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EVALUATING THE INFLUENCE OF PARTICIPAITON IN A DIVERSE HIGH SCHOOL-BASED GROUP MENTORING PROGRAM

by

LAWANDA CUMMINGS

Under the Direction of Gabriel Kuperminc, Ph.D.

ABSTRACT

Group mentoring may offer similar supports as traditional one-on-one mentoring and a more culturally consistent forum for addressing issues of ethnicity, academic self-concept and school connectedness (Lindsay-Dennis, Cummings, McClendon, in press; Utsey, Howard & Williams, 2003). The present study investigates the development of students' ethnic identity, academic self-concept and school connectedness through participation in a school based group mentoring program within a culturally diverse high school. Employing a mixed method design and multilevel modeling analysis, both the ethnicity of the mentor and the diversity composition of each group were assessed as contributors to the mentoring process. Ethnic identity and academic self concept did not yield significant associations (p =.75 and p =.42). School connectedness yielded a significant, but negative association ($p < .05$) from participation; with multicultural students reporting significantly less connection to the school. Review of process notes maintained by mentors revealed specific group processes that may have influenced the ethnic identity, academic self-concept, and school connectedness of students; such as discussion and resolution of experiences of racism.

INDEX WORDS: Group mentoring, Adolescents, Ethnicity, School performance

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by

LAWANDA CUMMINGS

A Dissertation in Partial Fulfillment of the Requirements for the Degree of

Doctorate of Philosophy in Psychology

in the College of Arts and Sciences

Georgia State University

2010

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Lawanda Cummings

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by

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Introduction

Mentoring programs have emerged as a popular means for supporting youth. Research has been primarily focused on outcomes for one-on-one mentoring programs (Rhodes, 2001; DuBois, Holloway, Valentine & Cooper, 2002). These traditional programs have demonstrated success in promoting protective factors, lessening risk behaviors, and improving academic performance (DuBois, Holloway, Valentine & Cooper, 2002). Little attention has been given to group based mentoring programs despite their being more cost effective and potentially reaching more youth. A group mentoring approach matches a group of students to one or more mentors creating two levels of relationship of the 1) mentor to protégé and 2) the protégé to their peers (Hererra, Vang, & Gale, 2002). The limited research on group mentoring documents educational and psychosocial gains similar to one-on-one mentoring (Hererra et al., 2002).

Mentoring provides a modality to intervene with students at risk for educational and social failure. A mentoring "guide to success" is especially salient for ethnic minority students who confront cultural and social incongruence between their own values or beliefs and those of their schools and the larger society (Ogbu, 1990; Phelan, Cao, & Davidson, 1994; Cooper, Jackson, Azmitia, Lopez & Dunbar, 1995). Research has argued that group mentoring may offer similar supports as one-on-one mentoring and a more culturally consistent forum for addressing issues of ethnicity (Lindsay-Dennis, Cummings, McClendon, in press; Utsey, Howarld & Williams, 2003). Group mentoring offers a format that parallels the collective worldview found in the cultures of visible racial/ethnic groups (Utsey et al., 2003). Therefore, many students of color may be more comfortable in and better equipped to benefit from group mentoring than from one-on-one mentoring. However, limited research on group mentoring has left many

questions on the effectiveness, processes and best practices for group mentoring initiatives.

Currently, one-on-one mentoring programs have been studied more extensively than group mentoring programs. For example, several rigorous evaluations of the Big Brothers Big Sisters (BB/BS) program, a national one-on-one youth mentoring program, have documented gains for mentored youth compared to non-mentored youth in a variety of areas such as; academic performance and behaviors, family and peer relationships, and interpersonal skill development (Grossman & Tierney, 1998; Tierney, Grossman & Resch, 1995). Research indicates that mentoring is particularly beneficial for youth living in high risk situations such as single parent homes, high crime areas, and having limited economic resources (DuBois et al., 2002). For example, The Guiding Youth to Careers program emerging from the University of Pennsylvania focused on poor urban youth with various contextual risks with participants evidencing gains in protégés academic and occupational acuity (Malone, 2006). These gains were linked to mentors supporting students effort setting and meeting goals. For many urban students contextual risks are compounded with struggles associated with being from a Visible Racial/Ethnic Group (VREG) within a society that does not always value diversity or acknowledge the challenges faced by members of these groups (Cook & Helms, 1999).

