

Teacher- and Self-Reported Peer Victimization of African-American and Hispanic/Latino  
Children: Using Victimization Identification Groupings to Examine Psychological Adjustment

By

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## Abstract

Although teachers may accurately identify some victimized children, prior research suggests teacher-report of PV may not be consistent with self-report of PV, with research indicating African-American (AA) youth underreport PV while Hispanic/Latino (H/L) youth over-report PV. Focusing on the implications of over-identification and under-identification of self- and teacher-reported PV, the current study compares selected indicators of psychological adjustment, such as feelings of belongingness at school, affect, and aggression, for 193 AA and 150 H/L children in the 5<sup>th</sup> grade who are self- and/or teacher-identified as victims and non-victims. Results indicated that self-reported victims perceived their school climate less positively and reported more negative affect than those victims identified by teachers. H/L youth who self-reported PV also endorsed beliefs that being aggressive pays off more strongly compared to non-victims and teacher-reported victims. Results provide crucial information regarding reports of PV and children's behaviors that may inform efforts to intervene in PV.

## ACKNOWLEDGEMENTS

The data for this thesis were collected as part of a larger research initiative. Peaceful Schools Project was an outcomes study evaluating the effectiveness of two school-based violence prevention efforts compared to a no-treatment condition from 1999 until 2002. One of the violence prevention efforts, Creating a Peaceful School Learning Environment (CAPSLE), is an innovative whole-school intervention designed by Stuart Twemlow, Frank Sacco, and Stephen Twemlow in conjunction with staff at the initial pilot school. The second intervention condition was a psychiatrist consultation model.

The Principal Investigators for the Peaceful Schools Project were Stuart Twemlow, M.D., Eric Vernberg, Ph.D., and Peter Fonagy, Ph.D. The project was funded by the Menninger Clinic, the city of Topeka, and many generous private donations. The study would not have been possible without the cooperation of USD 501 and participating teachers and students, efforts of the CAPSLE implementation team, support from Menninger staff, and several undergraduate research assistants and graduate students at the University of Kansas.

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Teacher- and Self-Reported Peer Victimization of African-American and Hispanic/Latino Children: Using Victimization Identification Groupings to Examine Psychological Adjustment

Peer victimization (PV) is defined as an aggressive act, either verbally, physically, or psychologically, by an aggressor (or perpetrator) with the intention to cause harm to the victim (Graham & Bellmore, 2007; Olweus, 1993). Though PV can happen anywhere, such as in community settings or online (Turner, Finkelhor, Hamby, Shattuck, & Ormord, 2011), PV often occurs in different school settings (e.g., playground, school bus; Fite et al., 2013).

Most children will have experienced some form of PV in their lifetime, starting as early as prior to entering pre-school (Arseneault, Bowes, & Shakoor, 2010), and continuing until late adolescence (La Greca & Harrison, 2005). Over time, individuals who are frequently victimized by peers, particularly those in the 3<sup>rd</sup>-6<sup>th</sup> grades, are more likely to withdraw socially (Boivin et al., 2010).

In addition, the transition from elementary school to middle school has been linked to decreases in academic achievement as well as puts youth, especially those who have been targets of PV in elementary school, at risk to experience additional PV and develop poor relationships with peers (Burchinal, Roberts, Zeisel, & Rowley, 2008). Thus, prevention and intervention efforts should be directed during the transition from elementary to middle school since this is a period when PV increases (Pellegrini & Bartini, 2001), and children who see themselves as victims during this time are more likely to struggle during the transition.

Adult awareness of PV for specific children is often important for initiating effective interventions to reduce victimization and to address the associated psychological and social difficulties (Yoon, 2004). Classroom teachers, who spend the majority of the school day working with students in academic settings, potentially provide valuable perspectives on PV (Fekkes,

Pijpers, & Verloove-Vanhorick, 2005; Roseth & Pellegrini, 2010). Teachers are often expected to recognize and respond to problems not only related to academic performance, but also behavioral adjustment, and emotional distress. Although teachers may accurately identify some victimized children (Williford, Fite, & Cooley, 2015), a number of children who experience significant PV and behavioral and emotional problems related to this do not come to the attention of teachers or school personnel (Card & Hodges, 2008). This under-identification of PV by teachers (and other school personnel) potentially increases the risk of experiencing persistent victimization by others from one academic school year to the next. There are many reasons why teachers may not recognize PV. PV may occur when teachers are not present, or be carried out in a covert manner that is not easily observed by teachers or other adults (Card & Hodges, 2008; Roseth & Pellegrini, 2010). Adult recognition of PV also relies to some extent on disclosure or help-seeking behavior by victimized children or concerned peers, but many children do not disclose their own PV experiences to adults or friends (Vernberg, Ewell, Beery, Freeman, & Abwender, 1995). It is possible that previous instances in which PV is unnoticed, or is disclosed but not addressed effectively, may contribute over time to reluctance to disclose PV or even to accept PV as an expected aspect of the school environment (Yoon & Kerber, 2003). Failure of school personnel to detect and offer appropriate intervention when PV occurs may also interfere with the development of effective strategies for schools and victims to respond to victimization, and for victims to cope with the negative emotions that often accompany peer victimization.

It is also possible that some children who are identified by teachers as being targets of PV do not indicate much peer victimization themselves on self-report measures (Leff, Patterson, Kupersmidt, & Power, 1999). This discrepancy between teacher- and self-reports of PV may reflect differences in the interpretation of whether aggressive behavior among peers represents a

problematic form of victimization or a more neutral or acceptable form of behavior. For example, some children may be reluctant to view themselves as targets of PV due to negative attitudes about children who are targets of peer aggression (Stone & Lemanek, 1990). These attitudes may include beliefs that victims typically have done something to deserve aggression, or that children should be prepared to defend themselves with aggression when peers display aggressive behavior towards them (Dill, Vernberg, Twemlow, & Gamm, 2003). According to Cards and Hodges (2008), teacher-report provides additional information and perspective with regards to victimized youth, but self-report is also vital for identification of victimized children. Overall, these findings support why self- and teacher- reports are important to consider when identifying PV in youth.

Ethnic minority status may also affect the risk of experiencing PV, adult recognition, and self-awareness of victimization. At least two large-scale self-reported studies found that both African-American (AA) and Hispanic/Latino (H/L) youth self-reported experiencing more PV in comparison to White non-Hispanic youth (Nansel et al., 2001; Spriggs, Iannotti, Nansel, & Haynie, 2007). Though both these studies found that AA youth reported less PV compared to H/L youth, research using multiple informants and other indicators of victimization (including violent victimization) have suggested that AA youth are at elevated risk for being targets of aggression (i.e., PV; Hanish & Guerra, 2000). Hudley (1993) argued that AA and H/L children, are also more likely to be perceived as aggressive compared to other ethnic minority youth (i.e., Asian) especially by school personnel. AA and H/L families of youth are more likely to report lower socioeconomic status and negative outcomes (e.g., increased stress, and more aggression) due to concerns with family's income than Caucasian youth (Guerra, Huesmann, Tolan, Van Acker, & Eron, 1995). Also, Unnever and Cornell (2003) found that low-income youth are more

likely to have positive attitudes about peer aggression. Teachers are also more likely to expect students of lower socioeconomic backgrounds to perform poorly in school (Glock & Krolak-Schwerdt, 2014), to be more aggressive towards peers, and possibly are more likely to view these students as perpetrators rather than victims of aggressive behavior. In combination, sociocultural factors such as discrimination, stereotyping, and economic disadvantages (Hill, Soriano, Chen, & LaFromboise, 1994) may affect the recognition of problematic levels of peer victimization among AA and H/L. It is important to understand how AA and H/L ethnicity may relate to teacher-report and self-report methods to identify peer victimization (and related psychological adjustment problems) when considering prevention or intervention programs for PV to confirm that students who need intervention are not being missed.

The current study focuses on PV among fifth graders from two ethnic minority groups—AA and H/L. Fifth grade is a critical period to assess PV for many reasons. By mid-childhood, socially withdrawn youth are often rejected or neglected by peers (Boivin, Hymel, & Bukowski, 1995), increasing the likelihood that they may be targets of PV (Dill, et. al, 2004; Hanish & Guerra, 2004). Additionally, children in this grade are typically on the verge of a major school transition—entering middle school (6<sup>th</sup> grade); thus, these children will soon be entering a new developmental stage of early adolescence, a period in which peer group affiliations becomes more salient and important. Group affiliation can serve as a protective factor to PV (Pellegrini, Bartini, & Brooks, 1999) since friends can “protect” victims from different aggressors, and are less likely to be passive bystanders at the time of the peer victimization. On the other hand, a lack of group affiliation or acceptance may increase risk of further PV. Lastly, fifth graders are also the oldest group of students in many elementary schools and have been with the same peers for multiple years making them more aware of their social status.

Thus, the current study examined similarities and differences between children who met investigator-assigned criteria to be categorized as teacher-reported and self-reported victims (or non-victims) of PV among African-American (AA) and Hispanic/Latino (H/L) children in late elementary school (fifth grade).<sup>1</sup> In keeping with a focus of the implications of using teacher-reports, self-reports, or both to identify children who experience problematic levels of PV, the study compared selected indicators of psychological adjustment (perception of school climate, positive and negative affect, and attitudes towards aggression) for children in the four *peer victimization identification status groups* (abbreviated as *VIS groups*) that can occur when utilizing self and teacher reports— (a) *consistently identified*<sup>2</sup> as victims (both teacher-reported and self-reported as victims), (b) *teacher-identified only* (teacher-reported as a victim but not self-reported as a victim), (c) *self-identified only* (self-reported as a victim but not teacher-reported as a victim), and (d) consistently identified as *non-victims* (neither teacher-reported nor self-reported as a victim). This approach for categorizing victimization status allowed for the examination of whether AA and H/L ethnicity is in fact related to VIS group membership or to indicators of psychological adjustment within each VIS group. This approach also allowed examination of the statistical relations between adjustment indicators and self-reported victimization (coded yes/no), teacher-reported victimization (coded yes/no), and ethnicity.

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<sup>1</sup> For the remaining portions of the document, the term *reported*, in the context of self-reported or teacher-reported, will refer to whether or not the child met study criteria to be coded as a victim of peer aggression by the selected informant (either self or teacher). The term *identified*, in the context of self-identified, teacher-identified, consistently identified, or non-victim will refer to the participant meeting study's criteria for one of the four peer victimization identification statuses.

<sup>2</sup> *Consistently identified* is a term created for this study to refer to participants where self-report and teacher-report agreed this individual was meeting the minimum study's cut-off criteria (of a total score of 17 on self-reported PV and a total score of 1 on teacher-reported PV) for experiencing some PV. This term does not reflect that these are the only individuals who experience PV.

### **Teacher-Report of Peer Victimization of AA and H/L Youth**

Some research has suggested that school personnel may be particularly vigilant towards detecting externalizing problems among minority youth in general and may overlook internalizing problems that are often associated with PV (Hudley, 1993; Leonard, Stiles, & Gudino, 2016).

