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Positive Peer Association among Black American Youth and the Roles of Ethnic Identity and Gender

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Peer influence is a phenomenon that affects many youth due to the importance of peer relationships during adolescence (Brinthaup, 2002). Peer influence has been defined as the “pressure to think or behave along certain peer-prescribed guidelines” (Clasen & Brown, 1985, p. 452). Although consequences associated with negative peer relationships have been well documented (Brechtwald & Prinstein, 2011), the extant literature on positive peer influences is sparse. Positive peer influence occurs when youth are encouraged to engage in prosocial behavior or towards adopting socially beneficial outcomes (Wentzel, 2014). The current study examines whether peer association, a subtype of peer influence and a term normally related to 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. Although a high degree of economic and cultural diversity exists within the Black community, the current sample was chosen because the experience of poverty compounds the experience of oppression and discrimination that is shared with more well-resourced Black youth (Reeves, Rodrigue, & Kneebone, 2016; Williams & Mohammed, 2013). An exploration of positive youth development is particularly important because 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 (Yosso, 2005). The current study examines the relation between positive peer association and the outcomes of self-esteem, school connectedness, normative beliefs about aggression, and parental relationships longitudinally. Additionally, the connection between positive peer association and the various outcomes is explored in terms of the influence of ethnic identity, a recognized resilience factor among minority adolescents, and gender.

Developmental and Theoretical Frame

Two 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 (Jennings, Maldonado-Molina, & Komro, 2010; 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

(Rubin, Bukowski, & Bowker, 2015). Similarly, primary socialization theory states that all social behaviors have components that are learned including social norms and behaviors (Oetting & Donnermeyer, 1998; Rew, Arheart, Thompson, & Johnson, 2013). 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 and peers. As youth grow into the developmental stage of adolescence, in addition to the continued importance of family, peers emerge as another immediate influence in their lives and in shaping their behavior.

Peers and Black youth

Adolescents across racial groups tend to spend more time with their friends than at any other previous developmental stage (Barry & Wentzel, 2006; Monahan, & Booth-LaForce, 2015). Despite their potential influence, peers may be less central to the development of Black American youth (Almeida, Subramanian, Kawachi, & Molnar, 2011) as they continue to spend a substantial amount of time with their family similar to that demonstrated by youth in more collectivist societies (Larson, Richards, Sims, & Dworkin, 2001; Wolf, Aber, & Morris, 2015). Although family remains central to their development, Afrocentric theories suggest peer relationships may also be a key influence due to values placed on interpersonal relationships. These theories are culturally derived perspectives that describe the development and wellbeing of people of African descent and are based on values and belief systems that are thought to be shared to some extent among the Black American community (see for review Gilbert, Harvey, & Belgrave, 2009; Jones, Hopson, Gomes, 2012). A facilitation of "cultural orientation toward spirituality, interpersonal relationships, communalism, and expressive communication" are core elements of Afrocentric approaches (Jones, Hopson, Gomes, 2012). Thus, an individual develops through her interaction with others. The growing recognition of the Afrocentric paradigm has come amidst the increased understanding by the developmental field that there is a lack of culturally responsive understanding of Black American development (Jones, Hopson, Gomes, 2012). Unlike more common theoretical approaches developed by researchers and practitioners trained from a Eurocentric model and based on White middle-class individuals, Afrocentric perspectives provide a culturally consistent framework for understanding the development and psychological functioning of Black Americans.

Research has demonstrated the importance of interpersonal relationships for Black American youth, as samples of Black youth have been found to use social support as a coping strategy more than their European American and Latino peers (Tolan, Gorman-Smith, Henry, Chung, & Hunt 2002). Although cultural values of collectivism and interdependence are not unique to Black communities, this framework may offer insight into the potential role of peers among Black youth. A specific examination of this group is necessary because many Black American youth experience excessive amounts of marginalization and environmental risk that make it imperative for attention to be placed on how this subset of youths maintain healthy developmental trajectories.

Peer influence

Peer influence is a way of intentionally or unintentionally 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. This influence is of particular importance in early, as opposed to late, adolescence when youth tend to be most easily swayed by their peers due to the development of reward mechanisms in the brain that precedes control mechanisms (Rubin, Bukowski, & Bowker, 2015; Steinberg & Monahan, 2007; Weigard, Chein, Albert, Smith, & Steinberg, 2014).

Peer influence is a broad category that can be conceptualized in four different ways: direct peer pressure, indirect peer association, normative regulation, and the structuring of opportunities (see Brown, 2004 for a review of all four types). The current study addresses indirect peer association. Peer association focuses on the behaviors of peers surrounding a particular youth instead of whether or not peers encourage that youth to do something, with a greater emphasis placed on general peer group behaviors as opposed to direct exchanges between group members (Brown, 2004). The indirect modeling of behaviors, indirect peer association, appears to be a significant form of peer influence as it has been consistently related to both negative and positive behaviors of adolescents such as aggression, delinquency, depression, empathy and self-esteem (Padilla-Walker & Bean, 2009). For instance, empirical evidence suggests that adolescent smoking socialization occurs through perceived social norms as opposed to explicit peer pressure (Simons-Morton, & Farhat, 2010); youth describe feeling internal pressure to smoke when around other youth who are smoking, but do not report that overt peer influence is a main factor in their smoking (Simons-Morton, & Farhat, 2010). Overall, these findings suggest that indirect peer association may be a particularly relevant form of peer influence for understanding adolescents' outcomes.

Fluctuations in peer influence

Peer relationships in adolescence often fluctuate which causes peer influence to be a concept that is difficult to capture fully. Not only can adolescents experience peer influence of varying intensity over time, but they may be faced with different types of influences depending on which peers are surrounding them at a given moment (Brown, 2004). Youth interact within broad, interrelated social networks in which youth who may be tangentially connected have the potential to influence each other (Brechwald & Prinstein, 2011). Different peer networks in places such as schools, neighborhood, religious institutions, and after school programs may each have different hierarchies, norms, and valued behaviors and attitudes which cause youth to experience changing influences. Greater variability in peer influences may suggest social regulation challenges. Daily emotional variability has been found to relate to symptoms of PTSD (Ortiz, Richards, Kohl, & Zaddach, 2008) and to exposure to violence (Sweeney, Goldner, & Richards, 2011) suggesting that greater variability in emotional states is a symptom of stress, and may indicate difficulty with emotion regulation.