Although research shows that mentoring can be an effective strategy for building resilience among youth, especially those living in conditions of high risk, there is a scarcity of available mentors relative to the numbers of youth who would benefit from having a mentor. Indeed, recent estimates suggest that there are 14.6 million adolescents are still in need of mentors (Mentoring.org, 2009, para. 4). Group mentoring offers an alternative strategy to address the mentoring gap by engaging more students with fewer mentors and resources. Group mentoring also aligns with Albee's (1969) belief that community level interventions are needed

as there will never be enough trained professionals to address the psychological needs within the population. Additionally, many members of VREGs are hesitant to utilize traditional psychological resources requiring creative methods of intervention to address threats to wellness (Albee, 1969; Caplan & Caplan, 1993). Current trends in intervention design for VREG students acknowledge a need for cultural responsiveness in program design and implementation (Lindsay-Dennis, Cummings, McClendon, in press). Group mentoring is more consistent with the group identity and socialization processes of many VREGs due its group-level focus, collective process, and integrative nature (Herrera et al., 2002; Ogbu, 1990; Utsey et al, 2003).

Studies have generally concluded that children and adolescents who receive one-on-one mentoring experience gains in their academic performance and in their relationships with parents and teachers (Rhodes, 2002). Herrera et al. (2002) pointed out that these studies have not investigated the impact of participating in group mentoring to assess and compare whether participation operates in a different way to promote other protective factors that influence students' academic and interpersonal outcomes (Lapidus, 2004; House, 2004; Hartup, 1989). Previous work with the mentoring program of interest in the current study, yielded specific gains from participation within peer and parent relationships and group (ethnic) belongingness (Lapidus, 2004; House, 2004). The diverse context of the program and past findings of increased group belongingness led to the current inquiry focused on group participation and ethnic identity development.

The present study investigates the development of students' ethnic identity, academic self-concept and school connectedness through participation in a school based group mentoring program within a culturally diverse high school. Additionally, the role of ethnic identity as a mediator of the associations of program participation with academic self concept and school

belonging will be tested. The remainder of this chapter critically reviews contemporary literature regarding youth mentoring, ethnic identity, academic self-concept, and the role of school connectedness. The current questions represent an important step in understanding and substantiating some of the positive outcomes believed to come from participation in group mentoring within the school context as well as the role of students' ethnic identity in the mentoring process. Exploring whether group mentoring can affect students' ethnic identity, academic self-concept, and school connectedness is also important because of the plethora of research that links these constructs to academic success and positive psychosocial development (Blum, 2005; Kuperminc, Blatt, & Leadbeater, 2000; Phinney & Chavira, 1992, Estela-Zarate, Bhinji & Reese, 2005; Altschul, Oyserman, & Bybee, 2006).

Mentoring

Mentoring initiatives are very popular due to the accepted belief that non-parental relationships with an adult can bolster protective factors in youth's lives and positively alter the youth's educational, occupational, and developmental trajectories (Rhodes, 1994). There are currently more than 1,700 organizations listed with the National Mentoring Database and over 500 agencies in the U.S. (DuBois, Holloway, Valentine & Cooper, 2002). Mentoring programs have various formats that include traditional one-on-one adult mentoring, cross-generational, peer mentoring, e-mentoring, and group mentoring (Sipe, 2002; Karcher, 2003; Karcher et al, 2006; Herrera, 1999). Across these formats, research has shown that supportive non-parental adult relationships have the potential to boost youth resilience and promote higher levels of efficacy (Rhodes, Bogat, Roffman, Edelman, & Galasso, 2002; Grossman & Tierney, 1998; Dondero, 1997; Rhodes, 1994).

