 at Time 1, .93 at Time 2, and .91 at
Normative Beliefs About Aggression

In order to measure normative beliefs about aggression, participants completed a shortened version of the Normative Beliefs about Aggression Scale (Huesman & Guerra, 1997). The original version consists of 28 questions. Prompts were changed to have gender neutral language and the set of questions that included a male as the actor/target was consolidated with the set that included a female as the actor/target. Additionally, items that included an example of relational aggression as a prompt (i.e. “suppose a boy says something bad to a girl”) were omitted in the current study’s version. The new scale contained 11 items (i.e. “In general it is wrong to hit other people” or “It is wrong to take it out on others by saying mean things when you’re mad”) to which participants had to circle an answer that best described what they thought. Higher scores indicate greater support for aggression. The scale yielded an alpha of .79 at Time 1, .75 at Time 2, and .82 at Time 3. Reliability and validity were established in previous research (Huesman & Guerra, 1997).

School Connectedness

In order to measure school connectedness, participants completed an adapted version of the Sense of School as a Community questionnaire which is a subscale from the School Sense of Community measure developed by Battistich & Hom (1997). Four items were omitted from the original subscale because they were viewed as redundant. The edited version consisted of 10 items (i.e. “When I’m having a problem, some other
student will help me” or “My school is like a family”). Response options ranged from “disagrees a lot” (1) to “agrees a lot” (5). The scale yielded an alpha of .85 at Time 1, .86 at Time 2, and .82 at Time 3. Reliability and validity were established in previous research (Battistich & Hom, 1997).

Positive Peer Association

Positive peer pressure, conceptualized as positive peer association, was assessed using a 6 question scale derived from an adaptation of Clasen and Brown’s (1985) Peer Pressure Inventory. Items asked “how many of your friends/associates” engage in various lawful/healthy activities (i.e. “study hard, get good grades” or “obey your parents or guardians”). Youth were asked to rate the number of friends that participated in a particular prosocial behavior on a 4-point scale ranging from “a lot” to “none”. The scale yielded an alpha of .68 at Time 1, .79 at Time 2, and .75 at Time 3. Reliability and validity were established in previous research (Clasen & Brown, 1985).

Fluctuations in Daily Positive Peer Association

This was assessed by examining the standard deviations of the amount of times that children reported that they were with peers thought to be friendly, helpful, trustworthy, and safe on the ESM measure. At each ESM signal, the youth was asked to report who they were with choosing from the options such as friends, family members, teachers, alone, etc. Additionally they were asked to report what type of people they were with on four 7-point scales. Scales ranged from “very friendly” to “very unfriendly”, “very unhelpful” to “very helpful”, “very trustworthy” to “very untrustworthy”, and “very dangerous” to “very safe.” Time with positive peers was
calculated by totaling the number of times that the youth reported being with peers who were “a little,” “somewhat,” or “very” friendly, helpful, trustworthy, and safe. This was then averaged and the standard deviations were calculated. The ESM was used to assess daily positive peer association as it is considered more sensitive to changes in adolescence as compared to dispositional measures. The scale yielded an alpha of .99 at Time 1, .94 at Time 2, and .99 at Time 3.

Ethnic Identity

Ethnic Identity was measured using an adapted version of the Multigroup Ethnic Identity Scale (MEIM) (Phinney, 1992). This scale measures various dimensions of ethnic identity within diverse groups of adolescents. In keeping with previous studies (Mandara et al., 2009) only the affirmation and belonging subscale was used as it reflects a respondent’s positive attitudes and affiliation towards one’s race. To more specifically assess racial identity in this sample, phrases such as “my ethnic group” were replaced with such phrases as “Black people.” Respondents answered on a 1 (strongly disagree) to 4 (strongly agree) scale such items as “I have a lot of pride in Black people” or “I am happy to be a member of the Black group.” Cronbach’s alphas in the seventh and eighth grades were .80 and .73, respectively. Reliability and validity were established in previous research (Phinney, 1992). Data on the MEIM were only collected at times 2 and 3. Only Time 2 data will be used in the current study.
CHAPTER THREE

RESULTS

Preliminary Analyses

Missing data was addressed using the LISREL software. Available continuous variables at each of the three time points were used to impute missing values for the measures of positive peer association questionnaire, fluctuations in positive peer association, self-esteem, paternal closeness, maternal closeness, school connectedness, and beliefs about aggression, as well as ethnic identity. Specifically, we used multiple imputation via the expectation-maximization (EM) algorithm to impute missing values for the continuous data at each time point.

Means and standard deviations for all variables after imputation presented in Tables 1-3. Original sample means and standard deviations are also displayed. The correlations between the independent variables, moderators, and dependent variables are displayed in Tables 1-3.
Table 1. Year 1 correlations among variables under study for imputed sample (N = 316)

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Note. M = mean. SD = standard deviation. * p < .05; ** p < .01
PPr = positive peer pressure
Table 2. Year 2 correlations among variables under study for imputed sample \((N = 316)\)

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Note. M = mean. SD = standard deviation. * \(p < .05\); ** \(p < .01\)
PPr = positive peer pressure
Table 3. Year 3 correlations among variables under study for imputed sample (N = 316)

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| Original sample M | 1.92 | .14 | 3.94 | 15.73 | 8.85 | 15.28 | 19.46 | 3.44  |
| Original sample SD| .72  | .23 | 1.02 | 7.91  | 6.23 | 8.17  | 6.32  | .56   |

Note. M = mean. SD = standard deviation. * p < .05; ** p < .01
PPr = positive peer pressure
Main Effects

Hierarchical linear modeling (HLM) using HLM 6.08 was used to analyze the data. HLM accounts for shared variance in within-subjects designs in which data has been collected longitudinally. With HLM, different numbers of individual observations as well as both individual and inter-individual variance are estimated (Wood & Zhu, 2006). This study is interested in: a) whether positive peer association and fluctuations in daily positive peer association account for the predicted differences in the self-esteem, parental relationship, school connectedness, and normative beliefs about aggression over time; and b) the moderating role of ethnic identity and gender as they relate to the measures of positive peer association in predicting the outcome variables. HLM provides the most flexibility in considering these differences in outcome variables on average and across time while examining the specific predictors. Thus, HLM is the appropriate statistical analysis for answering the abovementioned research questions (Raudenbush & Bryk, 2002; Roosa et al., 2003).

An unconditional random coefficients model was constructed to obtain the average initial levels (at Time 1 or 6th grade) of the outcome variables (self-esteem, school connectedness, normative beliefs about aggression, paternal closeness, and maternal closeness) at the starting levels of the predictor and the average slope for the outcome variables as predicted by changes in peer association over time. This model also determines if there is significant variation in the intercept (in mean levels of each outcome variable in an intergroup interaction, at the starting level of each outcome variable). Since the time intervals were equal (yearly), a simple coding scheme was used
to identify the progression over time. Year one was coded at zero to allow the intercept term to be interpreted as the mean outcome variable level at 6th grade. The model used was as follows:

Level 1: \[ Y_{it} = \pi_{0i} + \pi_{1i}(\text{Time}) + \pi_{2i}(\text{Positive Peer Association questionnaire}) + E \]

Level 2: \[
\begin{align*}
\pi_{0i} &= \beta_{00} + r0 \\
\pi_{1i} &= \beta_{10} \\
\pi_{2i} &= \beta_{20}
\end{align*}
\]

In this model, \( Y_{it} \) represents the observed outcome variable for an individual \( i \) at time \( t \). The next coefficient, \( \pi_{0i} \), represents the outcome variable level for an individual \( i \) at the first time point, the \( \pi_{1i} \) represents the rate of change for individual \( i \) at that point in time, \( \pi_{2i} \) represents the rate of change for an individual \( i \) based on their experience of positive peer association, and \( E \) represents the error term. Thus, the coefficient \( \beta_{00} \) and \( \beta_{10} \) represents the average outcome variable level and average slope for change in outcome variable, respectively and \( r0 \) represents the assumption that individuals start at different levels of each outcome. A model was also constructed using fluctuations in positive peer association as a predictor variable.