In order to capture the variability in how often youth are surrounded by positive peers, in addition to retrospective questionnaire data, this study employs a time sampling technique

termed the experience sampling method (ESM) (Larson & Csikszentmihalyi, 1983). Traditional questionnaire data may not yield a completely accurate account of the oscillations of such influences when asked about this information retroactively. The ESM data helps to better capture the complexities of peer association represents a snapshot of the fluctuations in peer association free from recall.

Positive peer influence

The phenomenon of peer influence that leads to anti-social or delinquent behavior has been well studied (Brechwald & Prinstein, 2011; Shader, 2001). Similar to the abilities of its negative counterpart to promote anti-social behavior, positive peer influence may be part of the explanation for how youth develop healthy and pro-social behaviors (Wentzel, 2014). In their well-cited study of White middle-class youth, Brown, Clasen, and Eicher (1986) found that adolescents tend to report more positive than negative peer pressure and positive peer pressure was a strong deterrent against misconduct, such as drug use, and a facilitator of socially acceptable behavior. Additionally, researchers have demonstrated peers that exhibit positive behavior to be a protective factor for youth and a motivator to act prosocially (Choukas-Bradley, Giletta, Cohen, & Prinstein, 2015; Van Hoorn, Van Dijk, Meuwese, Rieffe, & Crone, 2014), and to lead to better academic achievement or increased self-esteem (Padilla-Walker & Bean, 2009). However, as most of the past research has been conducted in predominately White, middle class samples (Wentzel, 2014), research is needed that explores the potential benefits of positive peer influence amongst a sample of Black American youth residing in urban, low income areas.

The Relation between Peer Association and the Outcomes

The current study examines the relation between positive peer association and the outcomes of self-esteem, school connectedness, parental relationship, and normative beliefs about aggression in a sample of urban, Black American youth. According to positive youth development theory, youth move on healthy developmental trajectories when appropriate internal strengths (e.g. self-esteem) and positive external strengths (e.g. social support) are fostered (Benson et al., 2006; Bowers, Geldhof, Johnson, Lerner, & Lerner, 2014). To make this conceptualization of development more applicable, The Search Institute identified developmental assets, which are defined as a variety of contextual and relational strengths that have been demonstrated to improve educational and health outcomes for youth (Benson, Scales, & Syvertsen, 2010). The assets were derived from a conceptually driven amalgamation of the extant research and are organized into categories that have practical value for research and community intervention (see Benson, 2007 for full review and explanation).

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, Scales, & Syvertsen, 2010). The target outcomes of the current study are related to assets that have been demonstrated to be particularly salient to better outcomes in Black American youth (Sesma Jr., Roehlkepartain, Benson, & Van Dulmen, 2003). For Black American youth, the asset category of social

competencies (e.g. beliefs about aggression) was associated with less school problems, antisocial behavior, and more thriving behaviors, while the category of positive identity (e.g. self-esteem) was associated with less depression, and the category of support (e.g. school connectedness and parental relationship) was linked to maintaining good health (Sesma Jr., et al., 2003). Although a discussion of the developmental strengths, challenges and needs of Black American youth are beyond the scope of this paper, see the American Psychological Association, 2008 for a review. Consistent with findings from the developmental assets literature, factors of aggression, self-esteem, and the relationship with parents and schools have all been identified as important to focus on in order to encourage optimal functioning for Black American youth given the marginalization that such youth face (American Psychological Association, 2008).

Self-Esteem

Self-esteem, or a person's evaluation of one's self, is a concept that is integral to one's wellbeing (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel 2004). Self-esteem development may be particularly important in Black American low-income, urban communities as it has the potential to serve as a protective factor amidst environmental stressors (Pyszczynski, et al. 2004). Among Black American youth, the construct has been negatively correlated with various detrimental outcomes and been found to be a protective factor facilitating adolescent mental health (Copeland-Linder, Lambert & Ialongo, 2010). Studies of adolescents of various ethnicities have demonstrated that self-esteem can protect against susceptibility to negative peer influence (Wild, Flisher, Bhana & Lombard 2004), is inversely related to negative peer association and is positively related to positive peer association (Padilla-Walker & Bean, 2009).

School connectedness

School connectedness refers to youth's perception of safety and support and sense of investment in school (McNeely & Falci, 2004). School connectedness has been linked to better emotional health and a reduction in risky behavior in adolescents (Kidger, Araya, Donovan, & Gunnell, 2012; Brooks, Magnusson, Spencer, & Morgan, 2012). However, 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 presented mixed findings on peer influence and school connectedness with some studies indicating that positive peer influence led to more engagement in school (Brophy, 1999), while others have found no relation between these two variables (Shin, Daly, & Vera, 2007). Other research has linked peer influence to particular aspects of school connectedness in adolescents including affective engagement and school compliance (Estell, & Perdue, 2013; Wang, & Eccles, 2012).

Parental relationship

Although peers start to compete with the influence of parents during adolescence, the relationship with parents remains a strong factor in youth' development. Within the same sample as 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 in the midst of increased stress and violence (Kaynak, Lepore, & Kliever, 2011; Ozer, 2005). 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 was shown to be a motivator for getting along with parents in a predominately White sample of 6th to 12th grade youth (Brown et al., 1986). This relation may exist because the positive social norms of a prosocial peer group provides opportunities for social rewards when youth in the group do things such as respect their elders and social consequences when youth do not. To fit in, youth may be motivated to follow norms of positively interacting with adults. However, the little research that exists has focused on samples of White youth. The current study seeks to add to the literature by examining the connection between positive peer association and parental relationships over time in a sample of Black youth living in high risk neighborhoods.