There is little research on identification of PV among ethnic minorities in the U.S. However, some evidence suggests ethnic minority status may play a role in the accuracy of teacher-reported peer victimization (Leff et al., 1999). AA youth were less likely to be consistently identified as victims [and were reported more as aggressors] in comparison to Caucasian youth (Leff et al., 1999). Similar studies could not be found for H/L youth, yet the Leff and colleagues' (1999) study suggests that it is important to assess identification among ethnic minority youth.

### **Self-Report of Peer Victimization of AA and H/L Youth**

Previous research suggests that H/L youth tend to self-report more frequent PV compared to other reporters (e.g., teachers; Wright, 2004), while the opposite is true for AA youth (Shirley & Cornell, 2003). For example, Bradshaw and colleagues (2007) found that AA youth were less likely to self-report that they had been a victim of PV compared to children who were H/L or White Non-Hispanic/Latino. There is evidence to suggest that children's interpretation and reporting of their personal experiences with PV may be shaped in part by cultural factors represented by AA and H/L identification (Bradshaw, Sawyer, & O'Brennan, 2007).

Also, race and ethnicity-related beliefs may influence the way certain victimization experiences are perceived. For example, attitude about acknowledging victimization (e.g., you deserved that to happen to you for not defending yourself), may affect youths' willingness to

report the experience (Bradshaw et al., 2007). This highlights another important reason to examine how ethnicity may relate to the reporting of PV.

### **Psychological Adjustment and Peer Victimization**

Peer victimization has been linked to multiple aspects of psychological adjustment, such as disconnection from school (Boulton & Underwood, 1992), elevated levels of negative emotions (Biggs, et al., 2010), and positive views on aggression (Dill et al., 2003). Thus, the current study examined four specific aspects of psychological adjustment that potentially relate to the 4-group categorization of peer victimization identification statuses.

**Perceptions of school climate.** Bandyopadhyay, Konold, and Cornell (2009) found that perceptions of overall school safety can be influenced by the school personnel's willingness to help as well as acknowledge PV as an inappropriate act. If the school's culture does not intervene when victimization occurs or the school creates an environment where students see no reason to report when they are victimized, those students who are victimized may become less likely to seek or expect assistance at school and therefore not feel safe at school (Olweus & Limber, 2000; Unnever & Cornell, 2003).

PV is also associated with disconnection from school among youth, with victims being more likely than aggressors to report being unhappy at school (Boulton & Underwood, 1992). In a study looking at H/L youth, individuals who felt like they belonged (and are welcomed in a school setting) were more likely to have positive academic outcomes such as less absences and better grades (Sanchez, Colon, & Esparza, 2005). Further, in a study examining protective factors that support academic success when transitioning to another grade level, AA who perceived being a part of a more positive school environment were more like to succeed in school (Gutman & Midgley, 2000). Of note, Fitzpatrick, Dulin, and Piko (2010) found that AA

youth tend to miss more school if they feel that school is unsafe and choose to disconnect from the academic setting. In Shirley and Cornell's study (2011), AA children reported being less likely to seek help from others (e.g., teachers) because they felt less supported by the school. However, given that previous studies have found that H/L youth are more likely to report being peer victimized in comparison to AA youth (Bradshaw et al., 2007), it is probable that H/L might feel safer to express this concern to school personnel than AA youth. In other words, these studies found that if a student felt like he or she was welcomed at school, the student was more likely to have positive outcomes (e.g., perform better at school, and seek help when needed).

**Positive and negative affect.** Positive affect refers to experiencing positive emotions, such as happiness while negative affect refers to feelings of distress such as being upset or nervous. Positive affect is thought to occur infrequently for children who are more depressed (Crook, Beaver, & Bell, 1998), whereas negative affect has been associated with anxious and depressive symptomology (Crook, Beaver, & Bell, 1998). Also, lower levels of positive affect in conjunction with negative affect is more strongly associated to depression (than anxiety) (Lonigan, Phillips, & Hooe, 2003). When exploring ethnic differences in the lifetime prevalence of anxiety (a combination of negative and positive affect), Asnaani, Richey, Dimaite, Hinton, and Hoffman (2010) found that individuals who identified as H/L were likely to report more anxiety-like symptoms than AA identified individuals. Further, in a meta-analysis conducted by Twenge and Nolen-Hoeksema (2002), which controlled for age, gender, race, and socioeconomic status, H/L youth reported significantly higher depressive (more negative affect than positive affect) symptomology in comparison to Caucasian and AA youth (Kovacs, 1992). However, in a study conducted by Lewis, Byrd, and Ollendick (2012) evaluating the impact of social support and anxiety symptoms among AA youth, the results indicated that less social support (i.e., peer

social support at school) was related to more anxiety symptoms (a combination of positive and negative affect) in AA youth, especially in comparison to Caucasian youth. Both ethnicities experience both positive and negative affect; however, an important variable to consider is whether ethnic minority youth feel supported by peers and school personnel. Further, H/L generally report more negative affect symptoms than AA youth.

Further, greater victimization is related to greater affective distress, and victimized youth are likely to experience residual affective distress even after PV has decreased (Biggs, et al., 2010). Prior research has demonstrated that shyness and social withdrawal are associated with significant maladjustment concerns, such as difficulty with peers, psychological concerns, and social concerns (Rubin, Chen, McDougall, Bowker, & McKinnon, 1995). Further, Dill and colleagues (2004) examined a model where the path included shyness/socially withdrawn behavior, peer rejection/social difficulty, victimization by peers, attitudes towards aggression, and negative affect. The model found that shy/socially withdrawn children were more likely to be victimized by peers resulting in higher reports of negative affect (Dill et al., 2004).

**Attitudes towards aggression.** There is some evidence that AA and H/L youth, regardless of victimization status, tend to be more accepting of aggression in response to provocation in comparison to other ethnicities like Caucasian and Asian youth (Guerra et al., 1995; Huesmann & Guerra, 1997) and thus aggressive-like strategies are more likely to be used by these populations. However, and most notably, AA youth are more likely to be identified by teachers for engaging in these aggressive techniques as well as deem aggressive-like reactions as acceptable (Shirley & Cornell, 2011).

Cultural beliefs on aggression vary considerably. A study conducted by Osterman and colleagues (1994) examined self-reported aggression among eight year olds. This study found

that significant differences existed among the different ethnic groups' reported aggression. Specifically, AA youth reported more physical (i.e., hits, kicks, pushes) and verbal (i.e., yells, insults) aggression towards peers (Osterman et al., 1994) than Caucasian youth. This study did not look at H/L youth; however, H/L do value the role of authority and may be more accepting of aggressive acts if displayed by an authority figure (Mash & Wolfe, 2014).

### **Summary of Research Aims and Hypotheses**

This study had two primary aims. The first was to examine whether ethnicity was related to membership in the four different VIS groups and the degree of convergence between teacher-reported and self-reported PV. Overall, it was anticipated that relatively few students would meet screening criteria for both self-reported and teacher-reported victims (*consistently identified victims*). H/L students were expected to be over-represented in the *self-identified* only group and under-represented in the *teacher-identified* victim groups. This expectation was based on previous research suggesting that H/L youth tend to be at increased risk for PV when self-report measures are used, but not when other informants (teachers, peers) are used to measure peer victimization (Wright, 2004). Conversely, AA children were expected to be over-represented in the *teacher-identified* only group and under-represented in the *self-identified* only group. This expectation was also based on prior research that suggesting that AA students tend to be at increased risk for PV when teacher or other sources of information are used, but not when self-reports are used (Shirley & Cornell, 2011).

The second aim was to examine similarities and differences in psychological adjustment between children categorized into the four victimization identification status (VIS) groups (*consistently identified, self-identified, teacher-identified, non-victim*), to evaluate how the source of peer victimization reports (teacher, self) was related to adjustment, and to assess how ethnicity

was related to adjustment measures and peer victimization status. Regardless of ethnicity, self-reported victims (i.e., both *self-identified* and *consistently identified* as victims) were expected to report higher levels of negative affect and less positive perceptions of the school climate, compared to students who are categorized as *teacher-identified* victims and *non-victims*. Additionally, *consistently identified* and *self-identified* victims were expected to report less positive affect in comparison to *non-victims* and *teacher-identified* victims. In other words, students categorized as *teacher-identified* victims or *non-victims* were expected to report relatively low levels of negative affect and more positive perceptions of the school climate compared to students in the *self-identified* only and *consistently identified* victim categories.

Students who were classified as *teacher-identified* (i.e., victims of PV based solely on teacher reports) were expected to endorse more favorable attitudes towards aggression, compared to non-victims, *self-identified* victims, and *consistently identified* victims. In this instance, discrepancies between *teacher-identified*, *self-identified*, and *consistently identified* victims were thought to reflect a tendency for teachers to view involvement in peer conflict as an indicator of victimization, whereas students who have relatively positive attitudes towards aggression, were thought to have a higher threshold for considering conflictual exchanges with peers as victimization.

## **Method**

### **Participants**

This study used de-identified archival data. The original study was conducted by researchers at the Menninger Clinic in conjunction with public schools in the Midwestern area of the U.S. All schools within this district were eligible to participate; 11 schools agreed to enroll from 1999-2002. Some of these schools also participated in a randomized controlled trial of

child-focused psychiatric consultation and a school systems-focused intervention to reduce aggression and prevent violence (see Fonagy et al., 2009). The Institutional Review Board of the Menninger Clinic was the Institutional Review Board of record for the original study.

**Current study sample.** The current study utilized data from children who were identified in school records as either AA or H/L and were enrolled in fifth grade during any of the three academic years of the active data collection phase (bi-racial youth were not included in this study). For Year 1, the total number of fifth graders who were eligible was 98. There were 123 eligible at Year 2, and 122 eligible at Year 3. This resulted in a final sample of 343 total students (193 AA; 150 H/L). To provide a view of how many ethnic minority students were present per school per year, refer to Tables 1-3; some schools were predominately ethnic minority youth. Participants who met selected study criteria were nested into smaller groupings (e.g., peer victimization identification statuses) and were compared. Notably, this study did not control for school nestedness.

## **Procedures**

**Recruitment.** After receiving Institutional Review Board's approval to conduct this study, schools within the Midwest area agreed to participate. Active permission from parents was required so participants' parents received a letter discussing the study's purpose. Within the letter, the parent was instructed to sign and return a consent form to provide their permission for their child to either participate or not participate in the study. Incentive was provided. Overall, 73.3% of the parents signed and returned the permission letter allowing their child to participate. Children were also asked to provide their assent.

**Data Collection.** Data collection started in the beginning of the fall semester of the academic year in 1999. Once assent was obtained, participants were administered a battery of

measures in their classroom. Study measures were administered by study personnel in December and April of each year. Many of the students in fifth grade during Year 2 or Year 3 had completed measures and an intervention in the previous year(s) (the intervention was a school-based violence prevention of which 175 of the 343 students had participated in at some point of their elementary career). For this study, we used participants' spring data for analyses with the hopes it would be a better estimate of the psychological adjustment outcome variables; however, if a participant was missing his or hers spring data and was enrolled in the fall of that year, the student's fall data of their fifth grade year was used (41 students' fall data was used to supplement their missing spring data).