**Positive Peer Association Questionnaire**

**Internal Forces**

The two internal developmental forces utilized in this study were self-esteem and normative beliefs about aggression. The intercept of self-esteem, \( \tau_{00} = 0.33, \chi^2 = 1088.18 \) \((df = 280, p < .001)\) varied across participants indicating that participants differed in initial levels of self-esteem. Examination of fixed effects indicated that the average initial level of self-esteem for all participants, \( \beta_{00} = 3.96, SE = 0.05 \), was significantly different
from zero, \( t(280) = 83.89, p < .001 \), indicating that, positive peer association was significantly associated with participants’ self-esteem at 6\(^{th}\) grade. The average slope for self-esteem over time, \( \beta_{10} = -.02, SE = 0.03 \), was not significantly different from zero, \( t(840) = -.59, p = .55 \), indicating that over the course of the three years, when averaging all youth reports, self-esteem did not change across time. The average slope for self-esteem in relation to positive peer association over time, \( \beta_{00} = .16, SE = 0.04 \), was significantly different from zero, \( t(840) = 4.34, p < .001 \), indicating participants experienced an increase in self-esteem as positive peer association increased over time (See Table 4).

The intercept of normative beliefs about aggression, \( \tau_{00} = 5.91, \chi^2 = 485.98 \) \((df = 280, p < .001)\) varied across participants indicating that participants significantly differed in initial levels of normative beliefs about aggression (See Table 5). The average initial level of normative beliefs about aggression for all participants, \( \beta_{00} = 7.66, SE = .30 \), was significantly different from zero, \( t(280) = 25.14, p < .001 \), indicating that positive peer association was significantly associated with participants’ normative beliefs about aggression level at 6\(^{th}\) grade. The average slope for normative beliefs about aggression over time, \( \beta_{10} = .58, SE = 0.21 \), was significantly different from zero, \( t(840) = 2.81, p < .01 \), indicating that over the course of the three years, when averaging all youth reports of beliefs about aggression, youth experienced an increase in beliefs about aggression. The average slope for normative beliefs about aggression in relation to positive peer association over time, \( \beta_{10} = -.77, SE = 0.29 \), was also significantly different from zero, \( t \)
(840) = -2.69, \( p < .01 \), indicating participants experienced a decrease in normative beliefs about aggression as positive peer association increased over time (See Table 4).

Table 4. Positive peer pressure questionnaire fixed effects for the unconditional level-one model

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<th>Fixed Effect (Means)</th>
<th>Coefficient</th>
<th>SE</th>
<th>T-ratio</th>
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<tr>
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</table>

* \( p < .05 \)    ** \( p < .01 \)    *** \( p < .001 \). Posppx = positive peer pressure questionnaire
Table 5. Positive peer pressure questionnaire random effects for the unconditional level-one model

<table>
<thead>
<tr>
<th>Random Effect</th>
<th>Variance Component</th>
<th>df</th>
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* $p < .05$    ** $p < .01$    *** $p < .001$

External Forces

The three external developmental forces used in this study were school connectedness, relationship with mother, and relationship with father. The intercept of school connectedness, $\tau_{00} = 10.89$, $\chi^2 = 519.70$ ($df = 280$, $p < .001$), varied across participants, indicating that participants differed in initial levels of school connectedness (See Table 5). The average initial level of school connectedness for all participants, $\beta_{00} = 13.78$, $SE = 0.39$, was significantly different from zero, $t (280) = 35.29$, $p < .001$, indicating that positive peer association was significantly associated with participants’ school connectedness level at 6th grade. The average slope for school connectedness over time, $\beta_{10} = .79$, $SE = 0.26$, was significantly different from zero, $t (840) = 3.04$, $p < .01$, indicating over the course of three years over, when averaging all youth reports of school connectedness, youth experienced an increase in school connectedness. The average
slope for school connectedness in relation to positive peer association over time, $\beta_{10} = 1.48$, $SE = 0.36$, was also significantly different from zero, $t (840) = 4.08$, $p < .001$, indicating that youth also experienced an increase in school connectedness across the three years and as positive peer association increased over time (See Table 4).

The intercept of paternal closeness, $\tau_{00} = 20.57$, $\chi^2 = 719.24 (df = 280, p < .001)$ significantly varied across participants indicating that participants differed in initial levels of paternal closeness (See Table 5). The average initial level of paternal closeness for all participants, $\beta_{00} = 16.33$, $SE = 0.44$, was significantly different from zero, $t (280) = 37.38$, $p < .01$, indicating that positive peer association was significantly associated with participants’ paternal closeness level at 6\textsuperscript{th} grade. The average slope for paternal closeness over time, $\beta_{10} = -.52$, $SE = 0.27$, was not significantly different from zero, $t (840) = -1.94$, $p = .052$. The average slope for paternal closeness in relation to positive peer association overtime, $\beta_{10} = 1.45$, $SE = 0.38$, was significantly different from zero, $t (840) = 3.78$, $p < .001$. These findings indicate that though over the course of the three years, when averaging all youth reports of paternal closeness, no change was observed over time, and that participants experienced an increase in paternal closeness as positive peer association increased over time (See Table 4).

The intercept of maternal closeness, $\tau_{00} = 12.86$, $\chi^2 = 794.84 (df = 280, p < .001)$ significantly varied across participants indicating that participants differed in initial levels of maternal closeness (See Table 5). The average initial level of maternal closeness for all participants, $\beta_{00} = 20.48$, $SE = 0.33$, was significantly different from zero, $t (280) = 62.18$, $p < .001$, indicating that positive peer association was significantly associated with
participants’ maternal closeness level at 6th grade. The average slope for maternal closeness over time, $\beta_{10} = -.47$, $SE = 0.19$, was significantly different from zero, $t (840) = -2.50, p < .05$, indicating that over the course of the three years, when averaging all youth reports, maternal closeness decreased over time. The average slope for maternal closeness in relation to positive peer association over time, $\beta_{10} = 1.11$, $SE = 0.28$, was also significantly different from zero, $t (840) = 3.92, p < .001$, indicating that participants experienced an increase in maternal closeness as positive peer association increased over time (See Table 4).

**Fluctuations in Positive Peer Association**

**Internal Forces**

The outcomes were additionally examined with fluctuations in positive peer association in the Level-1 model. The intercept of self-esteem, $\tau_{00} = 0.23$, $\chi^2 = 899.11$ ($df = 280, p < .001$), varied across participants indicating that participants differed in initial levels of self-esteem (See Table 7). Examination of fixed effects indicated that the average initial level of self-esteem for all participants, $\beta_{00} = 3.96$, $SE = 0.04$, was significantly different from zero, $t (280) = 94.80, p < .001$. This indicates that fluctuations in positive peer association were significantly associated with participants’ self-esteem at 6th grade. The average slope for self-esteem over time, $\beta_{10} = -.02$, $SE = 0.02$, was not significantly different from zero, $t (840) = -.80, p = .55$. The average slope for self-esteem in relation to fluctuation in positive peer association over time, $\beta_{10} = -1.80$, $SE = .13$, was significantly different from zero, $t (840) = -13.46, p < .001$. These two findings indicate that although over the course of the three years, when averaging all youth
reports, self-esteem did not change across time, participants experienced a decrease in self-esteem the more positive peer association fluctuated over time (See Table 6).