For some adolescents, naturally occurring bonds arise from their social networks with

older, more experienced adults. These ‘natural mentors’ usually provide ongoing guidance and support to facilitate a successful transition into adulthood (Klaw, Rhodes, Fitzgerald, 2003; Rhodes & Davis, 1996). Despite gains attributed to these relationships, approximately half of all youth do not have “natural mentors” to provide significant and on-going extra-familial relationships characterized by mutual caring, commitment, and trust outside of a systemized intervention program (Zimmerman, Bigenheimer, & Behrendt, 2005). In response to this need, mentoring programs have emerged all over the U.S. to service at-risk youth in hopes of decreasing the rates of school failure, incarcerations, and risky behaviors (Mentoring.org, 2009, para. 7). The current explosion of mentoring programs has spurred empirical inquiry into the effectiveness of formal mentoring programs designed to recreate the benefits observed in natural mentoring relationships.

Historically, mentoring initiatives in the U.S. focused on saving children and adolescents from the ills associated with the industrial revolution (Baker & Maguire, 2005). These early mentoring efforts were primarily focused on white children and adolescents and did not typically include VREGs. Historically, minority adolescents and children have been mentored by adults within their communities rather than through formalized organizations focused on mentorship. These natural mentors emerged from communities that often shared a common culture and heritage with protégés. These natural links within the community have lessened as a result of dramatic changes in schools, extended family, and neighborhoods which limit time and availability for natural relationships to emerge (Scales & Leffert, 1999). These and other factors, such as the mobile nature of modern families, have been associated with fewer natural mentors and support within the immediate social structure of at-risk adolescents (Rhodes, 2001). To achieve some of the gains and protective factors associated with having a natural mentor,

formalized mentoring initiatives (including the group mentoring format) have emerged. Evaluation research on formalized programs seeks to identify whether the same positive gains seen in natural youth-adult mentoring relationships occur in these settings and to identify empirically-based best practices for these initiatives.

There are many definitions of formalized mentoring; however most include 3 main elements: 1) the mentor is someone with greater experience or wisdom than the mentee, 2) the mentor offers guidance or instruction intended to facilitate growth and development of mentees, and 3) there is an emotional bond between the mentor and mentee, in particular trust (Dubois & Karcher, 2005). These elements are central in effective mentoring although they function differently within the various approaches to mentor/protégé interactions. Research on mentoring programs allows a thorough consideration of both the advantages and disadvantages of each approach to assist practitioners and researchers develop testable theory on optimal mentoring.

Limitations of One-on-one Mentoring and Alternative Approaches

Although considered the gold standard, the literature acknowledges that one-on-one mentoring programs have a chronic shortage of quality mentors. This shortage limits the growth of these initiatives and leaves many youth that would benefit from these relationships without mentors (Rhodes, Grossman & Roffman, 2002). In addition to contributing to the mentoring gap, one-on-one mentoring programs usually have a lot of flexibility that may motivate some mentors but intimidate others. For example, one-on-one programs like BBBS may have no set curriculum or predefined goal for mentoring relationship. This requires that the mentor identify and set up activities to promote the establishment of meaningful relationship with their protégé. In contrast, most group mentoring initiatives have a built in curriculum or focus (e.g. problem behaviors). These and other reasons such as funding shortfalls, shortage of quality mentors, and high levels

of need, have inspired modified mentoring models that provide varied levels of structure and modalities of contact, including group mentoring, cross-age peer mentoring, and virtual or e-mentoring (Karcher, 2003; Sipe, 2002; Rhodes, Grossman & Roffman, 2002).