Normative beliefs about aggression

Aggression is a serious behavior concern that leads to negative long-term consequences (Ehrenreich, Beron & Underwood, 2016; McLoughlin, Rucklidge, Grace & McLean, 2010). Due to stressors such as greater exposure to community violence, Black American youth from high-risk environments tend to have higher rates of aggressive behavior than the national average (McMahon et al., 2013). Within these neighborhoods, aggression has the ability to help people meet their goals and create a sense of power that separates and protects them from being victimized (Henry, Tolan & Gorman-Smith, 2001; Robinson, Paxton & Jonen, 2011). Aggressive thoughts and fantasies can become important coping mechanisms in environments with high levels of violence, and over time through the modeling of such behaviors, aggression is viewed as legitimate behavior especially in the face of constant threats (Guerra, Huesmann, & Spindler, 2003).

The development of aggression is often associated with the negative influence of peers (Goodearl, Salzinger & Rosario, 2014). However, studies have found youth's beliefs about aggression to be inversely related to prosocial peer behavior, as well as when peers and teachers discouraged aggression (Henry, et al., 2000; McMahon et al., 2013). The current study seeks to confirm this research by examining whether positive peer association may have the opposite effect of its negative counterpart and is associated with the reduction of aggressive normative beliefs, a concept that is highly correlated with an individual's aggressive acts (Robinson, Paxton & Jonen, 2011; Goodearl, Salzinger & Rosario, 2014).

The role of ethnic identity

Further complicating issues of navigating peer association, is the fact that adolescents are experiencing a time of identity formation (Klimstra et al., 2010). For minority adolescents, ethnic identity is of particular importance to positive development (Williams, Chapman,

Wong, & Turkheimer, 2012; Williams, Aiyer, Durkee & Tolan, 2014) 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 (Charmaraman & Grossman, 2010; Shin, Daly, & Vera, 2007). More so than their White American counter parts, 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 (Roberts et al., 1999). An adolescent's sense of ethnic identity is thought to promote their ability to protect against socioenvironmental stressors such as negative peer influence (Derlan & Umana-Taylor, 2015; Shin, Daly, & Vera, 2007) and is related to higher peer acceptance and popularity for Black American adolescents (Rock et al., 2011). The importance of ethnic identity to peer relationships was demonstrated in a study of African American and European American youth in 11th grade which found that African American youth who endorsed higher ethnic identity were more likely to engage in positive peer relationship (Joyce, O'Neil, Stormshak, McWhirter, & Dishion, 2013). No relation was found for the European American youth.

The current study will examine one component of ethnic identity, affirmation and belonging. Affirmation and belonging represents feelings, attitudes, and pride regarding one's ethnicity (Mandara et al., 2009). This construct has been shown to have stronger connections to Black American adolescent's mental health than other components of ethnic identity (Derlan & Umana-Taylor, 2015; Mandara et al., 2009). Among Black American adolescents, one's level of affirmation and belonging has been found to facilitate the relationship between peer association and better social-emotional outcomes (Mandara et al., 2009; Williams, et al., 2014), and higher ethnic identity may lead to more engagement with culturally congruent people and settings such as positive peers (Joyce et al., 2013). Consequently, affirmation and belonging may moderate the influence of positive peer association among Black American adolescents by enhancing the benefits of positive peer association, in a protective-protective model with positive peer association (Fergus & Zimmerman, 2005).

The role of gender

The literature suggests mixed results on whether males and females tend to differ in their experiences with peer influence. Few studies have looked at gender differences for positive peer association. One, of the few that did, found that girls reported higher positive peer association 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 (Collins & Steinberg, 2006; Gavin & Furman, 1989). Such socialization practices that emphasize the importance of interpersonal relations for girls (Gavin & Furman, 1989) indicates that positive peer associations will be particularly relevant to enhancing outcomes among girls.

Hypotheses

The primary purpose of the current study is to examine whether peer association, a term normally associated with negative outcomes in youth, can have a role in promoting positive

trajectories among Black American adolescents living in low-income, urban, high violence neighborhoods. Secondary aims are to explore the role of gender and ethnic identity amidst the dynamics of positive peer association. The current study's hypotheses are divided in regard to the examination of the trajectories of positive peer association and fluctuations in daily positive peer association. 1a) It is predicted that higher levels of positive peer association overtime will be associated with more beneficial outcomes including increased self-esteem, school connectedness, and parenting relationships, and decreased beliefs about aggression longitudinally. 1b) It is predicted for girls and for individuals with higher ethnic identity there will be a stronger positive longitudinal relation between positive peer association and the four outcomes. 2a) It is predicted that less fluctuations in daily positive peer association (i.e. more consistent) over time will be associated with more beneficial outcomes longitudinally. 2b) It is predicted that for girls and for individuals with higher ethnic identity there will be a stronger negative relation longitudinally between fluctuations in positive peer association and the four outcomes of interest here.

METHOD

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).

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. The sample's median response total of 42 or 82% of the total conforms to established satisfactory levels of ESM responding (see Larson, 1989). Only measures of self-esteem and fluctuations in positive peer association were calculated from ESM data. Data from the ESM and the questionnaires were collected during the same week. 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

Predictors

Positive peer association: Positive peer influence, conceptualized as positive peer association, was assessed using a 6-question scale derived from an adaptation of Clasen and Brown's (1985) Peer Association Inventory. Items asked "how many of your friends/associates" engage in various lawful/healthy activities (i.e. "study hard, get good grades"). Youth responded on a 4-point scale ranging from "a lot" to "none". The scale yielded an alpha of .68, .79, .75 at Time 1, 2, and 3. Reliability and validity were also established previously (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. During a weeklong period, at each ESM signal, the youth were asked to report who they were with choosing from the options such as friends, family members, teachers, alone, etc. Additionally, they were asked to describe the type of people they were with on four 7-point scales (i.e. "very friendly" to "very unfriendly"). 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 scale yielded an alpha of .99, .94, .99 at Time 1, 2, and 3.