Teacher ratings were only assessed for those students who provided assent and whose parents gave permission to do so. Teachers were administered measures in November regarding the students in their class. Teachers received reimbursements for completing measures on behalf of their students. Refer to Table 4 for a list of measures and details about when these measures were administered.

## **Measures**

**Self-Reported Peer Victimization.** Student reports of PV were assessed using an elementary school-age adaptation of the Victimization of Self (VS) scale of the Peer Experience Questionnaire. Initially developed for use with students in junior high school (Vernberg, Jacobs, & Herschberger, 1999), questionnaire items were modified to be at a 3<sup>rd</sup> grade (or lower) reading level (Dill et al., 2004). The Victimization of Self (VS) scale includes 10 items that provide behavioral descriptions of diverse peer victimization experiences. Students in the current sample were asked to indicate the frequency of victimization since the beginning of the school year using a 5-point scale ranging from 1 (*Never*) to 5 (*A Few Times a Week*). The total sum score on

the VS items was used to represent overall self-reported PV. Possible observed sum scores ranged from 10 to 50 ( $M = 15.41$ ,  $SD = 6.95$ ). Internal consistency for the total VS score of the students' reports was good for participants in the current sample ( $\alpha = .86$ ) for this study.

Consistent with study aims to categorize victimization identification status, students whose total score on the VS was 17 were coded as meeting study criteria for self-reported victims. The cut-off score of 17 was determined to be an appropriate representation of individuals who experience peer victimization at least once a week and was proportionate to the teachers' reporting of peer victimization (both were approximately in the top 25<sup>th</sup> percentile). Refer to Table 5 for more details on the PV cut-offs determination.

**Teacher-Reported Peer Victimization.** Teacher-reported peer victimization was assessed using a teacher nominated version of Crick and Bigbee's (1998) Social Environment Questionnaire (SEQ-T), which was originally used as a peer-nominated scale. The measure consisted of 9 items that provide behavioral descriptions of diverse PV experiences (e.g., *gets hit, kicked, punched by others, gets ignored by other kids when someone is mad at them*). Teachers were instructed to circle the names of the students in their class who fit each description of victimization since the beginning of the school year. Possible observed sum scores ranged from 0 to 9 ( $M = .48$ ,  $SD = 1.10$ ). Student who were nominated as fitting one or more of these descriptions were coded as meeting study criteria for teacher-reported victims (total victimization sum score needed to be at least a score of one).

### **Psychological Adjustment**

As noted, five student-reported indicators of psychological adjustment (the study's dependent variables) were expected to be related to peer victimization status and reporter of PV (independent variables).

**Positive School Social Climate.** Student perceptions of the school social climate was measured with the Positive Learning Environment scale originally developed for use in schools as a self-assessment tool (University of Washington, 1986). This 16-item scale includes 13 positively worded statements about the school learning environment (e.g., *I like my school; There is someone in the school who can help me with my problems*) and 3 negatively worded statements (e.g., *People make fun of me; I do not feel safe in my school*). Negatively worded items were reverse-scored to create an overall indicator of positive perceptions of the school climate. Students rated each item on a 5-point Likert scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Possible observed sum scores ranged from 16 to 80 ( $M = 57.54$ ,  $SD = 11.54$ ), with higher scores indicating more positive perceptions of the school climate. The authors of the measure reported adequate internal consistency for the scale and noted that more positive perceptions of the school climate was related to better school performance (University of Washington, 1986). For the current sample, internal consistency was adequate for the fall and spring total (Cronbach's  $\alpha = .89$ ).

**Positive and Negative Affect.** The Positive and Negative Affect Schedule for Children (PANAS-C; Laurent et al., 1999) was used to measure how often children experienced positive (12 items) and negative (15 items) emotions in the "past few weeks." Each item on the PANAS-C is rated on a 5-point Likert scale from 1 (*Not at All*) to 5 (*Extremely*). Possible observed sum scores ranged from 12 to 90 (Positive Affect  $M = 41.91$ ,  $SD = 10.56$ ; Negative Affect  $M = 27.70$ ,  $SD = 10.18$ ), with higher scores indicating more positive or negative affect. Internal consistencies were acceptable for positive affect ( $\alpha = .77$ ) and negative affect ( $\alpha = .79$ ).

**Attitudes toward Aggression.** The Aggression is Legitimate and Warranted (Dill et al., 2003; Vernberg et al., 1999) was used to assess the degree to which each student agrees with

statements about aggression and PV being warranted actions and paying off. This measure is a downward extension of a previously created measure for adolescent comprised of 12 items. 7 of the 12 items support that aggression is legitimate and warranted, and 5 of the 12 items support that aggression is a rightful action that can get someone what he or she really wants (aggression pays off; e.g., “A kid who gets picked on must have done something wrong,” and “It’s okay to be a bully sometimes”). Participants were asked to indicate their level of agreement on a 4-point scale, from 1 (*I Don’t Agree at All*) to 4 (*I Completely Agree*). To compute the aggression is legitimate and warranted scale, possible observed sum scores ranged from 7 to 28 ( $M = 12.71$ ,  $SD = 5.45$ ), with greater scores indicating greater acceptance of the attitude that aggression is legitimate and warranted. To compute the aggression pays subscale, all 5 responses were summed, possible observed sum scores ranged from 5 to 20 ( $M = 7.91$ ,  $SD = 3.18$ ), with greater scores indicating increased endorsement of the belief that being aggressive gives one what he or she wants (“pays off”). Previous studies have shown adequate internal reliability ranging from  $\alpha = .80-.88$  (Vernberg et al., 1999; Dill et al., 2003).

## Results

### **Aim 1. Examining Ethnicity in Relation to Informant Reports and Peer Victimization**

#### **Identification Status**

Students who met criteria for self-reported victims but did not meet criteria for teacher-reported victims were categorized as *self-identified* victims. Participants who met criteria for teacher-reported victims but did not meet criteria for self-report victimization were categorized as *teacher-identified* victims. Participants who met study criteria for self-reported victims and teacher-reported victims were categorized as *consistently identified* victims. Finally, if the

student did not meet criteria for either self- or teacher- reported victims, the participant was categorized as a *non-victim*.

Of the 343 children, 98 (29%) children were classified as self-reported victims, and 32 of these were also coded as teacher-reported victims. Thus, 66 children (19.2% of total sample) were in the *self-identified* only group, and 32 (9.3%) were in the *consistently identified victims* group. A total of 75 children (22%) were classified as teacher-reported victims. Removing the 32 children in the *consistently identified victims* group, 43 children remained in the *teacher-identified only* group. A total of 202 children (59%) did not meet study criteria as self-reported or teacher-reported victims and were in the consistently identified as *non-victims* group.

A better estimate of the number and proportion of AA youth and H/L youth who were categorized in each of these four groups is shown in Figure 1. Of the 193 AA youth, 20.21% met criteria to be categorized in the *self-identified* only group ( $n = 39$ ). Conversely, of the 150 H/L youth, 18% met criteria to be categorized in the *self-identified* only group ( $n = 27$ ). For AA youth, 13.98% met criteria to be categorized in the *teacher-identified* only group ( $n = 27$ ) while 10.67% of H/L youth met criteria to be categorized in the *teacher-identified* only group ( $n = 27$ ). 9.8% of AA youth were *consistently identified* as victims compared to 8.7% of H/L youth.

To assess whether ethnicity was associated with peer victimization identification status (VIS), a 2 X 4 contingency table analysis was run using ethnicity (AA, H/L) and victimization identification status groupings (*self-identified*, *consistently identified* as victims, *teacher-identified*, and consistently identified as *non-victims*) as independent variables (refer to Table 6). The  $\chi^2$  from this analysis was not statistically significant indicating that VIS did not differ by ethnicity ( $\chi^2 (3, N = 343) = 1.73, p = .63$ ). Two separate 2 X 2 contingency tables were run to assess whether ethnicity was associated with a) self-reported PV, and b) teacher-reported PV.

Ethnicity was not associated with neither self-reported PV ( $\chi^2(1, N = 343) = .47, p = .49$ ) nor teacher-reported PV ( $\chi^2(1, N = 343) = 1.00, p = .32$ ).

## **Aim 2. Examining Psychological Adjustment in relation to Peer Victimization**

### **Identification Status, Informant Source, and Ethnicity**

Research questions for Aim 2 focused on examining potential differences in psychological adjustment between children categorized into the four victimization identification status (VIS) groups (*consistently identified, self-identified, teacher-identified, non-victim*), evaluating how the source of PV reports (teacher, self) was related to adjustment, and assessing how ethnicity was related to adjustment measures and VIS. Descriptive statistics (i.e., frequencies, means, and standard deviations) for the psychological adjustment variables by PV identification status groups, source of peer victimization reports, and ethnicity are presented in Tables 7-11.

**Overview of Analyses for Aim 2.** Two sets of analyses were used to address these research questions. First, a set of five 4 (VIS group) X 2 (ethnicity) ANOVAs were run to assess how victim identification group membership and ethnic group were related to the five psychological adjustment measures. Second, a set of five 2 X 2 X 2 ANOVAs examined how psychological adjustment was related to meeting criteria for self-reported victimization (coded yes/no), teacher-reported victimization (coded yes/no), and ethnicity (AA, H/L). This second set of analyses provided additional information by assessing possible main effects and interaction effects for self-reported victimization, teacher reported victimization, and ethnicity. For both sets of analyses, the five measures of psychological adjustment were used sequentially as dependent variables. When statistically significant interaction effects were found, a simple main effects (SME) approach was used to examine the interaction effect. In this SME approach, one of the

independent variables in the interaction was designated as a focal IV and the file was split based on one of the IVs that was designated as a moderator variable (ethnicity)<sup>3</sup>. Then, a one-way ANOVA was run for each ethnic group, and means on the adjustment measure were compared at different levels of the focal IV. When there were more than 2 levels of the focal IV, a follow-up pair-wise mean comparisons using the Tukey HSD method was conducted. In keeping with recommendations, the Mean Square Error (MSE) term from the initial factorial analysis to compute the F value for the simple main effects and for pair-wise mean comparisons was used (Jaccard & Guilamo-Ramos, 2002).

**Perception of School Climate.** The 4 X 2 ANOVA using perceived school climate as the dependent variable indicated that there were no statistically significant main effects or interaction effects for the VIS groups or ethnicity [ $F(1, 317) = 2.48, p = .061$ ] (Figure 2; Table 12). In other words, children in the four VIS groups did not differ in their perceptions of school climate, and ethnicity was not related to perceived school climate by itself or in combination with VIS group status.

The 2 X 2 X 2 ANOVA results provided additional information by showing a statistically significant relation (main effect) between self-reported victimization and school climate [ $F(1, 317) = 7.17, p < .05$ ]. Examination of descriptive statistics indicated that children who met study criteria to be categorized as self-reported victims endorsed less positive perceptions of the school climate ( $M = 54.87, SD = 1.27$ ) compared to those who were not ( $M = 59.23, SD = 1.02$ ) (Refer to Table 22).