The intercept of normative beliefs about aggression, $\tau_{00} = 5.93$, $\chi^2 = 487.20$ ($df = 280, p < .001$ significantly varied across participants, indicating that participants differed significantly in initial levels of normative beliefs about aggression (See Table 7). The average initial level of normative beliefs about aggression for all participants, $\beta_{00} = 7.61$, $SE = .30$, was significantly different from zero, $t (280) = 25.08, p < .001$. This indicates that fluctuations in positive peer association were significantly associated with participants’ normative beliefs about aggression level at 6th grade. The average slope for normative beliefs about aggression over time, $\beta_{10} = .63$, $SE = 0.21$, was significantly different from zero, $t (840) = 3.06, p < .01$, indicating that over the course of the three years, when averaging all youth reports of beliefs about aggression, youth experienced an increase in beliefs about aggression. The average slope for normative beliefs about aggression in relation to fluctuations in positive peer association over time, $\beta_{10} = 3.24$, $SE = 1.06$, was significantly different from zero, $t (840) = 3.05, p < .01$, indicating youth experienced an increase in normative beliefs about aggression the more positive peer association fluctuated over time (See Table 7).
### Table 6. Fluctuations in positive peer pressure fixed effects for the unconditional level-one model

<table>
<thead>
<tr>
<th>Fixed Effect (Means)</th>
<th>Coefficient</th>
<th>SE</th>
<th>T-ratio</th>
</tr>
</thead>
<tbody>
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<td>94.80 ***</td>
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<td>.02</td>
<td>-.80</td>
</tr>
<tr>
<td><strong>Self-Esteem Posppx Growth Rate</strong></td>
<td>-1.80</td>
<td>.13</td>
<td>-13.46 ***</td>
</tr>
<tr>
<td><strong>School Connectedness Initial Status</strong></td>
<td>13.87</td>
<td>.39</td>
<td>35.83 ***</td>
</tr>
<tr>
<td><strong>School Connectedness Year Growth Rate</strong></td>
<td>.71</td>
<td>.26</td>
<td>2.71 **</td>
</tr>
<tr>
<td><strong>School Connectedness Posppx Growth Rate</strong></td>
<td>-6.33</td>
<td>1.35</td>
<td>-4.69 ***</td>
</tr>
<tr>
<td><strong>Normative Beliefs Initial Status</strong></td>
<td>7.61</td>
<td>.30</td>
<td>25.08 ***</td>
</tr>
<tr>
<td><strong>Normative Beliefs Year Growth Rate</strong></td>
<td>.63</td>
<td>.21</td>
<td>3.06 **</td>
</tr>
<tr>
<td><strong>Normative Beliefs Posppx Growth Rate</strong></td>
<td>3.24</td>
<td>1.06</td>
<td>3.05 **</td>
</tr>
<tr>
<td><strong>Father parental Relationship Initial Status</strong></td>
<td>16.42</td>
<td>.44</td>
<td>37.72 ***</td>
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<tr>
<td><strong>Paternal closeness Year Growth Rate</strong></td>
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<td>.26</td>
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<tr>
<td><strong>Paternal closeness Posppx Growth Rate</strong></td>
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<td>1.45</td>
<td>-3.79 ***</td>
</tr>
<tr>
<td><strong>Maternal closeness Initial Status</strong></td>
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<td>63.58 ***</td>
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<tr>
<td><strong>Maternal closeness Year Growth Rate</strong></td>
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<td>.19</td>
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<tr>
<td><strong>Maternal closeness Posppx Growth Rate</strong></td>
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<td>1.07</td>
<td>-5.07 ***</td>
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</tbody>
</table>

* * p < .05     ** p < .01     *** p < .001
Table 7. Fluctuations in positive peer pressure random effects for the unconditional level-one model

<table>
<thead>
<tr>
<th>Random Effect</th>
<th>Variance Component</th>
<th>df</th>
<th>$\chi^2$</th>
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<td>School Connectedness Initial Status</td>
<td>10.25</td>
<td>280</td>
<td>504.60 ***</td>
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<td>Normative Beliefs Initial Status</td>
<td>5.93</td>
<td>280</td>
<td>487.20 ***</td>
</tr>
<tr>
<td>Paternal closeness Initial Status</td>
<td>20.38</td>
<td>280</td>
<td>713.53 ***</td>
</tr>
<tr>
<td>Maternal closeness Initial Status</td>
<td>11.66</td>
<td>280</td>
<td>741.37 ***</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01  *** p < .001

External Forces

The intercept of school connectedness, $\tau_{00} = 10.25, \chi^2 = 504.60 (df = 280, p < .001)$ significantly varied across participants indicating that participants differed in initial levels of school connectedness (See Table 7). The average initial level of school connectedness for all participants, $\beta_{00} = 13.78, SE = 0.39$, was significantly different from zero, $t (280) = 35.83, p < .001$. This indicates that fluctuations in positive peer association were significantly associated with participants’ school connectedness level at $6^{th}$ grade. The average slope for school connectedness over time, $\beta_{10} = .71, SE = 0.26$, was significantly different from zero, $t (840) = 2.71, p < .01$. The average slope for school connectedness in relation to fluctuations in positive peer association over time, $\beta_{10} = -6.33, SE = 1.35$, was also significantly different from zero, $t (840) = -4.69, p < .001$. These two findings indicate youth experienced an increase in school connectedness across the three years but a decrease in school connectedness the more positive peer
association fluctuated over time (See Table 6). The intercept of paternal closeness, $\tau_{00} = 20.38$, $\chi^2 = 713.53$ ($df = 280$, $p < .001$), significantly varied across participants, indicating that participants differed significantly in initial levels of paternal closeness (See Table 7). The average initial level of paternal closeness for all participants, $\beta_{00} = 16.42$, $SE = 0.44$, was significantly different from zero, $t (280) = 37.72$, $p < .001$. This indicates that fluctuations in positive peer association were significantly associated with participants’ paternal closeness level at 6th grade. The average slope for paternal closeness over time, $\beta_{10} = -.61$, $SE = 0.26$, was not significantly different from zero, $t (840) = -2.29$, $p < .05$, indicating that over the course of the three years, when averaging all youth reports, paternal closeness levels decreased over time. The average slope for father parental relationship in relation to fluctuations in positive peer association over time, $\beta_{10} = -5.51$, $SE = 1.45$, was significantly different from zero, $t (840) = -3.79$, $p < .001$, indicating participants also experienced a decrease in paternal closeness the more positive peer association fluctuated over time (See Table 6).

The intercept of maternal closeness, $\tau_{00} = 11.66$, $\chi^2 = 741.37$ ($df = 280$, $p < .010$), significantly varied across participants, indicating that participants differed significantly in initial levels of maternal closeness (See Table 7). The average initial level of maternal closeness for all participants, $\beta_{00} = 20.54$, $SE = 0.32$, was significantly different from zero, $t (280) = 63.58$, $p < .001$. This indicates that fluctuations in positive peer association were significantly associated with participants’ maternal closeness level at 6th grade. The average slope for maternal closeness over time, $\beta_{10} = -.55$, $SE = 0.19$, was significantly different from zero, $t (840) = -2.83$, $p < .01$, indicating that over the course of the three
years, when averaging all youth reports, maternal closeness decreased over time. The average slope for maternal closeness in relation to fluctuations in positive peer association over time, $\beta_{10} = -5.44, SE = 1.07$, was significantly different from zero, $t(840) = -5.07, p < .001$, indicating that participants additionally experienced a decrease in maternal closeness the more positive peer association fluctuated over time (See Table 6).