Outcomes

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. Self-Esteem was then compiled by averaging youth responses on these items and aggregating the data from the

week-long period. The ESM was used to assess self-esteem as it is considered more sensitive to changes as compared to dispositional measures (Moneta, Schneider, & Csikszentmihalyi, 2001). The scale yielded Cronbach alphas of .75, .85, and .86 at Time 1, 2, and 3. Reliability and validity were also established in previous research (Mandara et al., 2009).

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 seven items (i.e. “Do you go to your mother for advice?”) 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, .93, .91 at Time 1, 2, and 3. Reliability and validity were also established in previous research (Blyth and Foster-Clark, 1987).

Normative beliefs about aggression: Youth responded to a shortened version of the Normative Beliefs about Aggression Scale (Huesmann & Guerra, 1997). The original version consists of 28 questions. Prompts were changed to have gender neutral language and one set of questions. 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”) 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, .75, .82 at Time 1, 2, and 3. Reliability and validity were also established in previous research (Huesman & Guerra, 1997).

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. “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 1, 2, and .82 at Time 3. Reliability and validity were also established in previous research (Battistich & Hom, 1997).

Moderator

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. Only the affirmation and belonging subscale was used as it reflects a respondent’s positive attitudes and affiliation towards one’s race (Mandara et al., 2009). “My ethnic group” was replaced with “Black people” throughout. Respondents answered on a 1 (strongly disagree) to 4 (strongly agree) scale such items as “I have a lot of pride in Black people”. Cronbach’s alpha in 7th grade was .80. Reliability and validity were also established in previous research (Phinney, 1992). Data were only used from Time 2 for this study.

Analytic Strategy

Missing data were 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 pressure questionnaire, daily positive peer pressure, fluctuations in positive peer pressure, self-esteem, father relationship, mother relationship, school connectedness, and beliefs about aggression, as well as ethnic identity. Specifically, multiple imputation via the expectation-maximization (EM) algorithm was used to impute missing values for the continuous data at each time point. 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, Peters, Richards, & Pearce, 2011).

Models

Hierarchical linear modeling (HLM) using HLM 6.08 was used to test the study hypotheses. HLM allows for the examination of nested data by accounting for shared variance in within-subjects designs with multiple data points across time. In this study, time was nested within persons with positive peer association and all outcome variables (self-esteem, school connectedness, normative beliefs about aggression, paternal closeness, and maternal closeness) being measured 3 times for each person. Thus, two-level hierarchical (or nested) models were conducted. The first level included time and positive peer association examining the trajectories of positive peer association and the outcomes of interest. At the second level, participant's gender and sense of ethnic identity (conceptualized as affirmation and belonging) were included.

First, a main effects model was conducted to examine the impact of positive peer association over time while accounting for gender and ethnic identity. As gender was already included in the model, no additional control variables were added to the analysis. This model was run for all the outcome variables (self-esteem, school connectedness, normative beliefs about aggression, paternal closeness, and maternal closeness). 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. A similar model was also conducted using fluctuations in daily positive peer association as a predictor variable.

In order to determine which factors may be contributing to the differences in the rate of change in each of the outcome variables across time, a model including moderation effects was also conducted. Only fixed effects were tested as random error terms were not included at different stages of the model. Below is an example of a full model with moderational effects included (for an individual i at time t):

$$\text{Level 1: } Y_{it} = \pi_{0i} + \pi_{1i}(\text{Time}) + \pi_{2i}(\text{Fluctuations in PPA}) + E$$

$$\text{Level 2: } \pi_{0it} = \beta_{00} + \beta_{01}(\text{Gender}) + \beta_{02}(\text{Ethnic Identity}) + r_0$$

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

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

A similar model was also constructed using fluctuations in daily positive peer association (PPA):

$$\begin{aligned}\text{Level 1: } Y_{it} &= \pi_{0i} + \pi_{1i}(\text{Time}) + \pi_{2i}(\text{Positive Peer Association}) + E \\ \text{Level 2: } \pi_{0it} &= \beta_{00} + \beta_{01}(\text{Gender}) + \beta_{02}(\text{Ethnic Identity}) + r_0 \\ \pi_{1it} &= \beta_{10} + \beta_{11}(\text{Gender}) + \beta_{12}(\text{Ethnic Identity}) \\ \pi_{2it} &= \beta_{20} + \beta_{21}(\text{Gender}) + \beta_{22}(\text{Ethnic Identity})\end{aligned}$$

RESULTS

Means and standard deviations for all variables after imputation are presented in Table 1. Original (before imputation) sample means and standard deviations are also displayed. The correlations between the independent variables, moderators, and dependent variables are displayed in Table 1. The main effects presented below represent the relations examined for hypothesis 1 and moderation corresponds to the relations examined for hypothesis 2.

Positive Peer Association

Main effects (Hypothesis 1a)—Models examining the main effects of positive peer association over time while accounting for gender and ethnic identity revealed that positive peer association was significantly associated with participants' self-esteem, school connectedness, normative beliefs about aggression, paternal closeness, and maternal closeness at 6th grade (Table 2). Consistent with hypothesis 1a, as positive peer association increased over time, participants experienced a significant increase in self-esteem, school connectedness, paternal closeness, and maternal closeness and a significant decrease in normative beliefs about aggression. Additionally, significant effects of time indicated that youth experienced a significant increase in beliefs about aggression and school connectedness and a significant decrease in maternal closeness over time.