There were no statistically significant main effects for teacher-reported victimization or ethnic group. None of the interaction effects was statistically significant (Refer to Table 13).

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<sup>3</sup> None of the 3-way interactions was statistically significant and all of the statistically significant 2-way interactions involved ethnicity.

**Positive Affect.** The 4 X 2 ANOVA using positive affect as the dependent variable indicated that there were no statistically significant main effects or interaction effects for VIS group or ethnicity [ $F(1, 319) = .27, p = .89$ ] (Figure 3; Table 14). Children in the four VIS groups did not differ in their reports of positive affect, and ethnicity was not related to self-reported positive affect by itself or in combination with VIS group status. The 2 X 2 X 2 ANOVA results indicated that there were no statistically significant main or interaction effects for self-reported PV, teacher-reported PV, or ethnicity (Table 15).

**Negative Affect.** Results for the 4 X 2 ANOVA using negative affect as the dependent variable indicated that there was a statistically significant main effect for VIS group [ $F(1, 311) = 14.57, p < .05$ ]. There were no significant main or interaction effects involving ethnicity (see Table 16). A post hoc Tukey test showed that children in the *consistently identified* and *self-identified* VIS groups differed at a statistically significant level from children in the *non-victims* VIS group at  $p < .01$ . Specifically, individuals who were categorized in the *self-identified* as victims group ( $M = 33.11, SD = 1.27$ ) and *consistently identified* as VIS groups ( $M = 33.47, SD = 1.82$ ) reported greater negative affect compared to those individuals in the *non-victims* VIS group ( $M = 25.02, SD = .69$ ). The mean difference was  $-7.75, SD = 1.88$  for *consistently identified* compared to *non-victims* and the mean difference was  $-7.73, SD = 1.44$  for *self-identified* compared to *non-victims*.

The 2 X 2 X 2 analyses indicated a statistically significant interaction between self-reported victimization and ethnic group [ $F(1, 319) = 5.05, p < .05$ ] and a main effect for self-reported victimization category [ $F(1, 319) = 20.11, p < .05$ ] (Table 17). There were no statistically significant main or interaction effects involving teacher-reported victimization. To understand the statistically significant interaction effect, one-way ANOVAs using self-reported

victimization as the focal IV were run for each of the two ethnic groups. AA self-reported victims reported experiencing higher levels of negative affect ( $M = 30.75$ ,  $SD = 8.93$ ) compared to AA youth who self-reported as *non-victims* ( $M = 26.30$ ,  $SD = 10.01$ ) [ $F(1, 175) = 7.69$ ,  $p < .05$ ]. H/L self-reported victims also reported experiencing higher levels of negative affect ( $M = 35.72$ ,  $SD = 13.12$ ) compared to H/L youth who self-reported as *non-victims* ( $M = 25.13$ ,  $SD = 7.98$ ), and there was a significant difference between H/L self-reported victims from H/L self-reported as non-victims [ $F(1, 140) = 16.18$ ,  $p < .01$ ] (Refer to Table 23). Examination of descriptive statistics indicated that children who met study criteria to be categorized as self-reported victims reported higher levels of negative affect ( $M = 33.30$ ,  $SD = 1.10$ ) compared to those who were not ( $M = 27.03$ ,  $SD = .85$ ) (Table 9).

**Aggression is Legitimate and Warranted.** The 4 X 2 ANOVA using aggression is legitimate and warranted as the dependent variable indicated that there were no statistically significant main effects or interaction effects for VIS group or ethnic group (Table 18). The 2 X 2 X 2 ANOVA indicated that there were no statistically significant main or interaction effects for self-reported PV, teacher-reported PV, or ethnicity (Table 19).

**Aggression Pays Off.** The 4 X 2 ANOVA using aggression pays off as the dependent variable indicated that there was a significant main effect for VIS groups [ $F(1, 341) = 4.80$ ,  $p < .05$ ], see Table 20 and Figure 6. There were no main or interaction effects involving ethnicity. A post hoc Tukey test showed that children in the *consistently identified* and *self-identified* VIS groups differed significantly from those in the *non-victims* VIS group at  $p < .05$ . Specifically, individuals categorized in the *self-identified* VIS group ( $M = 8.69$ ,  $SD = .39$ ) and *consistently identified* VIS group ( $M = 9.27$ ,  $SD = .57$ ) reported more positive views on aggression paying off compared to those individuals in the *teacher-identified* as victims group ( $M = 7.34$ ,  $SD = .49$ )

and *non-victims* ( $M = 7.50$ ,  $SD = .22$ ). The mean difference was 1.59,  $SD = .61$  for *consistently identified* compared to *non-victims* ( $p < .05$ ), and the mean difference was 1.54,  $SD = .73$  for *consistently identified* compared to *teacher-identified* victims). The mean difference was 1.17,  $SD = .61$  for *self-identified* compared to *non-victims* ( $p < .05$ ), and the mean difference was 1.13,  $SD = .61$  for *self-identified* compared to *teacher-identified* victims.

The 2 X 2 X 2 ANOVA results showed a statistically significant interaction between self-reported victimization group and ethnic group [ $F(1, 341) = 4.85$ ,  $p < .05$ ] and a statistically significant main effect for self-reported victimization [ $F(1, 341) = 12.64$ ,  $p < .05$ ] (Table 21). There were no statistically significant main or interaction effects for teacher-reported victimization. To understand the statistically significant interaction effect, one-way ANOVAs using self-reported victimization as the focal IV were run for each of the two ethnic groups. AA self-reported victims reported experiencing similar levels of positive attitudes toward aggression paying off ( $M = 8.72$ ,  $SD = 2.97$ ) compared to AA youth who self-reported as *non-victims* ( $M = 8.01$ ,  $SD = 3.193$ ) [ $F(1, 190) = 2.08$ ,  $p = .115$ ]. H/L self-reported victims reported experiencing more positive attitudes towards aggression paying off ( $M = 9.02$ ,  $SD = 3.43$ ) compared to H/L youth who self-reported as *non-victims* ( $M = 6.96$ ,  $SD = 2.94$ ; Table 24) [ $F(1, 147) = 12.93$ ,  $p < .001$ ].

## Discussion

This study examined how the use of teacher-reports and student self-reports to identify problematic levels of PV for AA and H/L children in their last year of elementary school may converge and diverge, and also explored how the reports of PV may relate to selected indicators of psychological adjustment. To this end, teacher- and self-reports of victimization were used to categorize PV status into four groups: *self-identified* as victims, *consistently identified* as victims,

*teacher-identified* as victims, and *non-victims*. This approach allowed for the evaluation of whether AA or H/L ethnicity was related to membership in these peer victimization identification status (VIS) groups and to assess the variations of psychological adjustment based on VIS group membership. The study also examined how children of both ethnic minority groups who met investigator-assigned thresholds to be categorized as self-reported or teacher-reported victims and non-victims compared on measures of psychological adjustment.

Though other studies have considered ethnicity as a factor that may be related to PV (e.g., Hanish & Guerra, 2000; Storch, Nock, Masia- Warner, & Barlas, 2003), this is one of the first to examine and compare children from two specific ethnic groups in terms of PV identification statuses derived from teacher- and self-report measures of victimization. The current study categorized peer victimization status into four groups using teacher- and self- reports of victimization. The cut-off scores for membership in the VIS groups were assigned by the investigators for self-report and teacher-reports, and these were set to include similar proportions of self-reported (28% of sample) and teacher-reported (22% of sample) victims. As a result, over 40% of the total sample met study criteria to be categorized (either through self- or teacher-report) as experiencing potentially problematic levels PV at school. This approach also allowed for the examination of whether race/ethnicity was related to these peer victimization identification statuses (*consistently identified* as victims, *self-identified* as victims, *teacher-identified* as victims, and *non-victims*).

As expected, relatively few students met criteria for the *consistently identified* VIS group. In fact, only 9% of the overall students were in this group. Children in the *consistently identified* group met study criteria to be categorized as both self-reported and teacher-reported victims. This left almost 20% of children in the self-identified VIS group and 12.5% in the teacher-

identified VIS group. The fact that most of the children who self-reported elevated levels of PV were not rated as victimized by teachers on even a single item from the teacher nomination measure suggests that many children would be overlooked if teachers alone were used as a first level screen for problematic levels of PV. It is also true that many of the children identified as victims by teachers did not indicate frequent experiences with PV on self-report measures. Card and Hodges (2008) suggested that self-report is a better identifier (compared to teacher-report) of individuals who are victimized. Teachers are likely not identifying all those youth who self-reported as being victimized in part because they often are not present in different settings where PV might be occurring (e.g., bathrooms, playgrounds; Card & Hodges, 2008; Fite et al., 2013).

Interestingly, ethnicity was not related at a statistically significant level to membership to any of the VIS group. Thus, there was little support for the hypothesis that AA children would be over-represented in the *teacher-identified* VIS group, or that H/L children would over-represented in the *self-identified* VIS group. A little less than 14% of AA youth were in the teacher-identified VIS group, compared to nearly 11% of the eligible H/L students. About 20% of AA children were classified in the self-identified group, compared to 18% of H/L children. Anticipated associations between VIS group membership and ethnicity might not have reached the threshold for statistical significance in part due to limited statistical power. The study included 150 AA youth and 193 H/L youth, yet the number of children in some VIS groups was relatively small. For example, 39 AA youth and 27 H/L youth were classified in the *self-identified* group. The most infrequently occurring VIS group (*consistently identified*) included only 19 AA children and 13 H/L children.

The study also assessed similarities and differences in psychological adjustment for children in the various VIS groups, including perceptions of the school climate, positive and

negative affect, and attitudes towards aggression (whether it is legitimate or warranted, and it pays off to be aggressive). A first set of analyses evaluated whether VIS group membership and ethnicity were related to psychological adjustment. A second set of analyses examined how psychological adjustment was related to meeting criteria for self-reported victimization (coded yes/no), teacher-reported victimization (coded yes/no), and ethnicity (AA, H/L). This second set of analyses provided additional information by assessing possible main effects and interaction effects for self-reported victimization, teacher reported victimization, and ethnicity.

**Perception of School Climate.** Aligning with our predictions, children who were coded as self-reported victims (which includes children in the *self-identified* and *consistently identified* VIS groups) reported less positive perceptions of the school learning environment in comparison to children who were not coded as self-reported victims. When comparing perceptions of the school climate among children in the four victimization identification status (VIS) groups, no statistically significant differences were found, although the main effect for VIS group approached significance ( $p < .06$ ). As shown in Figure 2, children in the *teacher-identified* group tended to report the most positive perceptions of the school climate of any of the four VIS groups, and children in the *consistently identified* VIS group tended to report the most negative perceptions of school climate.

**Positive Affect.** Main effects and interaction effects of teacher- and self-reports, ethnicity, and positive affect were not statistically significant. The rates of positive affect were similar for all the different VIS groups. Given that our sample was a community sample of elementary school youth, it is possible that these individuals may be reporting typical rates of positive affect. However, it appears that even when someone is victimized, they still experience some positive affect. Given that most studies evaluate positive and negative affect together

(Biggs, et al., 2010) to evaluate negative outcomes (e.g., anxiety-like symptomology), it is possible that much of the youth who are victimized experience a combination of positive and negative affect versus one or the other and should be considered for future studies.