Site-based mentoring programs, like the current intervention, are the fastest growing variation of mentoring intervention because they require less time and preparation on the part of the mentor and can be tailored to the context's specific focus (i.e. wellness intervention at a clinic). Rhodes and colleagues (2002) reported that nearly half of new mentoring programs are site-based, with approximately 70% based within schools. School-based programs maximize on ready access to students due to compulsory education and the focus of schools on student development. Among the mentoring variations, school based programs primarily focus on outcomes consistent with the school context (academic, decreasing maladaptive behavior; Portwood & Ayers, 2005). Often, these programs match a teacher or counselor to students who have been identified as at-risk (Rhodes, Grossman& Roffman, 2002). School-based group mentoring programs seek to provide opportunity for more students to have a mentor by pairing a group of students with a more experienced mentor (Rhodes, Grossman & Roffman, 2002). There has been limited empirical research on school-based group mentoring to explicate group-level processes and effects of participation. These school bound programs take advantage of contextual structures such as peers and invested adults (i.e., teachers or counselors) to support student academic and psychosocial success. In theory, the group-level processes may facilitate students' identity development as members of VREGs, as academic beings, and promote their integration into the school context.

Group Mentoring

Due to its more efficacious use of resources, group mentoring has achieved recent

popularity as an alternative to one-on-one mentoring. Of the 700 programs surveyed by Public/Private Ventures, approximately 20% consider themselves to be group mentoring programs (Rhodes, Grossman & Roffman, 2002). Herrera and colleagues (2002) described substantial variation within group mentoring initiatives. Variations can be found in group sizes (spanning 2 to 32 students), in group agenda (specific development in one skill or social/activity focus), and amount of time spent in groups (6 to 14 hrs per month; Rhodes, Grossman & Roffman, 2002). Group mentoring holds a specific appeal to school and community based initiatives due to its cost effectiveness. These programs cost on average 50% less than one-on-one mentoring per child (Herrera et al., 2002). Additionally, group mentoring makes more intensive use of mentors to serve a larger number of students providing support to students that would not otherwise be reached.

Within group mentoring initiatives, there are two levels of relationships that include the protégé to their peers and the protégé to the mentor. These two levels of interactions and relational modeling have shown benefits in students' interpersonal skill development with both their peers and parents (Herrera et al, 2002; House, 2004). Hartup (1989) discussed the role of vertical and horizontal relationships in child development. He suggested that vertical relationships provide a safe and supportive relationship in which youth can learn social skills whereas horizontal relationships give youth an opportunity to use learned social skills and enhance them (Hartup, 1989). Similar to Hartup's discussion of vertical and horizontal relationships, Barrera and Prelow (2000) posited that the social support mechanisms common in interventions with youth mentoring and support groups as a mechanism for positive development. These mechanisms include the development of interpersonal skills within the program that protégés then utilize for the expansion of their social support networks beyond the

group. Greater efficacy in assessing and creating social networks increases students' potential for future success and establishes important skills that can be utilized throughout life. Higher levels of social support are associated with better health, educational, and social outcomes (Sherbourne & Stewart, 1991); therefore, group mentoring initiatives may provide a space to learn how to manage relationships.

One-on-one mentoring programs involve intense relationships between the mentor and protégé that involve emotional, tangible, and informational support. Although group mentoring programs seem to involve less intense mentor-protégé relationships and perhaps lower levels of social support between adult and youth, group mentoring also provides a support network for youth where group leaders provide informational support and individual group members provide emotional support to each other (Herrera et al, 2002). Therefore, group mentoring provides a setting where horizontal relationships occur through group member social support while vertical relationships occur through the mentoring relationship that is formed between each youth and the mentor. These two levels of relationships may facilitate similar outcomes to one-on-one mentoring programs through different mechanisms. The horizontal relationship or support group aspect may compensate for the less intense nature of the vertical mentor-protégé relationship (House, 2004). In addition, the support group provides a setting where protégés can build social networks and enhance social skills. Enhanced social skills can facilitate the development of larger social networks outside of the group enriching their opportunities for additional mentorship (Barrera & Prelow, 2000). One of the major benefits identified in Herrera et al.'s (2000) study was improvement in protégés social skills. Mentors and protégés reported helping other protégés feel better about talking to new people and working better with peers. Mentors noticed improvements in conversation ability and shyness. These improvements are thought to

emerge from interactions between peers in a safe setting with the careful intervention and direction of a mentor (Herrera et al., 2000). These skills easily translate to school, peer, and home relationships promoting a more developed network of support (Sherbourne & Stewart, 1991).