Moderation (Hypothesis 1b)—There was no effect of gender for the slopes of any of the outcome variables over time. Additionally, there was no effect of gender for the slopes of any of the outcomes in relation to positive peer association over time. However, consistent with hypothesis 1b, ethnic identity significantly moderated the impact of positive peer association on both paternal closeness and maternal closeness over time. Simple slope analyses (Preacher, Curran, & Bauer, 2006) revealed that the slope for positive peer association and maternal closeness was significant for low levels of ethnic identity (−1 SD; simple slope = 2.12(0.93), $t = 2.25$, $p < .05$) but not high levels (+1 SD; simple slope = 0.76(1.02), $t = 0.75$, $p = .46$). Similarly, the slope for positive peer association and paternal closeness approached significance for low levels of ethnic identity (−2 SD; simple slope = 2.62(1.36), $t = 1.93$, $p = .05$) but not high levels (+2 SD; simple slope = 0.001 (0.022), $t = 0.033$, $p = .974$). These patterns suggested that ethnic identity protected youth from low levels of positive peer association on the relationships with both fathers and mothers. As positive peer association increased over time, the better one's relationship with one's father and mother became, particularly for individuals with a lower sense of ethnic identity (See Figure 1). See Table 2 for additional main effects found.

Fluctuations in Daily Positive Peer Association

Main effects (Hypothesis 2a)—Fluctuations in daily positive peer association were significantly associated with participants' self-esteem, school connectedness, normative beliefs about aggression, paternal closeness, and maternal closeness at 6th grade. Consistent with hypothesis 2a, the more fluctuations in daily positive peer association over time, the more participants experienced a significant decrease in self-esteem and school connectedness over time. Additionally, significant effects of time indicated that youth experienced a significant increase in beliefs about aggression and school connectedness and a significant decrease in paternal closeness and maternal closeness over the three years. See Table 3.

Moderation (Hypothesis 2b)—There was no effect of gender for the slopes of any of the outcomes in relation to fluctuations in daily positive peer association over time. However, results demonstrated that a higher sense of ethnic identity predicted better self-esteem at low daily positive peer association fluctuations (See Figure 2). Simple slope analyses revealed that the slope for fluctuations in daily positive peer association and self-esteem was significant for both low levels of ethnic identity (−1 SD; simple slope = −2.33(0.49), $t = -4.75$, $p < .001$) and high levels (+1 SD; simple slope = −3.07(0.58), $t = -5.30$, $p < .001$). For both individuals with low and high ethnic identity, greater fluctuations in daily positive peer association was related to lower self-esteem.

DISCUSSION

The current study sought to obtain a deeper understanding of the potential influence of positive peer association, in Black American youth residing in urban, low-income communities. The first goal was to examine the relation 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 relations between fluctuations in daily 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 these relations.

Positive Peer Association

This study's main finding was that as positive peer association increased from 6th to 8th grade, youth reported better outcomes over time. To date, the literature is unclear on the extent to which peers influence Black American youth. Previous research suggests that peers may have a different role for youth of color residing in low income, urban areas than for other youth. For instance, in an urban, low income sample of 124 Black, Latino, and Asian American high school students, increased reported levels of general friendship over time was negatively related to perceived mother support (Way & Pahl, 2001). The authors hypothesize that this may be due to the tendency for low-income and ethnic minority families to be wary of placing trust in those outside of their family (Way & Pahl, 2001). Consequently, the closer adolescents from these communities felt towards their family, the more likely they may have

been to share such familial beliefs and shy away from close connections with nonfamilial peers who they suspect may be a negative presence in their lives.

Alternatively, and further complicating the role and salience of peers for youth of color, is the communalistic culture of Black American youth that differs from the individualistic values of many of their White American counterparts. Although some Black youth living in low-income urban communities may be wary of peers due to potential negativity, their culture may also allow them to readily benefit from positive social connections. As previously discussed, many Afrocentric theories of development and wellbeing highlight the culture's emphasis that "connection with others provides the basis for healing, transformation and spiritual renewal" (Graham, 2005, p. 214). This interdependence is further demonstrated in the significant role that fictive kin (people who are considered family but are not related by biology or marriage) can have in the development of Black American youth (Stewart, 2007). Previous research has indicated positive relationships with non-familial adults are associated with better psychosocial and academic outcomes among Black youth (Hurd & Sellers, 2013; Hurd & Zimmerman, 2010). The results of the current study corroborated these themes of interdependence and found a similar association between more positive relationships with non-familial youth and beneficial outcomes. Consistent with Afrocentric value systems, it appears that a connection with prosocial others, in this case peers, is related to the healthy development of prosocial behaviors and attitudes among Black youth.

These findings are in slight contrast to one of the few studies examining Black American adolescents and positive peer association 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, fewer connections with outcomes may have emerged because the previous study was based on cross-sectional data from late adolescent, 9th to 12th grade students from West Texas while the current study involved longitudinal data from early adolescent, 6th to 8th grade participants from low income, Chicago neighborhoods. High school, for instance, may lead to a different experience of peer association in youth as youth become less easily influenced by peers during high school (Rubin, Bukowski, & Bowker, 2015). The findings for peer association during early adolescence in the current sample indicate the potentially different relevance of peers at this developmental stage.

Fluctuations in Daily Positive Peer Association

The ESM method was used to capture a snapshot of youths' daily experience of positive peer association. Results revealed that youth who were exposed to more stable positive peer association also reported better self-esteem and school connectedness over time. These findings suggest the importance of consistent positive social forces during early adolescence and further implicate the potentially beneficial nature of positive peer association in healthy youth development. However, this consistency may be difficult for many adolescents to obtain naturally given the instability of relationships at this time (Brown, 2004). Also of note is that unlike with positive peer association retrospective data which was associated with all outcome variables, stable positive peer association appears particularly salient to self-esteem

and school connectedness. Although further research is needed, a random sampling of fluctuations in positive peer association may not provide enough information to appropriately explore its impact on domestic relationships or more culturally tied beliefs. Parental relationships are a part of a home system that is typically removed from a child's social systems. Due to the distal connection, consistent or inconsistent positive peer association may need to be present for a longer period to influence parental relationships.