**Moderation**

In order to determine which factors may be contributing to the differences in the rate of change in the outcome variables across time, a conditional model was constructed to include individual level predictors. Thus, at the second level, participant’s gender and sense of ethnic identity (conceptualized as affirmation and belonging) were added. Ethnic identity was grand-mean centered to allow the interpretation of the intercept as the predicted level of each outcome variable at the first time point. The model used was as follows:

**Level 1:**

$Y_{it} = \pi_0 + \pi_{1i}(Time) + \pi_{2i}(Positive\ Peer\ Association) + E$

**Level 2:**

$\pi_{0i} = \beta_{00} + \beta_{01}(Gender) + \beta_{02}(Ethnic\ Identity) + r_0$

$\pi_{1i} = \beta_{10} + \beta_{11}(Gender) + \beta_{12}(Ethnic\ Identity)$

$\pi_{2i} = \beta_{20} + \beta_{21}(Gender) + \beta_{22}(Ethnic\ Identity)$

In this model, $Y_{it}$ represents the reported outcome variable level for an individual $i$ at time $t$. The next coefficient, $\pi_{0i}$, represents the outcome variable level for an individual $i$ at the first time point, $\pi_{1i}$ represents the rate of change for individual $i$ over time, $\pi_{2i}$ represents the rate of change for individual $i$ in relation to positive peer association over time, and $E$ represents the error term. The coefficient $\beta_{00}$ represents the average outcome variable level at first interaction, $\beta_{01}$ represents the difference in each outcome variable
for males and females, \( \beta_{02} \) represents the difference in each outcome variable for someone according to their level of ethnic identity, and \( r0 \) represents the assumption that individuals start at different levels of each outcome. The coefficient \( \beta_{10} \) represents the average slope for each outcome variable over time, \( \beta_{11} \) represents the slope for each outcome variable for males and females, and \( \beta_{12} \) represents the slope for each outcome variable for someone according to their level of ethnic identity. Finally, the coefficient \( \beta_{20} \) represents the average slope for each outcome variable in relation to positive peer association over time, \( \beta_{21} \) represents the slope for each outcome variable for males and females, and \( \beta_{22} \) represents the slope for each outcome variable for someone according to their level of ethnic identity. A second model was also constructed using fluctuations in positive peer association as a predictor variable.

Positive Peer Association Questionnaire

Examination of fixed effects indicated that, on average, there was no effect of gender for the intercepts of self-esteem (\( \beta_{01} = -1.11, t(278) = -1.12, p = .27 \)) and school connectedness (\( \beta_{01} = -1.11, t(278) = -1.14, p = .89 \)). There was additionally no effect for ethnic identity for normative beliefs about aggression (\( \beta_{01} = -0.37, t(278) = -0.73, p = .47 \)) and paternal closeness (\( \beta_{02} = 0.80, t(278) = 1.11, p = .27 \)). The relationships between these predictors and outcomes at baseline were not different for males and females or for people low or high in ethnic identity (See Table 8).

Similarly, there was no effect of gender for the slopes of self-esteem over time (\( \beta_{11} = 0.06, t(834) = 1.12, p = .26 \)), school connectedness (\( \beta_{11} = 0.66, t(834) = 1.24, p = .22 \)), normative beliefs about aggression (\( \beta_{01} = 0.42, t(834) = 0.98, p = .33 \)), father parental
relationship ($\beta_{11} = .02, t (834) = .05, p = .96$), and mother parental relationship ($\beta_{11} = -.63, t (834) = -1.59, p = .11$). There was additionally no effect of ethnic identity for the slopes of school connectedness ($\beta_{12} = -0.52, t (834) = -1.18, p = .24$), normative beliefs about aggression ($\beta_{01} = .25, t (834) = .72, p = .47$), father parental relationship ($\beta_{11} = .10, t (834) = .23, p = .82$), and mother parental relationship ($\beta_{12} = -.34, t (834) = -1.06, p = .29$). The relationships between these predictors and outcomes over time were not different for males and females or for people low or high in ethnic identity (See Table 8).

Additionally, there was no effect of gender for the slopes of self-esteem in relation to positive peer association over time ($\beta_{11} = .03, t (834) = .39, p = .70$), school connectedness ($\beta_{11} = -1.04, t (834) = .74, p = .16$), normative beliefs about aggression ($\beta_{01} = .96, t (834) = 1.65, p = .10$) father parental relationship ($\beta_{11} = .73, t (834) = 94, p = .35$), and mother parental relationship ($\beta_{12} = -.24, t (834) = -.42, p = .67$). There was additionally no effect of ethnic identity for the slopes of self-esteem in relation to positive peer association over time ($\beta_{12} = -.09, t (834) = -1.59, p = .11$), school connectedness ($\beta_{12} = -0.61, t (834) = -.87, p = .39$), normative beliefs about aggression ($\beta_{01} = -.21, t (834) = -.47, p = .64$), and mother parental relationship ($\beta_{12} = -.70, t (834) = -1.40, p = .16$). The relationships between these predictors and outcomes over time were not different for males and females or for people low or high in ethnic identity (See Table 8).

There was a significant effect of gender on the intercept of normative beliefs about aggression ($\beta_{01} = -1.35, t (278) = -2.18, p < .05$) and father parental relationship ($\beta_{01} = -2.79, t (278) = -3.19, p < .01$). At 6th grade, for males there was a stronger association between positive peer association questionnaire and paternal closeness. There
was additionally a significant effect of ethnic identity on the intercepts of self-esteem ($\beta_{02} = .27$, $t (278) = 3.45$, $p < .001$), school connectedness ($\beta_{02} = 2.00$, $t (278) = 3.10$, $p < .01$), and mother parental relationship ($\beta_{02} = 1.84$, $t (278) = 3.40$, $p < .001$) for the intercept.

This indicates that the higher a child’s sense of ethnic identity, as measured at Time 2, the stronger the relationship between positive peer association and both self-esteem, school connectedness, and maternal closeness at 6th grade (See Table 8).

Additionally there was an effect of ethnic identity for the slope of paternal closeness in relation to positive peer association over time ($\beta_{11} = -1.91$, $t (834) = -3.17$, $p < .01$) and maternal closeness ($\beta_{11} = -1.12$, $t (834) = -2.52$, $p < .05$). This indicates that the lower one’s sense of ethnic identity, the greater one’s relationship with their father increases the more positive peer association also increases over time (See Figure 4).

Additionally, the lower one’s sense of ethnic identity, the greater one’s relationship with their mother increases the more positive peer association increases over time (See Figure 5).

**Table 8. Positive peer pressure questionnaire fixed effects for the conditional level-two model**

<table>
<thead>
<tr>
<th>Fixed Effect Models</th>
<th>Coefficient</th>
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<tr>
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<td>Ethnic Identity, $\beta_{02}$</td>
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<td>.08</td>
<td>3.45 **</td>
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<td><strong>Self-Esteem Year Growth Rate</strong></td>
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<td>Intercept, $\beta_{10}$</td>
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<td>.08</td>
<td>-1.23</td>
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<td>Gender, $\beta_{11}$</td>
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<td>.05</td>
<td>1.12</td>
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<td>Ethnic Identity, $\beta_{12}$</td>
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<td>.04</td>
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### Self-Esteem Posppx Growth Rate

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<th>$\beta_{12}$</th>
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<td>0.12</td>
<td>0.94</td>
</tr>
<tr>
<td>Ethnic Identity</td>
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<td>-1.59</td>
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### School Connectedness Initial Status

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<th>$\beta_{01}$</th>
<th>$\beta_{02}$</th>
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</thead>
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<tr>
<td>Ethnic Identity</td>
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<td>0.65</td>
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### School Connectedness Year Growth Rate

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<th>$\beta_{11}$</th>
<th>$\beta_{12}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
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<td>0.53</td>
<td>-1.24</td>
</tr>
<tr>
<td>Ethnic Identity</td>
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<td>-1.18</td>
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### School Connectedness Posppx Growth Rate

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<th>$\beta_{11}$</th>
<th>$\beta_{12}$</th>
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<tbody>
<tr>
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### Normative Beliefs Initial Status

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<th>$\beta_{02}$</th>
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### Normative Beliefs Year Growth Rate

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### Normative Beliefs Posppx Growth Rate

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<th>$\beta_{12}$</th>
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### Paternal closeness Initial Status

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<td>-3.19 **</td>
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### Paternal closeness Year Growth Rate

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Ethnic Identity, $\beta_{12}$  
0.10  0.45  0.23

Paternal closeness Posppx Growth Rate
- Intercept, $\beta_{10}$  
0.33  1.27  0.26
- Gender, $\beta_{11}$  
0.73  0.78  0.94
- Ethnic Identity, $\beta_{12}$  
-1.91  0.60  -3.17 **