**Negative Affect.** Participants who self-reported as victims were more likely to report increases in negative affect than those participants who did not self-report experiencing sufficient PV to meet the study criteria. For this variable, ethnicity may have played a role in the reporting of negative affect. H/L youth who were self-reported as victims reported much higher levels of negative affect compared to H/L self-reported *non-victims*, which is similar to the findings of other studies (e.g., Asnaani et. al., 2010). Among AA youth, self-reported victims also reported higher levels of negative affect in comparison to AA *non-victims*, but the magnitude of this difference was smaller than that seen among H/L youth. However, children identified using only teacher-reports of PV did not significantly differ from non-victimized youth's reporting of negative affect. This finding is consistent with previous research supporting that individuals who perceive themselves as peer victimized are more likely to report higher rates of negative affect (Dill et al., 2003).

**Attitudes towards Aggression being Legitimate and Warranted.** There was not a significant main effect of self-reported victims nor teacher-reported victims on their reporting of aggression being a legitimate solution to conflict, and ethnic differences were not found. This finding is contrary to previous studies, which also assessed aggression being legitimate and warranted. Dill and colleagues (2003) found that victimized youth may not believe they deserved to be victimized. Given this belief, it is probable that the victimized youth in this sample believed this aggressive acts was undeserving when it occurred to them.

**Attitudes towards Aggression Pays Off.** Self-reported victims' (*self-identified* and *consistently identified*) belief that aggression is a behavior that gets someone what he or she wants (aggression pays off) significantly differed from self-reported *non-victims*. As reported in Dill and colleagues' study (2003), victimized youth were found to have more positive attitudes about aggression when they believe the aggressive act gives the aggressor what they want. Dill and colleagues' study (2003) hypothesized a mediational path involving behavioral, cognitive, and affective components to argue that the "vicious cycle" of victimization—certain characteristics (e.g., shyness, being social withdrawn) predicts peer rejection and social difficulty resulting in PV—explains why victimized youth have difficulty coping with negative emotions and may believe that use negative solutions (e.g., aggression) is an appropriate coping mechanism. Again, only using teacher-reporting methods of PV was not related to participants' reports of aggression paying off.

### **Limitations**

This study found that teacher-reports do not capture all the students who may be experiencing PV. This finding supports previous literature that has found teacher-reported PV should not be used to identify victimized youth, but can be considered to provide additional perspective to youth's experiences of PV (Card & Hodges, 2008). However, in the current study, teacher-nominations did not show much variability. Teacher-reports of PV could have ranged from a total score of 0-9 but in our sample 100% of teacher-report total scores only ranged from 0-6, with 93% reporting PV below a total score of 3. This lack of variability may explain why teacher-reports did not best reflect the youth that were victimized as well as did not distinguish teacher-reported victims from non-victims on multiple psychological adjustment variables. When using teacher reports to identify PV, it may be useful to allow teachers to indicate a range of

responses (e.g., never, once or twice, several times) rather than allowing only a dichotomous rating (e.g., yes, no). This would allow the teacher-reported measure of PV to have a similar level of variability as the self-reported PV measure.

Though this study did not find that student's ethnicity influenced whether an individual was *consistently identified* (both self- and teacher-reported as a victim), this study also did not examine whether the teacher's ethnicity influenced their reporting of PV. Previous literature has shown that teacher's ethnicity might play a role in the identification of some victims. Specifically, in a study that controlled for student's socioeconomic status, African-American youth were more likely to be identified as victims by African-American teachers in comparison to Caucasian youth (Leff, et al., 1999). It is possible that an ethnic minority teacher might be more sensitive to the ethnic minority youth's experience in the school setting given their own personal experience as an ethnic minority student as well as culturally may be better at distinguishing playful interactions from PV acts. For example, if the teacher is the same ethnicity, they might be better at identifying an individual of the same ethnic background who may be experiencing PV. Therefore, examining factors related to teacher-identification of victimization can be important in assessing PV in ethnic minority youth, such as the teacher's own ethnicity and should be considered for future studies.

This study also examined total PV experienced, but did not specifically look at the different forms of PV (e.g., physical PV, relational PV, etc.) or teachers' perceptions of students' psychological adjustment. Given the small sample size in the different PV groupings, separating the different forms of PV would have further reduced statistical power. However, it is possible that with a larger sample size some of the study's hypotheses would have been supported. For example, it is possible that teachers are primarily selecting AA youth who are victims of physical

victimization given previous literature reports that teachers are more vigilant towards detecting externalizing problems typically seen more in AA youth (Hudley, 1993).

Similarly, it is possible that teachers are identifying H/L youth who appear more distressed given that previous literature has stated that H/L youth are more likely to show internalizing symptoms that relational victimized youth might exhibit (Kovacs, 1992). By evaluating the different forms of PV, future studies would be able to better identify which victims are consistently being identified as victims and better understand patterns that might be present for the different reporters (e.g., self-reported victims might report more relational victimization while teacher-reported victims might report more physical/overt victimization occurring). It is also important to note that this study did not control for nestedness within classrooms and schools. For example, each teacher provided nominations of PV for all students in his/her classroom, and the number of students rated as experiencing PV varied across classrooms. Similarly, schools varied in size and in the proportion of ethnic minority students comprising the student body. Future studies may benefit by including statistical analyses that could address potential issues related to nestedness (Cox, 1961).

This study examined AA and H/L youth and reported similarities and discrepancies for these two ethnic minority groups. Though some differences related to ethnic group were found, the findings cannot automatically be generalized to individuals who may identify as either of these ethnic groups since there are many factors to consider when assessing ethnic differences that were not accounted for in this study. For example, how much each participant in fact identifies as part of these ethnic groups, how strongly their culture influences their general beliefs, and if these participants are first- or second generation youth. These variables may have influenced some of the results as well as the interpretation of the findings.

Additionally, this study only focused on AA and H/L youth and did not assess if these ethnic minority reports of PV differ from those of other ethnicities (i.e., Caucasian, Asian American, etc.) as seen in other studies (Hanish & Guerra, 2000; Sawyer, Bradshaw, & O'Brennan, 2008). More specifically, this study did not assess if the rates of PV for AA and H/L youth varied differently from other ethnic groups. Future studies evaluating ethnic differences should plan to evaluate PV among multiple ethnic groups. So that if ethnic differences remain significant for certain outcome variables, interventions may consider providing different culturally-appropriate material to reduce negative symptoms of PV and psychological adjustment.

This study also focused on psychological adjustment variables. The reasoning for this focus was to better understand one of the many associated negative outcomes of PV. However, PV is associated with many different negative consequences, such as behavioral and academic concerns (Burchinal, Roberts, Zeisel, & Rowley, 2008; Sanchez, Colon, & Esparza, 2005). Since this study solely focused on one of the negative outcomes of PV (e.g., psychological adjustment), there is a possibility that future studies who assesses multiple factors of PV can better identify youth who may need more immediate intervention.

Additionally, a longitudinal design would allow for further long-term evaluation of identification of PV and psychological adjustment, and should be considered in future studies. By considering a longitudinal design, one can identify the severity of PV being experienced over time, how much (or little) reports of PV change, and if there are other variables that may help better identify peer victimized youth in addition to measures of school climate, negative affect, and attitudes towards aggression paying off.

### **Implications and Significance of Study Findings**

Though previous studies have been published reporting that an individual has experienced PV if he or she endorsed an item of PV occurring a few times a week (Fite et al., 2013), other studies have used one standard deviation (SD) above the PV total mean (Hanish & Guerra, 2000). The method of using one SD is more regularly used to better distinguish which individuals experience more frequent victimization than those who may not; however, this study's approach in using cut-off scores of PV had the advantage of evaluating if informant reports differ and account for similar participants. If future studies use cut-off scores for participants to meet study criteria for PV, it is recommended that higher scores be considered so that the severity of PV and chronicity of frequent PV can also be assessed as factors influencing self- and teacher-report agreement.

This is one of the first studies to focus on teacher-report and self-report of PV among two groups of ethnic minority youth. Though differences in reporting for the psychological adjustment variables were found, identification of victims was not determined by one's ethnicity. For example, though teachers reported slightly more AA youth as victims, teachers also reported a fair amount of H/L youth as victims. This finding suggests that there may be other identification factors (i.e., gender; Fite et al., 2013) that may better indicate if an individual will a) be correctly identified, b) be identified as a victim vs. non-victim, and c) report different experiences as an ethnic minority [and male or female] and should be further studied.

The cross-sectional design reviewed differences among the four PV identification groupings as well as allowed appropriate evaluation of psychological adjustment for these different groupings by ethnicity. By evaluating different ethnic groups, interventions may need to consider being more culturally sensitive in the selection of victimized youth as well as the material being given during intervention. If differences are found, interventions should account

for these differences. For example, H/L youth were reporting higher rates of negative affect in comparison to AA youth, it is possible that a PV intervention may need to address concerns of negative affect more in a group with H/L youth than in a group with AA youth or another ethnicity. Notably, ethnic differences that were found (i.e., reports of negative affect) should not be automatically generalized to individuals of similar ethnic/racial backgrounds. Ethnic differences that are found should only be used to provide additional support for the benefit of modifying interventions to appropriately suit different group members.

In summary, children who met criteria to be coded as self-reported victims tended to have poorer adjustment (e.g., poorer perception of school climate, reporting more negative affect, more positive attitudes about aggression paying off). Also, teacher-reported victims did not account for much variance in adjustment. When looking at VIS differences, children in the *self-identified* and *consistently identified* VIS groups typically looked similar on adjustment measures. Lastly, this study found some ethnic differences. Increased levels of negative affect and positive attitudes toward aggression among self-reported victims was particularly striking for H/L children. H/L children were reporting more negative psychological adjustment concerns.

Overall, these findings provide additional support for including self-reports of PV when screening for peer victimization. Self-reported PV was related to several indicators of psychological adjustment, and teacher nominations of PV did not account for additional variance in adjustment beyond that explained by self-reported PV. This study suggests that self-reported PV can serve as a better tool to correctly identified victims who does not feel safe at school and who generally feel more negative emotions—two symptoms that are typically reported by victimization youth and can be very helpful in informing efforts to prevent or intervene in PV.

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Table 1. *Rates of Ethnic Minority Participants per School Year 1*

	Ethnicity 1999-2000					Total
	White	Asian	AA	H/L	Am. Ind.	
School 1	60	0	62	11	1	134
School 2	77	0	44	8	11	140
School 3	118	6	31	18	6	179
School 4	103	2	86	17	10	218
School 5	89	1	56	11	5	162
School 6	106	2	73	14	4	199
School 7	135	4	30	14	2	185
School 8	86	0	8	43	10	147
School 9	106	0	9	76	9	200
School 10	170	1	22	55	4	252
School 11	211	3	67	25	10	316
Total	1261	19	488	292	72	2132

Note: AA is an abbreviation to signify African-American ethnicity; H/L is an abbreviation to signify Hispanic/Latino ethnicity; Am. Ind. is an abbreviation to signify American Indian ethnicity

The number of participants comes from the original outcomes study database which also included third, fourth, and fifth graders.