Similarly, a sampling of the consistency of positive peer association over a week may not have been enough to appropriately examine normative beliefs about aggression. Some supportive beliefs about aggression are a part of the dynamics of many low income, urban communities due to the effectiveness of this presentation in addressing various environmental stressors (Henry, Tolan & Gorman-Smith, 2001; Robinson, Paxton & Jonen, 2011). Consequently, the pervasive nature of normative beliefs about aggression may make it resistant to being associated with the measurement of fluctuations in daily positive peer association utilized in the current study.

Notably, when looking at the change in the outcomes over time, apart from school connectedness, which increased over time, youth endorsed either no change or worse outcomes over time. This highlights the compounded risk experienced by Black youth living in impoverished environments (Reeves, Rodrigue, & Kneebone, 2016; Williams & Mohammed, 2013). A lower socioeconomic status is related to a variety of adverse outcomes in youth spanning social-emotional, cognitive, and physical domains (Reeves, Rodrigue, & Kneebone, 2016; Williams & Mohammed, 2013). Although other Black youth face marginalization due to their race, the current finding emphasizes how critical early adolescence may be for intervention and the importance of connecting positive external forces with Black youth in urban, low income environments. Positive peers may be a particularly necessary force with whom to connect these youth as, in addition to numerous other stressors, gangs may be prevalent in their communities. When lacking other areas to achieve competence and support, Black American youth in impoverished communities may turn to peers for respect, protection and acceptance (Brittian, 2011). In as early as ages 10–12, researchers have been able to predict gang involvement partially based on peer relations as youth usually join gangs willingly, attracted to their social benefits including acceptance, protection, and respect (Dishion, Nelson, & Yasui, 2005; Howell, 2011; National Crime Prevention Council, 2012). Without protective factors such as positive social connections, youth will experience negative outcomes and can succumb to negative forces such as gangs.

Despite the general sample's negative trajectories, positive peer association appears to be associated with youth starting and maintaining a healthy trajectory that might have otherwise been absent from their lives. The present study demonstrates that associating with peers who behave prosocially as well as having consistent interactions with peers one perceives as positive, are related to a promotion of developmental assets. As previously discussed, developmental assets characterize strengths an individual either internally possess or externally experiences, which improve both educational and health outcomes (Benson, Scales, & Syvertsen, 2010). Prosocial peers appear to be related to the development of positive internal forces (self-esteem and beliefs about aggression) and external forces (school connectedness, maternal closeness, and paternal closeness). This has important

implications for creating culturally relevant interventions as the utilization of peers to foster wellbeing aligns with the core elements of Afrocentric approaches, such as interpersonal relationships and communalism.

Ethnic Identity

The current study's final goal was to examine how gender and ethnic identity impacted peer relationships. Analyses revealed that the higher one's sense of ethnic identity, the closer one felt to both their father and mother when positive peer association was less. High ethnic identity, already an established buffer of environmental stress, was shown to grant benefits to youth experiencing less positive peer association. Furthermore, results demonstrated that the negative effects of experiencing less consistent positive peer association eventually overwhelm the protective nature of possessing a higher sense of ethnic identity in relation to self-esteem. Overall, although ethnic identity is a beneficial element in adolescent development, the current study found that, contrary to hypotheses, ethnic identity and positive peer association do not interact to enhance the already advantageous nature of each on their own. Youth in the sample with a higher sense of ethnic identity, began with better outcomes at Time 1. Consequently, they had less room for growth in their experience of positive peer association than their lower ethnic identity counterparts. These results may have emerged because only one aspect of ethnic identity was analyzed in the study. It may be that other components of ethnic identity can have different effects on positive peer association. Additionally, previous research has demonstrated that ethnic identity has a stronger influence among Black American males than females (Mandara et al., 2009). Additive benefits of ethnic identity on positive peer association could exist among males but may not have appeared in the current analysis due to the examination of ethnic identity across gender.

Gender

Contrary to our hypotheses, gender did not influence the associations between either peer association or fluctuations in peer association and any of the outcomes over time. The findings from this study suggest that 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). However, some evidence that gender can influence within more complex, three way interactions (Brechwald, & Prinstein, 2011) suggests that future research should consider gender within other moderators of peer influence.

Strengths, Limitations and Future Directions

The present study had several strengths. First, it contributes to the dearth of literature on positive peer association among 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 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. Additionally, in shifting 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. Such an approach can fail to portray community members as possessing preexisting resources. 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 use of traditional questionnaire data to measure the fluctuating intensity of peer association (Brown, 2004), limits the full picture of peer association. 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.

Despite its many strengths, several limitations should be addressed. First, due to breadth of positive youth development outcomes examined in the study, numerous analyses were conducted, increasing the risk for Type 1 error. Second, 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 youth may consider their friends 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 third limitation of the study is its reliance on self-report measure. Findings should be interpreted while acknowledging the potential shortcomings of self-report methodology including response bias and participant's introspective ability.

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 could elucidate how individuals differ in their trajectories. Other aspects of the peer association relationship exist such as characteristics of the influencing peers and the type of peer relationship (e.g. degree of reciprocity) (Brechwald., & Prinstein, 2011). Additionally, research should pay attention to whether trends differ based on socialization or selection processes (Mercer, S. H., & Derosier, 2010). It is currently unclear whether youth who develop positive behaviors just happen to select similar friends or are truly influenced by them. Future studies should explore relations from these different perspectives and 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 (Mandara et al., 2009) 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 positive change (van Hoorn et al., 2014). Peer support interventions have been linked to 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 influence to impact positive change is so promising that it has been labeled a “social cure” for many pressing public health concerns (Rosenberg, 2011, p. xxi). The findings from this study offer evidence that positive peer association may be a force in encouraging positive youth development among Black American youth from low income, urban communities. Unlike other externally funded interventions, peers are a cost effective, community-based and self-sustaining mechanism that can promote positive youth development in a culturally consistent manner. One area where this idea is being developed, and preliminary evidence suggests promise, is cross age peer mentoring in which trained high school youth serve as mentors for middle school youth from the same community (Karcher, 2013). Although more research is still needed, it is clear that positive peer association can be a factor in encouraging healthy development among Black American youth from low income, urban communities.