Group mentoring attracts a different type of protégé than traditional mentoring. Many youth interested in group mentoring would not usually participate in traditional mentoring but the opportunity to interact with peers increases the attractiveness of these interventions (Herrera et al., 2002). Using a group format also attracts a different type of mentor than traditional one-on-one programs. Group mentors are usually older, less educated and more likely to be from a minority group (Rhodes, Grossman & Roffman, 2002). Herrera and colleagues (2002) found that these mentors felt less capable of managing the more intense one-on-one mentoring relationship but capable of facilitating group level activities. Most school-based group mentoring initiatives have set objectives that direct activities and time with protégés providing mentors structure for mentor protégé interactions. Although the objectives are usually defined, the group mentoring approach requires mentors to manage various levels of relationship and group dynamics while promoting each student's development. Mentors' skill at managing these dynamics can potentially determine the effectiveness of groups in supporting protégés. These complicated interactions are not fully understood but they present alternative processes toward the gains documented from one-on-one programs.

Ethnicity and Group Mentoring.

Ethnic and racial identity within the development and implementation of community-based mentoring programs for minority youth has been debated as a factor in mentor selection, program effectiveness, and program process (Steele, 1997; Marin & Marin, 1991; Darling et al,

2006). Within the debate on the impact of the race of mentors on protégé development, Ogbu (1990) questions the ability of a white mentor to teach a black youth how to navigate the social and contextual landmines of racism and oppression. Brown's (2009) study of student-faculty mentoring for African American male freshmen revealed benefits to matched mentors due to a common experience. Also students indicated a discomfort in admitting difficulty to white faculty mentors in fear of confirming negative stereotypes (Brown, 2009). In contrast, Rhodes, Davis, Prescott, and Spencer (1996) found no significant effects due to the race of the mentor in a study of African American teen mothers. The prominent factor in Rhodes et al, study was the development of mutuality and trust within the mentoring relationship (1996). These contrasting findings point to a limited understanding of race and ethnicity with mentoring relationships.

Literature on matching versus cross-matching mentors and protégés has primarily focused on race and not ethnicity. Helms defines race as "a sense of group or collective identity based on one's perception that s/he share's a common heritage with a racial group (1990)." In contrast, ethnicity is defined as "one's sense of belonging to an ethnic group and the part of one's thinking, perceptions, feelings and behavior that is due to ethnic group membership" (Phinney & Rotherham, 1987). The concept of ethnicity extends beyond group membership to the integration of culture and experiences. Common ethnicity may lend relevancy to the mentor relationship for VREG youth because of shared values and experiences. Research on ethnicity matching may have been limited due to the lack of minority mentors within formalized programs; the unclear distinction between race and ethnicity in research and a lack of empirical evaluative studies that explore the function of mentor ethnicity in mentoring relationships and program outcomes (Rhodes, Grossman, & Roffman, 2002; Cokely, 2000; Herrera et al., 2002).

Some psychologists point to the potential cultural congruence that group mentoring may

have with minority students from cultures with a more collective worldview (Utsey, Howard & Williams, 2003). Utsey and colleagues (2003) used West African principles in their therapeutic group mentoring of African American boys in foster care. The utilization of collective principles and cultural values within the group sessions was effective in decreasing the incidents of maladaptive behavior among participants. Collins (2000) also discussed the cultural congruence of a group dialogue process for African American women to redefine their reality and experiences. For both mentors and protégés', "the give and take of the dialogue process makes struggling together for meaning of lived experiences itself a powerful exercise in self-definition and self-discovery (Collins, 2000, p. 136)". In this way group mentoring may have greater applicability for more culturally collectivist groups toward the promotion of students' academic self-concept, their school connectedness and positive ethnic identity development.