Table 2. *Rates of Ethnic Minority Participants per School Year 2*

	Ethnicity 2000-2001					Total
	White	Asian	AA	H/L	Am. Ind.	
School 1	38	0	54	8	0	100
School 2	59	0	28	6	7	100
School 3	95	4	18	15	3	135
School 4	89	1	91	26	7	214
School 5	85	0	59	21	2	167
School 6	96	1	66	12	1	176
School 7	108	5	23	12	2	150
School 8	72	0	9	56	9	146
School 9	105	0	10	84	7	206
School 10	169	2	17	43	2	233
School 11	162	1	26	21	8	218
Total	1078	14	401	304	48	1845

Note: AA is an abbreviation to signify African-American ethnicity; H/L is an abbreviation to signify Hispanic/Latino ethnicity; Am. Ind. is an abbreviation to signify American Indian ethnicity

The number of participants comes from the original outcomes study database, which also included third, fourth, and fifth graders.

Table 3. *Rates of Ethnic Minority Participants per School Year 3*

	Ethnicity 2001-2002					Total
	White	Asian	AA	H/L	Am. Ind.	
School 1	42	0	42	7	1	92
School 2	66	0	36	6	7	115
School 3	105	5	25	14	5	154
School 4	119	1	100	25	11	256
School 5	77	1	62	19	3	162
School 6	113	1	70	10	1	195
School 7	106	8	18	9	3	144
School 8	84	1	12	50	3	150
School 9	116	0	12	79	7	214
School 10	150	3	15	61	4	233
School 11	-	-	-	-	-	-
Total	978	20	392	280	45	1715

Note: AA is an abbreviation to signify African-American ethnicity; H/L is an abbreviation to signify Hispanic/Latino ethnicity; Am. Ind. is an abbreviation to signify American Indian ethnicity

The number of participants comes from the original outcomes study database, which also included third, fourth, and fifth graders.

Table 4. *List of Measures and Time of Administration*

<b>Construct</b>	<b>Measure</b>	<b>Year 1</b>		<b>Year 2</b>		<b>Year 3</b>	
		<b>F</b>	<b>S</b>	<b>F</b>	<b>S</b>	<b>F</b>	<b>S</b>
<b>Victimization</b>							
Self-Reported	Peer Experience Questionnaire (Vernberg et al., 1999)	✓	✓	✓	✓	✓	✓
Teacher- Reported	Social Environment Questionnaire Teacher (Crick & Bigbee, 1998)	✓	NA	✓	NA	✓	NA
<b>Characteristics</b>							
School Climate/ Belongingness	Positive Learning Environment (University of Washington, 1986)	NA	✓	NA	✓	NA	✓
Affect	Positive and Negative Affect Schedule for Children (PANAS- C; Laurent et al., 1999)	✓	✓	✓	✓	✓	✓
Attitudes towards Aggression	Aggression is Legitimate and Warranted (Dill et al., 2003; Vernberg et al., 1999)	✓	✓	✓	✓	✓	✓

*F: Fall Term*

*S: Spring Term*

*NA: Not applicable*

NOTE: Spring data was used. When Spring data was missing, Fall data was used.

Table 5. *Peer Victimization Cut-Offs*

## Teacher-Reported Peer Victimization

PV Score	Frequency	Cumulative %
0	268	78.1
1	28	86.3
2	24	93.3
3	12	96.8
4	3	97.7
5	6	99.4
6	2	100.0

## Self-Reported Peer Victimization

PV Score	African-American Youth		Hispanic/Latino Youth	
	Frequency	Cumulative %	Frequency	Cumulative %
10	71	20.7	30	20.0
11	49	35.0	23	35.3
12	30	43.7	14	44.7
13	32	53.1	14	54.0
14	30	61.8	14	63.3
15	20	67.6	10	70.0
16	13	71.4	5	73.3
17	20	77.3	6	77.3
18	10	80.2	5	80.7

Note: Approximately 25% of the sample met the study criteria for PV.

Table 6. *Peer Victimization Identification Status by Ethnicity*

		<i>Self-identified</i>	<i>Consistently identified</i>	<i>Teacher-identified</i>	<i>Non-victims</i>
Ethnicity	AA	39	19	27	108
	N = 193	20.21%	9.84%	13.98%	55.96%
	H/L	27	13	16	94
	N = 150	18.00%	8.67%	10.67%	62.66%

Table 7. *Descriptive Statistics of School Climate Outcome Variable*

Self-Reported	Teacher-Reported	Ethnicity	Mean	Std. Deviation	N
No	No <i>(Non-Victims)</i>	AA	56.3663	12.18501	101
		H/L	60.0968	10.27245	93
		Total	58.1546	11.43338	194
	Yes <i>(Teacher-Identified)</i>	AA	59.2609	9.27468	23
		H/L	61.1875	10.75930	16
		Total	60.0513	9.81928	39
Yes	No <i>(Self-Identified)</i>	AA	55.5429	12.36300	35
		H/L	57.1200	10.55667	25
		Total	56.2000	11.57701	60
	Yes <i>(Consistently identified)</i>	AA	52.8947	11.49345	19
		H/L	53.9231	15.67089	13
		Total	57.5446	11.53799	325

Note: AA = African-American

H/L = Hispanic/Latino

Table 8. *Descriptive Statistics of Positive Affect Outcome Variable*

Self-Reported	Teacher-Reported	Ethnicity	Mean	Std. Deviation	N
No	No <i>(Non-Victims)</i>	AA	41.1923	10.86106	104
		H/L	43.1522	9.95035	92
		Total	42.1122	10.46301	196
	Yes <i>(Teacher-Identified)</i>	AA	41.6522	11.32820	23
		H/L	40.4375	12.75915	16
		Total	41.1538	11.78656	39
Yes	No <i>(Self-Identified)</i>	AA	41.8889	11.34341	36
		H/L	40.5000	9.71288	26
		Total	41.3065	10.62874	62
	Yes <i>(Consistently identified)</i>	AA	43.2632	10.68146	19
		H/L	42.1818	8.25613	11
		Total	42.8667	9.72637	30

Note: AA = African-American

H/L = Hispanic/Latino

Table 9. *Descriptive Statistics of Negative Affect Outcome Variable*

Self-Reported	Teacher-Reported	Ethnicity	Mean	Std. Deviation	N
No	No <i>(Non-Victims)</i>	AA	25.4554	9.53365	101
		H/L	24.5889	7.50415	90
		Total	25.0471	8.62572	191
	Yes <i>(Teacher-Identified)</i>	AA	29.8750	11.36858	24
		H/L	28.1875	10.01478	16
		Total	29.2000	10.74697	40
Yes	No <i>(Self-Identified)</i>	AA	30.6364	9.47964	33
		H/L	35.6000	14.74788	25
		Total	32.7759	12.17280	58
	Yes <i>(Consistently identified)</i>	AA	30.9474	8.14094	19
		H/L	36.0000	9.01110	11
		Total	32.8000	8.67577	30

Note: AA = African-American

H/L = Hispanic/Latino

Table 10. *Descriptive Statistics of Aggression is Legitimate Outcome Variable*

Self-Reported	Teacher-Reported	Ethnicity	Mean	Std. Deviation	N
No	No <i>(Non-Victims)</i>	AA	12.83	5.636	108
		H/L	11.56	4.935	94
		Total	12.24	5.346	202
	Yes <i>(Teacher-Identified)</i>	AA	13.63	6.564	27
		H/L	11.56	4.320	16
		Total	12.86	5.862	43
Yes	No <i>(Self-Identified)</i>	AA	13.63	5.370	38
		H/L	13.48	5.666	27
		Total	13.57	5.451	65
	Yes <i>(Consistently identified)</i>	AA	13.72	4.763	18
		H/L	13.92	6.501	12
		Total	13.80	5.416	30

Note: AA = African-American

H/L = Hispanic/Latino

Table 11. *Descriptive Statistics of Aggression Pays Outcome Variable*

Self-Reported	Teacher-Reported	Ethnicity	Mean	Std. Deviation	N
No	No <i>(Non-Victims)</i>	AA	7.9533	3.16044	107
		H/L	7.0532	2.94161	94
		Total	7.5323	3.08548	201
	Yes <i>(Teacher-Identified)</i>	AA	8.2593	3.36946	27
		H/L	6.4375	2.98817	16
		Total	7.5814	3.31829	43
Yes	No <i>(Self-Identified)</i>	AA	8.7692	2.99527	39
		H/L	8.6296	3.49888	27
		Total	8.7121	3.18538	66
	Yes <i>(Consistently identified)</i>	AA	8.6316	3.00390	19
		H/L	9.9167	3.23218	12
		Total	9.1290	3.10636	31

Note: AA = African-American

H/L = Hispanic/Latino

Table 12. *Victim Identification Status Groups and Ethnicity in Relations to Perceived School Climate (4 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	250.303	1.917	.066
Intercept	1	641381.523	4913.377	.000
Ethnicity	1	210.217	1.610	.205
VIS Group	3	324.120	2.483	.061
Ethnicity X VIS Group	3	31.599	.242	.867
Error	317	130.538		
Total	325			
Corrected Total	324			

R Squared = .041 (Adjusted R Squared = .019)

NOTE: VIS Group is an abbreviation for victimization identification status group

Table 13. *Test of Between-Subjects Effects of Teacher-Reported Victims and Self- Reported Victims on Student's Perception of School Climate (2 X 2 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	250.303	1.917	.066
Intercept	1	641381.523	4913.377	.000
Self R PV	1	935.568	7.167	.008*
Teacher R PV	1	10.650	.082	.775
Ethnicity	1	210.217	1.610	.205
Self R PV * Teacher R PV	1	297.560	2.279	.132
Self R PV * Ethnicity	1	28.674	.220	.640
Teacher R PV * Ethnicity	1	17.043	.131	.718
Self R PV * Teacher R PV * Ethnicity	1	4.850	.037	.847
Error	317	130.538		
Total	325			
Corrected Total	324			

R Squared = .041 (Adjusted R Squared = .019)

\*  $p < .05$

NOTE: Self R PV is an abbreviation to signify self-reported peer victimization; Teacher R PV is an abbreviation to signify teacher-reported peer victimization

Table 14. *Victim Identification Status Groups and Ethnicity in Relations to Positive Affect (4 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	45.578	.404	.900
Intercept	1	332304.447	2942.743	.000
Ethnicity	1	8.850	.078	.780
VIS Group	3	30.327	.269	.848
Ethnicity * VIS Group	3	66.684	.591	.622
Error	319	112.923		
Total	327			
Corrected Total	326			

R Squared = .009 (Adjusted R Squared = -.013)