Maternal closeness Initial Status,
- Intercept, $\beta_{00}$  
18.30  1.10  16.64 ***
- Gender, $\beta_{01}$  
1.38  0.66  2.08 *
- Ethnic Identity, $\beta_{02}$  
1.84  0.54  3.40 **

Maternal closeness Year Growth Rate
- Intercept, $\beta_{10}$  
0.52  0.66  0.79
- Gender, $\beta_{11}$  
-0.63  0.40  -1.59
- Ethnic Identity, $\beta_{12}$  
-0.35  0.33  -1.06

Maternal closeness Posppx Growth Rate
- Intercept, $\beta_{10}$  
1.43  0.94  1.52
- Gender, $\beta_{11}$  
-0.24  0.57  -0.42
- Ethnic Identity, $\beta_{12}$  
-1.12  0.44  -2.52 *

* $p < .05$  ** $p < .01$  *** $p < .001$

Figure 4. Ethnic identity as a moderator of the relationship between paternal closeness and positive peer pressure
The outcomes were additionally examined with fluctuations in positive peer association placed in the Level-2 model. The effects of gender and ethnic identity on the slopes of the outcomes over time were similar to those found in the Level-1 model (See Table 9). Examination of fixed effects indicated that, on average, there was no effect of gender for the intercepts of self-esteem ($\beta_{01} = -0.07, t(278) = -0.84, p = .40$) and school connectedness ($\beta_{01} = -0.03, t(278) = -0.04, p = .97$). There was additionally no effect for ethnic identity for normative beliefs about aggression ($\beta_{01} = -0.28, t(278) = -0.54, p = .59$) and paternal closeness ($\beta_{02} = 0.44, t(278) = 0.61, p = .54$). The relationships between these predictors and outcomes at baseline were not different for males and females or for people low or high in ethnic identity (See Table 8).
On average, there was no effect of gender for the slopes of self-esteem in relation to fluctuations in peer association over time ($\beta_{11} = .53, t \ (834) = 1.79, p = .07$), school connectedness ($\beta_{11} = 3.94, t \ (834) = 1.32, p = .19$), normative beliefs about aggression ($\beta_{11} = -.73, t \ (834) = -.31, p = .76$), paternal closeness ($\beta_{11} = 2.30, t \ (834) = .72, p = .47$) and mother parental relationship ($\beta_{11} = 4.45, t \ (834) = 1.89, p = .06$). There was additionally no effect of ethnic identity for the slopes of school connectedness ($\beta_{12} = .70, t \ (834) = .28, p = .78$), normative beliefs about aggression ($\beta_{12} = .1.51, t \ (834) = .75, p = .45$), paternal closeness ($\beta_{11} = 1.55, t \ (834) = .57, p = .57$), and mother parental relationship ($\beta_{12} = .65, t \ (834) = .33, p = .74$). The relationships between these predictors and outcomes overtime were not different for males and females or for people low or high in ethnic identity (See Table 9).

There was, however, a significant effect of gender on the intercept of normative beliefs about aggression ($\beta_{01} = -1.38, t \ (278) = -2.22, p < .05$), paternal closeness ($\beta_{01} = -2.61, t \ (278) = -2.97, p < .01$), and maternal closeness ($\beta_{01} = 1.49, t \ (278) = 2.29, p < .05$). At 6th grade, for males there was a stronger association between fluctuations in positive peer association and both normative beliefs about aggression and paternal closeness. Among females at 6th grade, there was a stronger association between fluctuations in positive peer association and maternal closeness. There was additionally a significant effect of ethnic identity on the intercepts of self-esteem ($\beta_{02} = .20, t \ (278) = 2.79, p < .01$), school connectedness ($\beta_{02} = 1.65, t \ (278) = 2.55, p < .01$), and mother parental relationship ($\beta_{02} = 1.51, t \ (278) = 2.81, p < .01$). This indicates that the higher a child’s sense of ethnic identity, as measured at Time 2, the stronger the relationship between
fluctuations in positive peer association and both self-esteem, school connectedness, and maternal closeness at 6th grade (See Table 8).

Furthermore, there was a significant effect of ethnic identity for the slope of self-esteem in relation to fluctuations in positive peer association over time ($\beta_{12} = -0.62$, $t(834) = -2.48$, $p < .05$). This indicates that the higher a child’s sense of ethnic identity, the greater self-esteem decreases as positive peer association increasingly fluctuates over time (See Figure 6).

Table 9. Fluctuations in positive peer pressure fixed effects for the conditional level-two model

<table>
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<tr>
<th>Fixed Effect Models</th>
<th>Coefficient</th>
<th>SE</th>
<th>T-ratio</th>
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<td>28.62 ***</td>
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<td>Gender, $\beta_{01}$</td>
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<td>0.09</td>
<td>-0.84</td>
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<tr>
<td>Ethnic Identity, $\beta_{02}$</td>
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<td>0.07</td>
<td>2.79 **</td>
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<td>Gender, $\beta_{11}$</td>
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* p < .05   ** p < .01   *** p < .001

Figure 6. Ethnic identity as a moderator of the relationship between self-esteem and fluctuations in positive peer pressure.
CHAPTER FOUR
DISCUSSION

The current study sought to obtain a deeper understanding of the potential influence of one conceptualization of positive peer pressure, positive peer association, in urban, low-income Black American youth. There were three goals of analysis. The first was to examine the relationship between positive peer association, as measured using questionnaire data, and the outcomes of self-esteem, school connectedness, normative beliefs about aggression, paternal closeness and maternal closeness over time. Similarly, the second goal was to examine the relationship between fluctuations in positive peer association, as measured by a time sampling technique, and the outcomes over time. The final goal was to determine whether ethnic identity and gender moderated the aforementioned relationships. The findings will be discussed with respect to each of these goals.

Positive Peer Association: Retrospective

The first aim of the study was to examine the predictive effects of positive peer association. As previously discussed, positive peer association was measured using such items as “How many of your friends/associates…Respect your elders (pastor, teachers, etc.)?” A strong relationship emerged between the amount of positive peer association youth experienced at sixth grade and each of the outcomes of self-esteem, school connectedness, maternal closeness, paternal closeness and aggression endorsed at sixth
grade. As youth progressed from 6th to 8th grade, the more positive peer association they experienced the more self-esteem, greater sense of school connectedness, and better maternal and paternal closeness they reported. In terms of aggression, youth additionally experienced beneficial outcomes across time with increased positive peer association associated with decreased aggression.

Though the literature is unclear on the extent to which peers influence Black American youth (Giordano, Cernkovich, & DeMaris, 1993), these findings lend support to the idea that peers are able to have a strong impact on Black American youths’ wellbeing by promoting their healthy development towards prosocial behaviors and attitudes. These findings are in slight contrast to one of the few studies examining Black American adolescents and positive peer pressure which found that indirect positive peer association, though positively associated with empathy, was unrelated to self-esteem, aggression, depression, and delinquency (Padilla-Walker & Bean, 2009). However, as the previous study was based on cross-sectional data it may be that the current study’s use of longitudinal data was able to discover associations based on an examination of youth’s trajectories. Additionally, the previous study examined 9 to 12th graders from West Texas while the current study involved 6 to 8th grade participants from low income, Chicago neighborhoods. The transition to high school may lead to a different experience of peer pressure in youth with youth becoming less easily influenced by peers in high school (Steinberg & Monahan, 2007). Peers may also have a different role for youth in low income, urban areas. Lacking other areas to achieve competence and support, Black American youth in such areas may turn to peers for respect, protection and acceptance.
Youth seeking such support from deviant peers is thought to partially account for why gangs are of greater prevalence in marginalized, urban communities (Hill et al., 1992; Howell, 2011).