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Figure 1.
Ethnic identity as a moderator of the relationship between maternal closeness and positive peer association (in standard deviations)

Figure 2. Ethnic identity as a moderator of the relationship between self-esteem and fluctuations in positive peer association (in standard deviations)

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Years 1 to 3 correlations among variables under study for imputed sample (*N* = 316)

Table 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1. 6 th PPA Questionnaire	1.00	-.14*	.09	.14*	-.15**	.08	.13*	.10	-.06	.00	.05	-.08	.05	.12*	.10	-.06	.01	.04	-.06	.08	.12*	.01
2. 6 th PPA Fluctuations	-.14*	1.00	-.30**	-.18**	.20**	-.22**	-.50**	.03	.18**	-.25**	-.15**	.02	-.19**	-.26**	-.06	.20**	-.06	-.05	.08	-.08	-.27**	-.16**
3. 6 th Maternal Closeness	.09	-.30**	1.00	.34**	-.30**	.28**	.20**	.04	-.09	.37**	.10	-.05	.12*	.07	-.01	-.11	.21**	.04	.01	.08	.17**	.12*
4. 6 th Paternal Closeness	-.14*	-.18**	.34**	1.00	-.15**	.16**	.10	.09	-.11*	.11*	.34**	.03	.10	.03	.13*	-.06	.10	.26**	.01	.10	.06	-.01
5. 6 th Beliefs about Agg	-.15**	.20**	-.30**	-.15**	1.00	-.14*	-.12*	-.04	-.01	-.22**	-.02	.24**	-.12*	-.07	.06	-.01	-.09	.07	.13*	-.13*	-.07	-.07
6. 6 th School Connectedness	.08	-.22**	.28**	.16**	-.14*	1.00	.28**	.14*	-.09	.10	.14*	-.04	.25**	.13*	-.03	-.06	.06	.11	-.11*	.10	.15**	.13*
7. 6 th Self-Esteem	.13*	-.50**	.20**	.10	-.12*	.28**	1.00	.03	-.21**	.18**	.13*	-.03	.24**	.42**	.07	-.14*	.18**	.10	-.08	.12*	.38**	.17**
8. 7 th PPA Questionnaire	.10	.03	.04	.09	-.04	.14*	.14*	1.00	-.06	.17**	.10	-.03	.16**	.23**	.19**	.05	-.07	-.01	.04	.13*	.05	.09
9. 7 th PPA Fluctuations	-.06	.18**	-.09	-.11*	-.01	-.09	-.09	-.06	1.00	-.14*	-.18**	-.02	-.15**	-.51**	-.04	.42**	-.05	-.06	.11	-.12*	-.39**	-.02
10. 7 th Maternal Closeness	.00	-.25**	.37**	.11*	-.22**	.10	.10	.17**	-.14*	1.00	.36**	-.15**	.30**	.29**	.07	-.16**	.48**	.05	-.05	.11*	.14*	.26**
11. 7 th Paternal Closeness	.05	-.15**	.10	.34**	-.02	.14*	.14*	.10	-.18**	.36**	1.00	-.10	.19**	.18**	.10	-.03	.17**	.42**	.00	.15**	.12*	.10
12. 7 th Beliefs about Agg	-.08	.02	-.05	.03	.24**	-.04	-.04	-.03	-.02	-.15**	-.10	1.00	-.06	-.04	-.03	.00	.08	-.05	.22**	-.08	-.10	-.03
13. 7 th School Connectedness	.05	-.19**	.12*	.10	-.12*	.25**	.25**	.16**	-.15**	.30**	.19**	-.06	1.00	.28**	.05	-.17**	.17**	.10	-.11*	.34**	.24**	.19**
14. 7 th Self-Esteem	.12*	-.26**	.07	.03	-.07	.13*	.13*	.23**	-.51**	.29**	.18**	-.04	.28**	1.00	.12*	-.25**	.13*	.06	-.13*	.18**	.66**	.09
15. 8 th PPA Questionnaire	.10	-.06	-.01	.13*	.06	-.03	-.03	.19**	-.04	.07	.10	-.03	.05	.12*	1.00	-.05	.16**	.23**	-.08	.22**	.13*	.03
16. 8 th PPA Fluctuations	-.06	.20**	-.11	-.06	-.01	-.06	-.06	.05	.42**	-.16**	-.03	.00	-.17**	-.25**	-.05	1.00	-.23**	-.11	.11	-.18**	-.42**	.03
17. 8 th Maternal Closeness	.01	-.06	.21**	.10	-.09	.06	.06	-.07	-.05	.48**	.17**	-.08	.17**	.13*	.16**	-.23**	1.00	.25**	-.17**	.24**	.17**	.07
18. 8 th Paternal Closeness	.04	-.05	.04	.26**	.07	.11	.11	-.01	-.06	.05	.42**	-.05	.10	.06	.23**	-.11	.25**	1.00	-.06	.36**	.13*	.03
19. 8 th Beliefs about Agg	-.06	.08	.01	.01	.13*	-.11*	-.11*	.04	.11	-.05	.00	.22**	-.11*	-.13*	-.08	.11	-.17**	-.06	1.00	-.23**	-.14*	-.01
20. 8 th School Connectedness	.08	-.08	.08	.10	-.13*	.10	.10	.13*	-.12*	.11*	.15**	-.08	.34**	.18**	.22**	-.18**	.24**	.36**	-.23**	1.00	.23**	.03
21. 8 th Self-Esteem	.12*	-.27**	.17**	.06	-.07	.15**	.15**	.05	-.39**	.14*	.12*	-.10	.24**	.66**	.13*	-.42**	.17**	.13*	-.14*	.23**	1.00	.03
22. Ethnic Identity	.01	-.16**	.12*	-.01	-.07	.13*	.13*	.09	-.02	.26**	.10	-.03	.19**	.09	.03	.03	.07	.03	-.01	.03	.03	1.00
M	2.07	0.14	20.55	16.43	7.46	14.16	3.97	1.95	0.16	19.73	15.73	8.75	13.84	3.91	1.94	0.15	19.64	15.39	8.68	15.36	3.93	3.32
SD	0.61	0.16	6.05	8.06	5.47	7.11	0.81	0.69	0.19	5.79	7.99	5.30	7.15	0.82	0.60	0.18	5.28	6.64	5.20	6.59	0.82	0.60
Original Sample M	2.09	0.13	20.69	16.49	7.21	14.03	3.98	1.94	0.16	19.67	15.76	8.89	13.65	3.92	1.92	0.14	19.46	15.28	8.85	15.73	3.94	3.33
Original Sample SD	0.67	0.18	6.63	9.09	6.11	8.26	0.92	0.78	0.22	6.58	9.42	5.97	8.18	0.97	0.72	0.23	6.32	8.17	6.23	7.91	1.02	0.73