NOTE: VIS Group is an abbreviation for victimization identification status group

Table 15. *Test of Between-Subjects Effects of Teacher-Reported Victims and Self- Reported Victims on Student's Perception of Positive Affect (2 X 2 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	45.578	.404	.900
Intercept	1	332304.447	2942.743	.000
Self R PV	1	5.827	.052	.820
Teacher R PV	1	1.909	.017	.897
Ethnicity	1	8.850	.078	.780
Self R PV * Teacher R PV	1	83.885	.743	.389
Self R PV * Ethnicity	1	30.748	.272	.602
Teacher R PV * Ethnicity	1	24.446	.216	.642
Self R PV * Teacher R PV * Ethnicity	1	36.060	.319	.572
Error	319	112.923		
Total	327			
Corrected Total	326			

R Squared = .009 (Adjusted R Squared = -.013)

NOTE: Self R PV is an abbreviation to signify self-reported peer victimization; Teacher R PV is an abbreviation to signify teacher-reported peer victimization

Table 16. *Victim Identification Status Groups and Ethnicity in Relations to Negative Affect (4 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	614.318	6.662	.000
Intercept	1	171732.386	1862.329	.000
Ethnicity	1	164.250	1.781	.183
VIS Group	3	1344.007	14.575	.000
Ethnicity * VIS Group	3	187.179	2.030	.110
Error	311	92.214		
Total	319			
Corrected Total	318			

R Squared = .130 (Adjusted R Squared = .111)

NOTE: VIS Group is an abbreviation for victimization identification status group

Table 17. *Test of Between-Subjects Effects of Teacher-Reported Victims and Self- Reported Victims on Student's Perception of Negative Affect (2 X 2 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	614.318	6.662	.000
Intercept	1	171732.386	1862.329	.000
Self R PV	1	1854.894	20.115	.000*
Teacher R PV	1	224.759	2.437	.119
Ethnicity	1	164.250	1.781	.183
Self R PV * Teacher R PV	1	157.496	1.708	.192
Self R PV * Ethnicity	1	466.084	5.054	.025*
Teacher R PV * Ethnicity	1	1.580	.017	.896
Self R PV * Teacher R PV * Ethnicity	1	2.442	.026	.871
Error	311	92.214		
Total	319			
Corrected Total	318			

R Squared = .130 (Adjusted R Squared = .111)

\*  $p < .05$

NOTE: Self R PV is an abbreviation to signify self-reported peer victimization; Teacher R PV is an abbreviation to signify teacher-reported peer victimization

Table 18. *Victim Identification Status Groups and Ethnicity in Relations to Student's Perception of Aggression being Legitimate and Warranted (4 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	36.184	1.224	.289
Intercept	1	33844.876	1144.659	.000
Ethnicity	1	33.696	1.140	.287
VIS Group	3	44.115	1.492	.217
Ethnicity * VIS Group	3	12.235	.414	.743
Error	332	29.568		
Total	340			
Corrected Total	339			

R Squared = .025 (Adjusted R Squared = .005)

NOTE: VIS Group is an abbreviation for victimization identification status group

Table 19. *Test of Between-Subjects Effects of Teacher-Reported Victims and Self- Reported Victims on Student's Perception of Aggression being Legitimate and Warranted (2 X 2 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	36.184	1.224	.289
Intercept	1	33844.876	1144.659	.000
Self R PV	1	82.857	2.802	.095
Teacher R PV	1	5.423	.183	.669
Ethnicity	1	33.696	1.140	.287
Self R PV * Teacher R PV	1	.225	.008	.931
Self R PV * Ethnicity	1	35.536	1.202	.274
Teacher R PV * Ethnicity	1	.638	.022	.883
Self R PV * Teacher R PV * Ethnicity	1	4.055	.137	.711
Error	332	29.568		
Total	340			
Corrected Total	339			

R Squared = .025 (Adjusted R Squared = .005)

NOTE: Self R PV is an abbreviation to signify self-reported peer victimization; Teacher R PV is an abbreviation to signify teacher-reported peer victimization

Table 20. *Victim Identification Status Groups and Ethnicity in Relations to Student's Perception of Aggression Paying Off (4 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	29.740	3.067	.004
Intercept	1	13546.360	1396.930	.000
Ethnicity	1	7.810	.805	.370
VIS Group	3	46.588	4.804	.003
Ethnicity * VIS Group	3	16.192	1.670	.173
Error	333	9.697		
Total	341			
Corrected Total	340			

R Squared = .061 (Adjusted R Squared = .041)

NOTE: VIS Group is an abbreviation for victimization identification status group

Table 21. *Test of Between-Subjects Effects of Teacher-Reported Victims and Self-Reported Victims on Student's Perception of Aggression Pays (2 X 2 X 2 ANOVA)*

Source	df	Mean Square	F	Sig.
Corrected Model	7	29.740	3.067	.004
Intercept	1	13546.360	1396.930	.000
Self R PV	1	122.535	12.636	.000*
Teacher R PV	1	2.216	.229	.633
Ethnicity	1	7.810	.805	.370
Self R PV * Teacher R PV	1	6.691	.690	.407
Self R PV * Ethnicity	1	47.008	4.848	.028*
Teacher R PV * Ethnicity	1	.795	.082	.775
Self R PV * Teacher R PV * Ethnicity	1	17.304	1.784	.183
Error	333	9.697		
Total	341			
Corrected Total	340			

R Squared = .061 (Adjusted R Squared = .041)

\* p <.05

NOTE: Self R PV is an abbreviation to signify self-reported peer victimization; Teacher R PV is an abbreviation to signify teacher-reported peer victimization

Table 22. *Means of Self-Reported Victims Perception of School Climate*

Self-Reported Victims	95% Confidence Interval			
	Mean	Standard Error	Lower Bound	Upper Bound
No	59.23	1.02	57.23	61.23
Yes	54.87	1.27	52.37	57.37

Table 23. *Means of Self-Reported Victims and Negative Affect*

Self-Reported Victims	Mean	Standard Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No	27.03	.849	25.35	28.70
Yes	33.30	1.11	31.11	35.48

Self-Reported Victims	Ethnicity	Mean	Standard Error	95% Confidence Interval	
				Lower Bound	Upper Bound
No	Black	27.665	1.090	25.520	29.811
	Hispanic	26.388	1.303	23.825	28.951
Yes	Black	30.792	1.383	28.071	33.513
	Hispanic	35.800	1.737	32.382	39.218

Table 24. *Means of Self-Reported Victims and Aggression Pays*

Self-Reported Victims	Mean	Standard Error	95% Confidence Interval	
			Lower Bound	Upper Bound
No	7.43	.27	6.90	7.95
Yes	8.99	.35	8.30	9.67

Self-Reported Victims	Ethnicity	Mean	Standard Error	95% Confidence Interval	
				Lower Bound	Upper Bound
No	Black	8.106	.335	7.447	8.766
	Hispanic	6.745	.421	5.917	7.574
Yes	Black	8.700	.436	7.844	9.557
	Hispanic	9.273	.540	8.211	10.336

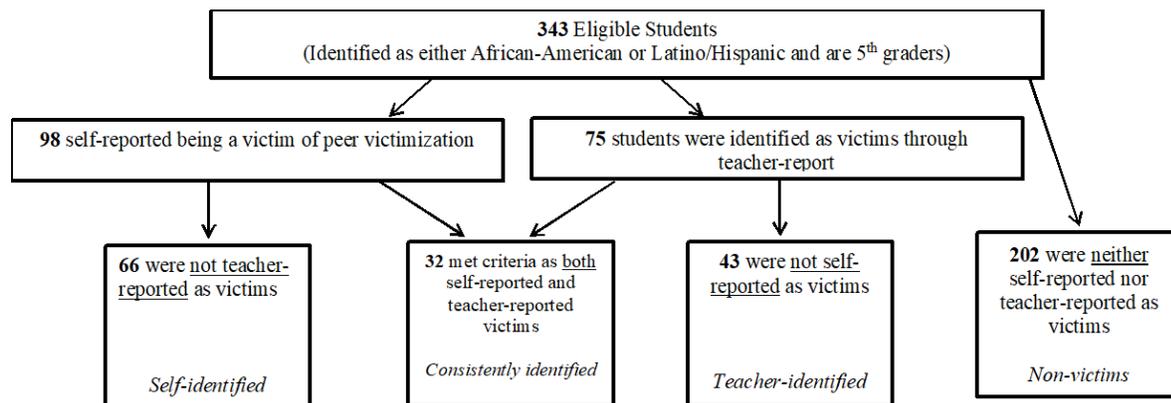
Figure 1. *Flowchart of Peer Victimization Identification Status Grouping*