**Fluctuations in Positive Peer Association**

In order to expand upon previous literature that is based on traditional questionnaire data, the ESM method was used to capture youths’ daily experience of positive peer association. The time sampling method allowed for an exploration of the second goal of the study which sought to examine the effects of stability of positive peer association. This construct was captured by examining the standard deviations of the amount of times that children reported that they were with peers thought to be friendly, helpful, trustworthy, and safe on the ESM measure. A strong relationship emerged between fluctuations in positive peer association youth experienced at sixth grade and each of the outcomes of self-esteem, school connectedness, maternal closeness, paternal closeness and aggression endorsed at sixth grade. Over time, greater fluctuations in positive peer association was associated with worse outcomes including decreased self-esteem, school connectedness, maternal closeness, and paternal closeness as well as increased aggression. Youth who are exposed to more stable positive peer association experience better outcomes initially and across time. These findings highlight the importance of consistent positive social forces during early adolescence and further support the beneficial nature of positive peer association in healthy youth development. However, this consistency may be something that is difficult for many adolescents to obtain naturally given the instability of relationships at this time (Brown, 2004).
Taken together both the findings on positive peer association and fluctuations in positive peer association support the primary aim of the study which was to demonstrate the beneficial nature of positive peer pressure in low income, urban youth. Interestingly, when simply looking at the change in the outcomes over time, youth experienced either no change or worse outcomes over time. Positive peer association appears to place and maintain youth on a healthy trajectory that might have otherwise been absent from their lives. These findings are congruent with the ideas posited by both social learning theory and primary socialization theory. As previously discussed, primary socialization theory states that individuals learn social norms and behaviors by interacting with primary socialization sources, which are the most salient figures in a person’s life (Oetting & Donnermeyer, 1998). Additionally, social learning theory suggests that attitudes and behaviors will be adopted if one is rewarded for those views and actions (Petraitis, Flay & Miller, 1995). During adolescence, one of the primary socializations sources is peers. Consequently, having peers accept and view a behavior as desirable serves as a reward that motivates other youth to embrace certain behaviors and attitudes. This phenomenon in regards to peers is typically associated with the adoption of negative beliefs and actions. The present study demonstrates that associating with peers who behave prosocially as well as having consistent interactions with peers one perceives as positive, is related to a promotion of developmental assets. Developmental assets characterize strengths an individual either internally possess or externally experiences, which improve both educational and health outcomes (Benson, 2007). Peers appear to have the ability to motivate others in a way that benefits both internal forces (self-esteem and beliefs about
aggression) and external forces (school connectedness, maternal closeness, and paternal closeness). As the research suggests, such an improvement in developmental assets will likely help the youth experience a decrease in deviant behaviors and an increase in healthy behaviors (Benson, 2007). Though these trends were exhibited across the entire sample, the current study also sought to examine how youth differed in regard to these relationships.

**Ethnic Identity**

The final goals of the study were to examine the moderating role of ethnic identity and gender. Ethnic identity was characterized as affirmation and belonging or a child’s sense of belonging to and feeling positive about being Black American. Affirmation and belonging is just one of many aspects of ethnic identity but is a component that is strongly linked to the mental health of Black American adolescents (Phinney, 1992; Mandara et al., 2009). The higher a child’s sense of ethnic identity as measured at Time 2, the stronger the relationship was between peer association and both self-esteem, school connectedness, and maternal closeness at 6th grade. Similarly, a higher sense of ethnic identity as measured at Time 2, was associated with a stronger relationship between fluctuations in positive peer association and both self-esteem, school connectedness, and maternal closeness at 6th grade.

Ethnic identity additionally affected the relationship between positive peer association and the outcomes over time. The lower one’s sense of ethnic identity, the closer one became to both their father and mother when positive peer association increased over time (Figures 4 & 5). Additionally, the higher a child’s sense of ethnic
identity, the greater self-esteem decreased when positive peer association fluctuated more over time (Figure 6). It appears that people who have less of a sense of ethnic identity, a positive force in youth development, are more impacted by the positive influence of peers. Positive peer pressure may be more important for people with a lower sense of ethnic identity as their relationships with their parents are more susceptible to peer pressure. Furthermore, it appears that the negative effects of experiencing less consistent positive peer pressure eventually overwhelms the protective nature of possessing a higher sense of ethnic identity. This leads to a sharper decrease in self-esteem than for those with a lower sense of ethnic identity.

Interestingly, ethnic identity was not found to influence the relationships between either positive peer association or fluctuations in positive association and aggression or paternal closeness at 6th grade. Ethnic identity additionally did not influence the relationships between positive peer association and the changes in self-esteem, school connectedness, and aggression over time or between fluctuations in positive peer association and any of the variables over time except self-esteem. Though ethnic identity moderated a few of the outcomes initially, it demonstrated little influence on the outcomes over time.

Overall, it appears that though peer association may function differently for Black American youth, it is likely due to more than a sense of belonging to and feeling positive about being Black American. This is somewhat contradictory to the extant literature that indicates that ethnic identity influences Black American youths’ experience of peer relations. However, in previous research (Shin, Daly, & Vera, 2007), ethnic identity was
found to be a moderator of negative peer experiences. Since ethnic identity is a positive force in the lives of Black American youth, it may be that though it can be a protective enhancing factor (Luthar, Cicchetti, & Becker, 200) regarding negative peer experiences, it does not enhance the already advantageous nature of positive peer association. Youth in the sample with a higher sense of ethnic identity, began with better outcomes at Time 1 and exhibited less improvement over time than their lower ethnic identity counterparts. High ethnic identity, already an established buffer of environmental stress, was not shown to grant additive benefits to youth experiencing positive peer pressure. Additionally, only one aspect of ethnic identity was analyzed in the study. Other components of ethnic identity may have different effects on positive peer association.

**Gender**

Contrary to our hypotheses, gender was found to account for the variance in few relationships in the current study. For males at 6th grade, there was a stronger association between positive peer association and both paternal closeness and beliefs about aggression at 6th grade. Similarly, there was a stronger association between fluctuations in positive peer association and both beliefs about aggression and paternal closeness for males at 6th grade as well as a stronger relationship between fluctuations in positive peer association and maternal closeness for females at 6th grade. However, gender did not influence the associations between either peer association or fluctuations in peer association and any of the outcomes over time. For at least the variables of paternal closeness and aggression, males seemed to benefit more from positive peer association and consistent positive peer association while for maternal closeness, females seem to
benefit more from consistent positive peer association. Nevertheless, as this trend was not observed overtime, the cross-sectional relationships have limited value. Regardless of gender, youth who experience more positive peer association and stable levels of positive peer association have better developmental trajectories. These findings are consistent with previous research that demonstrates no difference among boys and girls in the association between negative peer association and antisocial or neutral activities (Crockett, Raffaelli, & Shen, 2006; Santor, Messervey, & Kusumakar, 2000). Peer pressure appears to influence both males and females similarly. However, there is some evidence that gender can be influential within more complex, three way interactions (Brechwald., & Prinstein, 2011). Future research should consider gender within other moderators of peer influence to more comprehensively assess its impact.

**Strengths, Limitations and Future Directions**

The present study had several strengths. First, it contributes to the dearth of literature on both positive peer pressure and how it relates to Black American youth from low income, urban communities. It is important to continue to study positive forces in social and emotional development as they have been demonstrated to explain the trajectories of youth above and beyond what can be captured by only focusing on negative influences (Tolan, 2014). This is one of the few studies in the extant literature (Brechwald., & Prinstein, 2011) to not only examine positive peer association but conceptualize positive peer association as a promotive (directly fosters typical mental health and wellbeing; Tolan, 2014), rather than a protective factor (interacts with and reduces the effect of risk exposure; Tolan, 2014), among Black American from low
income, urban communities. Research on the role of peers in the development of youth from low income, Black American communities may have overlooked essential information due to the neglect of the constructive potential that peers can have. Additionally, in attempting to shift the focus to positive youth development, the current study sought to circumvent the deficits based approach which has traditionally been the framework of research with Black American and other marginalized populations. Although this method is often warranted as many issues face these communities that need to be identified and described, such an orientation can fail to portray community members as possessing preexisting resources. Findings from the current study make it clear that promotive resources do exist that can be explored and capitalized upon by future exploratory and intervention research.