Table 2

Positive peer association fixed effects

Fixed Effect Models	Self-Esteem			School Connectedness			Normative Beliefs			Paternal Closeness			Maternal Closeness		
	Coefficient	SE	T-Ratio	Coefficient	SE	T-Ratio	Coefficient	SE	T-Ratio	Coefficient	SE	T-Ratio	Coefficient	SE	T-Ratio
Initial Status	4.03	0.14	29.23***	14.95	1.01	14.86***	9.15	0.78	11.68***	20.65	1.18	17.50***	19.23	0.91	21.25***
Gender Initial Status	-0.05	0.08	-.58	-0.73	0.58	-1.25	-0.94	0.45	-2.07*	-2.72	0.69	-3.94***	0.78	0.53	1.47
Ethnic Identity Initial Status	0.14	0.07	2.22*	1.57	0.48	3.27**	-0.13	0.37	-0.35	0.98	0.57	1.74	1.56	0.44	3.58**
Time	-0.01	0.03	-0.60	0.79	0.26	3.03**	0.59	0.21	2.82**	-0.51	0.27	-1.93	-0.49	0.19	-2.52*
Positive Peer Association	0.16	0.04	4.29***	1.46	0.36	4.03***	-0.74	0.29	-2.60*	1.49	0.38	3.91***	1.06	0.28	3.75***
Ethnic Identity × Time	-0.13	0.04	-3.04**	-0.52	0.44	-1.18	0.25	0.35	0.72	0.10	0.45	0.23	-0.35	0.33	-1.06
Ethnic Identity × Pos Peer Association	-0.09	0.06	-1.59	-0.61	0.71	-0.87	-0.21	0.45	-0.47	-1.91	0.60	-3.17**	-1.12	0.44	-2.52*
Gender × Time	0.06	0.05	1.12	-0.66	0.53	-1.24	0.42	0.43	0.98	0.02	0.54	0.05	-0.63	0.40	-1.59
Gender × Pos Peer Association	0.03	0.08	0.39	-1.09	0.91	-1.21	0.96	0.58	1.65	0.73	0.78	0.94	-0.24	0.57	-0.42

*

p < .05

**

p < .01

***

p < .001

Note: Fixed effects from the unconditional level-one model are reported in the first section of the table. Fixed effects for the conditional level-two model appear in the following two sections of the table. Initial status represents the variable's relation with positive peer association at 6th grade.

Table 3

Fluctuations in positive peer association fixed effects

Fixed Effect Models	Self-Esteem			School Connectedness			Normative Beliefs			Paternal Closeness			Maternal Closeness		
	Coefficient	SE	T-Ratio	Coefficient	SE	T-Ratio	Coefficient	SE	T-Ratio	Coefficient	SE	T-Ratio	Coefficient	SE	T-Ratio
Initial Status	4.02	0.14	29.16***	14.88	1.01	14.73***	9.16	0.79	11.63***	20.64	1.20	17.22***	19.23	0.91	21.21***
Gender Initial Status	-0.03	0.08	-0.35	-0.59	0.59	-1.00	-0.98	0.46	-2.15*	-2.64	0.70	-3.76***	0.84	0.53	1.58
Ethnic Identity Initial Status	0.17	0.07	2.60*	1.75	0.48	3.64**	-0.16	0.37	-0.44	1.05	0.60	1.82	1.61	0.44	3.69***
Time	-0.03	0.02	-1.41	0.63	0.26	2.43*	0.65	0.21	3.12**	-0.63	0.27	-2.38*	-0.58	0.20	-2.94**
Positive Peer Association	-0.54	0.09	-6.03***	-3.50	0.85	-4.10***	-0.08	0.68	-0.12	0.28	0.92	0.31	0.14	0.68	0.21
Ethnic Identity × Time	-0.08	0.04	-2.03*	-0.15	0.44	-0.34	0.19	0.35	0.53	0.51	0.45	1.14	-0.02	0.33	-0.07
Ethnic Identity × Pos Peer Association	-0.62	0.25	-2.48*	0.70	2.54	0.28	1.51	2.01	0.75	1.55	2.72	0.57	0.65	2.00	0.33
Gender × Time	0.05	0.05	1.14	-0.57	0.53	-1.08	0.35	0.42	0.84	0.00	0.54	0.001	-0.60	0.40	-1.52
Gender × Pos Peer Association	0.53	0.29	1.79	3.94	2.99	1.32	-0.73	2.36	-0.31	2.30	3.21	0.72	4.45	2.36	1.89

* p < .05

** p < .01

*** p < .001

Note: Fixed effects from the unconditional level-one model are reported in the first section of the table. Fixed effects for the conditional level-two model for the moderators of Gender and Ethnic Identity appear in the following two sections of the table. Initial status represents the variable's relation with fluctuations in positive peer association at 6th grade.