Figure 2. School Climate Means by Peer Victimization Statuses by Ethnicity

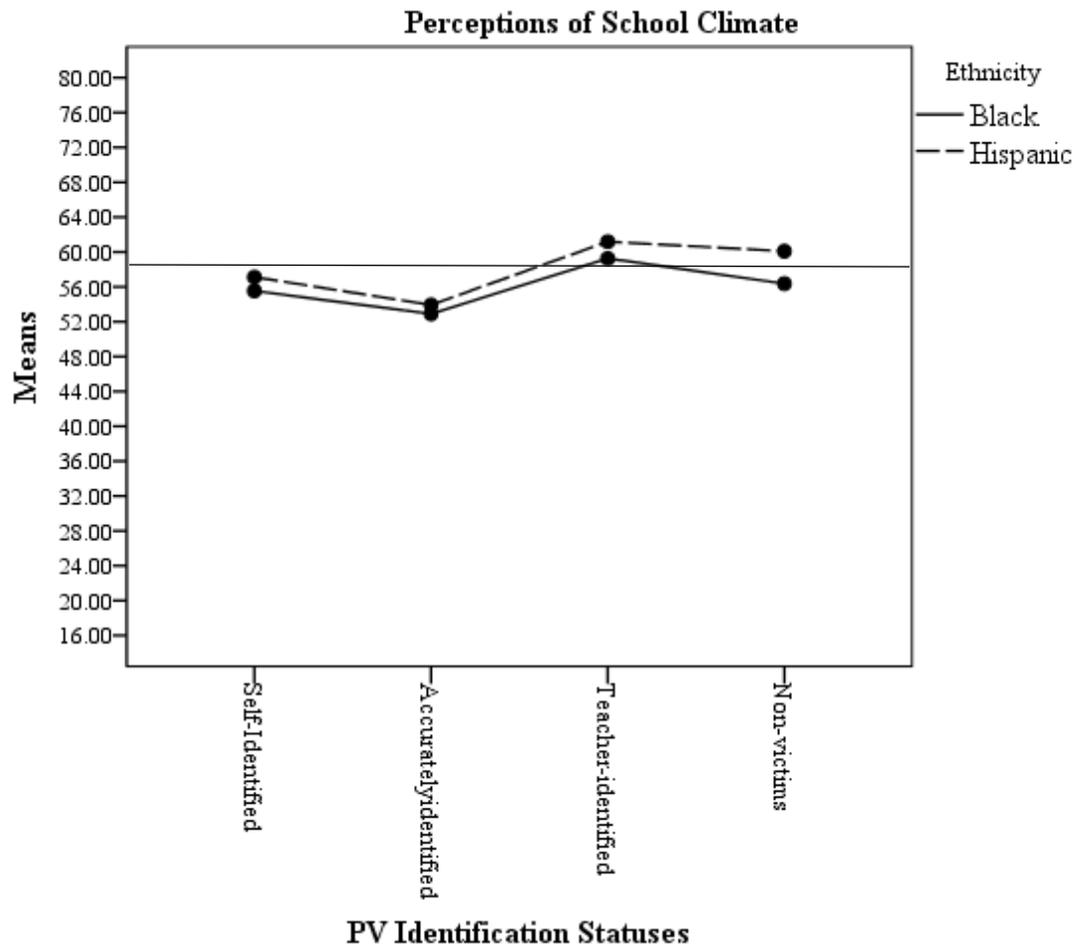


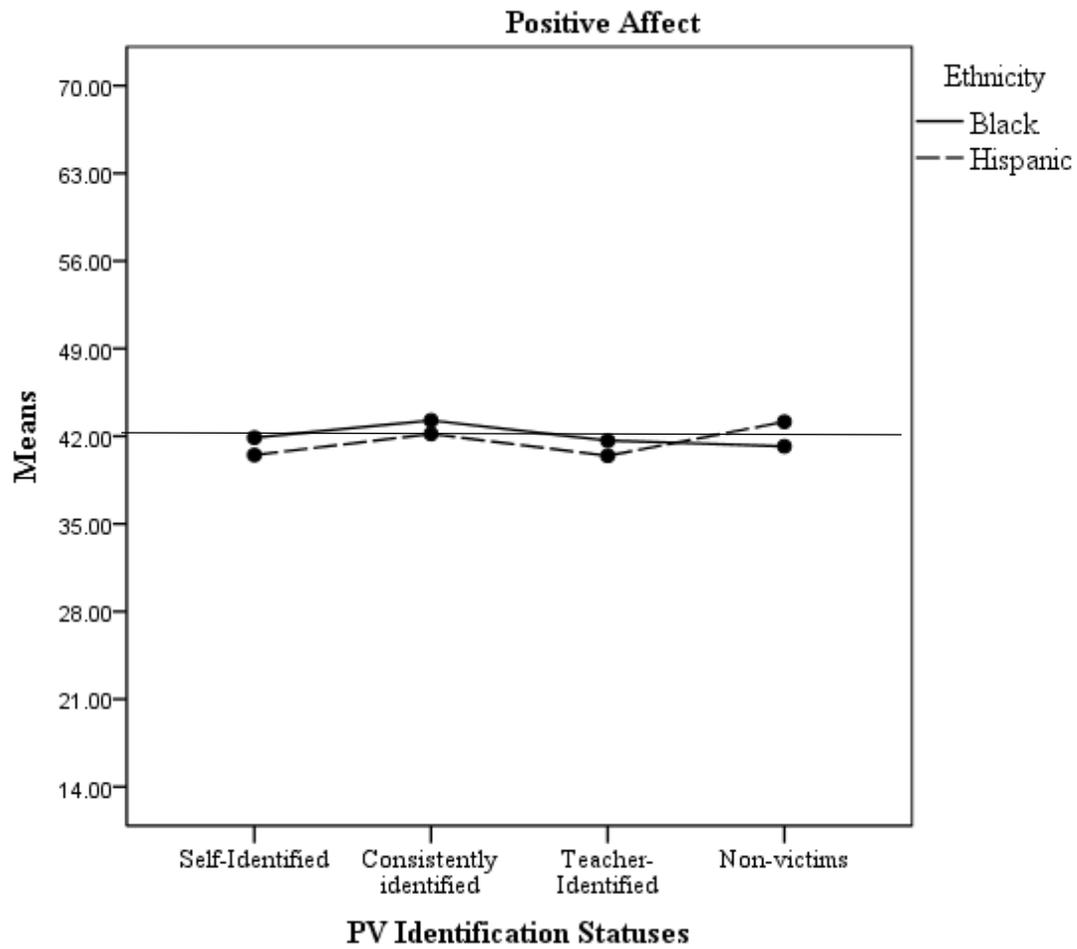
Figure 3. *Positive Affect Means by Peer Victimization Identification Statuses by Ethnicity*

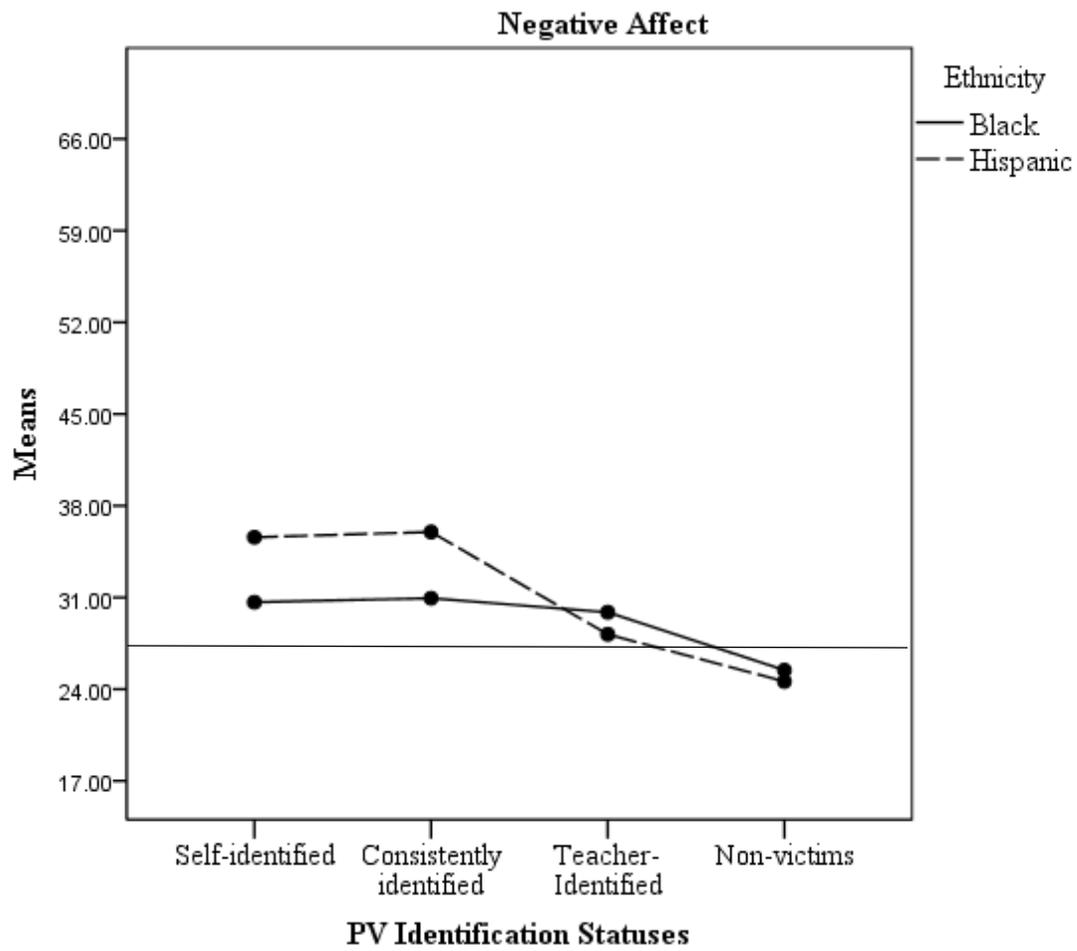
Figure 4. *Negative Affect Means by Peer Victimization Identification Statuses by Ethnicity*

Figure 5. *Aggression is Legitimate and Warranted Means by Peer Victimization Identification Statuses by Ethnicity*

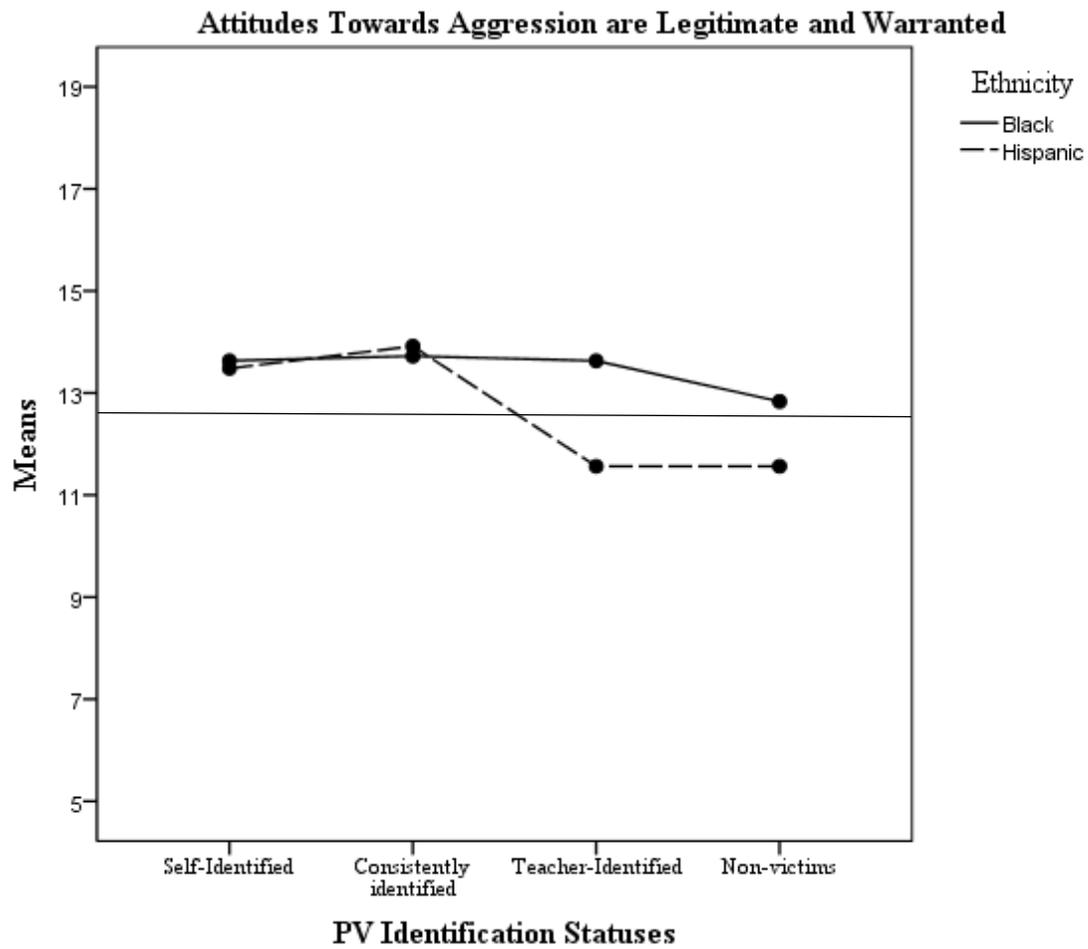


Figure 6. *Aggression Pays Means by Peer Victimization Identification Statuses by Ethnicity*