A second strength of the study is that it was able to better capture the complex nature of peer association through the use of a daily time sampling method. The extant literature has used traditional questionnaire data to measure the concept of peer pressure, which due to the fluctuating intensity of peer pressure and that multitude of influences that youth can experience (Brown, 2004), causes some limitations to the extent to which peer association can be fully captured. The use of the ESM in the current study expands upon previous literature by allowing for a more confident account of positive peer pressure’s variability.

Third, this study employed a multi-level analysis of longitudinal data. Other studies have predominantly examined positive peer association cross-sectionally using standard regression analysis. However, this is an issue as factors are nested within each
individual across different times and conditions. HLM is able to account for such shared variance which makes it a superior method of analysis (Roosa et al., 2003).

Despite its many strengths, several limitations should be discussed in regards to the current study. First, due to breadth of positive youth development outcomes examined in the study, numerous analyses were conducted. This increases the risk for Type 1 error as the more comparisons one makes, the higher the probability that an analysis will yield significance due to chance. Follow up studies could benefit from narrowing the scope of questioning and focusing on the trajectories of a single positive youth development factor in their interaction with peer forces. A second limitation was that ethnic identity was not examined by gender. Though in this sample, few trajectories were found to be moderated by ethnic identity, previous research demonstrated that ethnic identity (at least affirmation and belonging) is more salient to boys than to girls (Mandara et al., 2009). By not examining a three-way interaction involving ethnic identity and gender, the findings may underestimate the influence ethnic identity has on the role of positive peer association in the development of males. Third, the ESM items that composed the fluctuations in peer association variable can only be considered an approximation for positive peer association. The items asked whether they considered the peers they were with at the moment trustworthy, safe, helpful, or friendly. However, whether these variables indicate prosocial characteristics may, to some extent, depend on each participant’s subjective conceptualization of the terms. For example, it is conceivable that a youth may consider his friend trustworthy or friendly even if they were engaging in delinquent activities. As these data were taken from a larger study
administered years ago, ideal measures of fluctuations in daily positive peer association could not be included. A better measure could provide more concrete questions that allow for less room of interpretations of the items. A fourth limitation of the study is the homogenous sample in regard to racial, socioeconomic, and geographical demographics. The lack of diversity in the sample reduces external validity of the current study’s findings. Although it was the intent of the study to explore the experience of Black American youth from low-income, urban families, the low heterogeneity prevents conclusions from generalizing to other populations.

To combat limitations and expand upon these strengths, future studies should continue to examine the promotive characteristics of positive peer association among Black American youth from low-income, urban communities in larger longitudinal samples. This would allow for a more tailored analysis of the concept of positive peer association and positive youth development outcomes through the inclusion of more specific measures of peer association. Such an examination should intend to elucidate how individuals differ in their trajectories. Only moderators involving features of the influenced youth were examined in the current study. However, other aspects of the peer pressure relationship exist such as characteristics of the influencing peers and the type of peer relationship (e.g., degree of reciprocity) (Brechwald, & Prinstein, 2011). Future studies should explore moderators from these different perspectives. Along with other potential moderators, the influence of ethnic identity should be reassessed based on the gender of the participants to clarify whether the association males typically display to the concept of ethnic identity extends to positive peer association dynamics.
Conclusions and Implications

The current study corroborates existing movements that have recently begun to recognize peers as a potential factor in fostering change (van Hoorn et al., 2014). Within the physical healthcare field, peer support interventions have received attention for their ability to improve self-management for adult patients with chronic health conditions (Lorig, Ritter, Villa, & Armas, 2009). Peer support interventions have also been linked to other psychosocial benefits for adults with physical health concerns and have been a promising model for systems with resource constraints (Heisler, 2006). The potential for peer pressure to impact positive change is so promising that it has been labeled a “social cure” for many pressing public health concerns (Roesenberg, 2011, p. xxi). The findings from this study offer evidence that positive peer pressure can be a force in encouraging positive youth development among Black American youth from low income, urban communities. Unlike other interventions for youth that may rely on outside parties for manpower and funding, peers are a cost effective, community-based mechanism that can promote positive youth development. Such characteristics are important, as the ability to create self-sustaining interventions is essential to promoting long lasting change. One area where this idea is being developed is cross age peer mentoring in which trained high school youth serve as mentors for middle school youth from the same community. Preliminary evidence indicates this approach holds promise with bidirectional benefits exhibited in both the mentors and mentees (Karcher, 2013). Though more research, especially applied research, is now needed to better understand the phenomenon, positive
peer association may be the “social cure” that encourages healthy development among Black American youth from low income, urban communities.
APPENDIX A

EXPERIENCE SAMPLING METHOD (ESM) QUESTIONNAIRE
AT THIS TIME, IS ANY ADULT KEEPING TRACK OF YOU? ( ) YES ( ) NO
IF YES, WHO? ( ) MOTHER ( ) OTHER ( ) OTHER ADULT

SOMETHING PERSON KNOWS WHAT YOU ARE DOING?( ) YES ( ) NO
WHERE YOU ARE? ( ) YES ( ) NO
WHO YOU ARE WITH? ( ) YES ( ) NO

**********************************************************************************************

NOT AT ALL LITTLE PRETTY MUCH VERY
0 1 2 3 4 5 6 7 8 9

HOW MUCH CHOICE DID YOU HAVE ABOUT WHAT YOU WERE DOING?
++ + + + + + + + + +

HOW HARD WERE IT TO PAY ATTENTION?
++ + + + + + + + + +

**********************************************************************************************

HOW WERE YOU FEELING WHEN YOU WERE SIGNALIZED? (CIRCLE ONLY ONE ANSWER FOR EACH FEELING)

VERY SOME A LITTLE NOT AT ALL

CALM

SERIOUS

LAZY

MISFORTUNED

ANGRY

TENSE

OVERALL, HOW WERE YOU FEELING? (CIRCLE ONLY ONE FOR EACH SET OF FEELINGS)

SOME A LITTLE NOT AT ALL

HAPPY

FRIENDLY

GROUCHY

SCARED

IMPLACABLE

IF YOU WERE WITH KIDS, WERE THEY?

FRIENDLY

LOSER

SCARED

IF YOU WERE WITH PEOPLE, WERE THEY?

FRIENDLY

IMPLACABLE

THAT IS Y

IF YOU WERE WITH FRIENDS, HOW MUCH PRESSURE DID YOU FEEL TO DO WHAT THEY WANTED TO DO?

( ) NONE ( ) A LITTLE ( ) SOME ( ) A LOT

SHARE ANY GREAT THOUGHTS, NASTY CRACKS, CARTOONS & JOKES, ETC.
APPENDIX B

PARENTAL RELATIONSHIP
*Note: Participants filled out items 17-23 from the original questionnaire.
12. When my parent(s) is not home, I know how to get in touch with them? (Circle one response)

   Almost never   Occasionally   About half the time   Sometimes   Almost always
   1              2              3              4              5

13. My parent(s) believes it is important to know what I am doing when I am outside of the home?

   _____ Yes, very important   _____ Somewhat important   _____ No, not important

Answer the following questions about your MOTHER, STEPMOTHER, or the person that takes care of you who is a WOMAN. Put an [X] in the box that is true for you. We know that some kids may not be able to fill out this part.

Usually       Usually       
   True         False

   _____ 14. She keeps pushing me to do my best in whatever I do.
   _____ 15. She helps me with my school work if there is something I don’t understand.
   _____ 16. When she wants me to do something she explains why.

Circle one answer for each statement.

How much....... 

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A little</th>
<th>Some</th>
<th>A lot</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

17. Do you go to your mother for advice? 
18. Do you want to be like your mother? 
19. Does your mother understand what you are like? 
20. Do you share your inner feelings with your mother? 
21. Is your mother important to you? 
22. Do you talk or do things with her? 
23. How satisfied are you with the relationship you have with your mother?

GO TO NEXT PAGE
Father's Involvement (Put an X in the box that is true for you)

24. Do you have a father or someone who is like a father to you?

___ No    ___ Yes  If yes, please check if he is your: ___ Birth Father ___ Stepfather ___ Someone else  ___ Other Who?

25. Does your father/stepfather/someone who is like a father to you:

___ Live in your home    ___ Live someplace else    ___ Live both home and somewhere else

26. If your father does not live at home with you:

A. Where does he live?

B. How often do you see him? (Circle one)

<table>
<thead>
<tr>
<th>Everyday</th>
<th>Once a week</th>
<th>Once a month</th>
<th>A couple times a year</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Answer the following questions about your FATHER, STEPFATHER, or the person that takes care of you who is a MAN. Put an [X] in the box that is true for you. We know that some kids may not be able to fill out this part.

Usually

True    False

27. He keeps pushing me to do my best in whatever I do.

28. He helps me with my school work if there is something I don’t understand.

29. When he wants me to do something he explains why.

Circle one answer for each statement.

<table>
<thead>
<tr>
<th>How much...</th>
<th>Not at all</th>
<th>A little</th>
<th>Some</th>
<th>A lot</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. Do you go to your father for advice?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31. Do you want to be like your father?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32. Does your father understand what you are like?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33. Do you share your inner feelings with your father?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34. Is your father important to you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35. Do you talk or do things with him?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36. How satisfied are you with the relationship you have with your father?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX C

CHILDREN’S NORMATIVE BELIEFS ABOUT AGGRESSION
Children's Normative Beliefs About Aggression

Instructions
The following questions ask you about whether you think certain behaviors are WRONG or are OK. Circle the answer that best describes what you think. Circle ONE and only one answer.

Suppose a kid hits another kid.

1) Do you think it's OK for the kid who got hit to scream at the other kid?
   - IT'S PERFECTLY OK
   - IT'S SORT OF OK
   - IT'S SORT OF WRONG
   - IT'S REALLY WRONG

2) Do you think it's OK for the kid who got hit to hit the other kid?
   - IT'S PERFECTLY OK
   - IT'S SORT OF OK
   - IT'S SORT OF WRONG
   - IT'S REALLY WRONG

3) How much do you think the kid who hit the other kid first was trying to be mean?
   - NOT AT ALL TRYING TO BE MEAN
   - TRYING A LITTLE TO BE MEAN
   - TRYING SOMEWHAT TO BE MEAN
   - TRYING VERY MUCH TO BE MEAN

4) In general, it is wrong to hit other people.
   - IT'S REALLY WRONG
   - IT'S SORT OF WRONG
   - IT'S SORT OF OK
   - IT'S PERFECTLY OK

5) If you're angry, it is OK to say mean things to other people.
   - IT'S PERFECTLY OK
   - IT'S SORT OF OK
   - IT'S SORT OF WRONG
   - IT'S REALLY WRONG

6) In general, it's OK to yell at others and say bad things.
   - IT'S PERFECTLY OK
   - IT'S SORT OF OK
   - IT'S SORT OF WRONG
   - IT'S REALLY WRONG
7) It is usually OK to push or shove other people if you're mad.

   IT'S PERFECTLY OK
   IT'S SORT OF OK
   IT'S SORT OF WRONG
   IT'S REALLY WRONG

8) It is wrong to insult other people.

   IT'S REALLY WRONG
   IT'S SORT OF WRONG
   IT'S SORT OF OK
   IT'S PERFECTLY OK

9) It is wrong to take it out on others by saying mean things when you're mad.

   IT'S REALLY WRONG
   IT'S SORT OF WRONG
   IT'S SORT OF OK
   IT'S PERFECTLY OK

10) It is generally wrong to get into physical fights with others.

    IT'S REALLY WRONG
    IT'S SORT OF WRONG
    IT'S SORT OF OK
    IT'S PERFECTLY OK

11) In general, it is OK to take your anger out on others by using physical force.

    IT'S PERFECTLY OK
    IT'S SORT OF OK
    IT'S SORT OF WRONG
    IT'S REALLY WRONG
APPENDIX D

SCHOOL SENSE OF COMMUNITY
School Sense of Community

Please tell us how much you agree with the following statements about your school.

<table>
<thead>
<tr>
<th></th>
<th>Disagree A Lot</th>
<th>Disagree A Little</th>
<th>Don't Agree or Disagree</th>
<th>Agree A Little</th>
<th>Agree A Lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I’m having a problem, some other student will help me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Students at this school really care about each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Teachers and students treat each other with respect in this school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Students at this school work together to solve problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Students in this school are just looking out for themselves.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Students in this school treat each other with respect.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. My school is like a family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I feel that I can talk to the teachers in this school about things that are bothering me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Teachers and students in this school don’t seem to like each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Students in this school help each other, even if they are not friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX E

MULTIGROUP ETHNIC IDENTITY MEASURE (MEIM)
*Note: Only items 2, 5, 6, 9, & 11 were used in the current study.
EI Scale

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of ethnic or racial groups, are Mexican American, Hispanic, African American (Black), Asian American, American Indian (Native American), and European American (White). Every person is born into a racial or ethnic group, or sometimes two groups, but people differ on how important their ethnicity or race is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your racial or ethnic group and how you feel about it or react to it.

Please fill in: In terms of the racial or ethnic group, I consider myself to be...

2, 5, 6, 9, 11

If you do not consider yourself to be Black or African American, you do not need to complete the rest of this form.

1. I like meeting and getting to know people from races other than my own.

Strongly Disagree  Somewhat Disagree  Somewhat Agree  Strongly Agree

2. I am happy that I am a member of the Black or African American group.

Strongly Disagree  Somewhat Disagree  Somewhat Agree  Strongly Agree

3. I sometimes feel it would be better if different racial groups didn't try to mix together.

Strongly Disagree  Somewhat Disagree  Somewhat Agree  Strongly Agree

4. I often spend time with people from racial groups other than my own.

Strongly Disagree  Somewhat Disagree  Somewhat Agree  Strongly Agree

5. I have a strong sense of belonging to Black people.

Strongly Disagree  Somewhat Disagree  Somewhat Agree  Strongly Agree

6. I have a lot of pride in Black people and our accomplishments.

Strongly Disagree  Somewhat Disagree  Somewhat Agree  Strongly Agree

7. I don't try to become friends with people from other racial groups.

Strongly Disagree  Somewhat Disagree  Somewhat Agree  Strongly Agree

(over)
8. I am involved in activities with people from other racial groups.
   Strongly Disagree Somewhat Disagree Somewhat Agree Strongly Agree
   1 2 3 4

9. I feel a strong attachment towards Black people.
   Strongly Disagree Somewhat Disagree Somewhat Agree Strongly Agree
   1 2 3 4

10. I enjoy being around people from other racial groups.
    Strongly Disagree Somewhat Disagree Somewhat Agree Strongly Agree
    1 2 3 4

11. I feel good about my cultural or racial background.
    Strongly Disagree Somewhat Disagree Somewhat Agree Strongly Agree
    1 2 3 4
REFERENCES


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VITA

In 2012, Dakari Quimby graduated from Washington University in St. Louis, double majoring in Psychology and Philosophy-Neuroscience-Psychology. During his undergraduate studies, Dakari served as a research assistant in Washington University’s Developmental Neuropsychology Laboratory. He additionally gained valuable clinical exposure including working as an intern on a multisystemic team or serving as a practicum student at the St. Louis Crisis Nursery. Such opportunities helped maintain his motivation to empower marginalized communities.

After graduation, Dakari pursued graduate school in Clinical Psychology in order gain the skills needed to increase access to and provide mental health services for people of color. At Loyola, Dakari has worked as a teaching and research assistant for Dr. Maryse Richards on the Risk and Resilience research team. Upon completion of his doctorate, Dakari will dedicate his career to providing therapy for youth of color exposed to community violence and related environmental stressors and promoting task shifting of mental health services in communities facing social and economic inequalities.

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