Ethnic Identity

VREG youth make up 33% of all youth under the age of 18 in the United States (Delgado, 2000). Students who are members of non-White ethnic or racial groups are traditionally referred to as 'minorities'. Cook and Helms (1999) challenged this conceptualization because it implies "an inescapable psychological reminder of the disempowered status of individuals who are not white" (p. 28). Additionally, the term minority becomes a misnomer in many areas where Whites are outnumbered by other groups, such as the diverse school in which this study took place. The majority of VREG youth live in urban areas across all regions of the United States, which adds another layer of risk (Delgado, 2000). These contextual factors pose psychological, developmental, and academic threats to adolescents' transition into adulthood. For urban youth, these threats include poverty, teenage pregnancy and exposure to sexually transmitted diseases, crime, obesity, and violence (Belgrave et al, 2004;

Robinson & Ward, 1991; Ward, 1996, DuBois & Rhodes, 2001). Delgado (2000) points out that these risks associated with urban living are compounded with experiences of racism and classism. These social forces increase the challenges associated with social and academic development, thereby making VREG group membership an additional risk. To combat these issues, many organizations have employed mentoring focused on students identified as 'at-risk' due to familial composition, poverty, or academic failure. These students are disproportionately from VREGs.

Ethnic Identity Development in Adolescence.

Adolescence has been documented in scholarly and popular literature as a challenging developmental period that poses new demands on youth in their transition into adulthood (Darling, 2005). For many VREG adolescents, this period can be especially daunting because it also encompasses ethnic identity formation. During adolescence, youth routinely strive to develop an identity separate from that of their parents. This developmental phase is also characterized by more intense peer relationships and disrupted parent relationships (Steinberg & Morris, 2001). Much of our identity is constructed though our interactions with others and the context, therefore these relational processes can significantly impact on how VREG youth come to understand their ethnic identity. Mentoring programs can contribute to this self-discovery process with non-related caring adults providing guidance and support throughout adolescents' identity development. Mentoring relationships add another source of support, socialization, and a vehicle for understanding their place within the larger society.

Erikson (1968), a prominent theorist in developmental research, emphasized the social context of psychological development. He conceptualized psychological development as a result of the interaction between biological needs, societal demands and social forces encountered in

the developing person's life. During adolescence, Erickson's model focused on the psychosocial crisis of identity versus identity diffusion. Adolescence is a period during which the developing person establishes a sense of personal identity beyond the family unit. According to Erikson, adolescents must find the answers to the following questions: Where do I come from? Who am I? What do I want to become? These questions address origin, which for adolescents from VREGs include values and traditions that are different from mainstream culture.

Building upon Erikson's work, James Marcia (1966) developed a status approach for understanding identity development in adolescents. Marcia identified patterns and common issues that emerge while exploring adolescent identity. According to Marcia, important decisions are made during adolescence about future occupations, political ideologies, and religious beliefs. Addressing questions about their personal identity facilitates understanding of how young people "fit" into the world. Both Erickson and Marcia's progressive models allude to the importance of contextual features and culture, but there is not an explicit acknowledgement of an ethnic identity development process (Phinney, 1990).

Phinney (1989) builds on Marcia's work by focusing specifically on ethnic identity in adolescents and adults. Robinson and Howard-Hamilton (2000) defined ethnicity as groups of individuals that share a common culture, nationality, history, or religion. Culture has a variety of meanings but generally encompasses shared meaning and patterns of society that are transmitted through generations (Betancourt & Lopez, 1993). Phinney's (1989) model for ethnic identity included an unexamined ethnic identity, an ethnic identity search, and an achieved (committed) ethnic identity. Within the *unexamined ethnic identity*, the developing person has not encountered ethnic identity issues due to either endorsement of the majority culture values, a lack of interest in ethnic identity, or absorbed positive values from family for their group without

realizing the incongruence with majority culture (Phinney, 1990). E*thnic identity search*, is characterized by active exploration of one's personal ethnic identity. This active exploration is a response to a significant event that brings their membership to an ethnic group to the forefront. Active search processes many times include immersion into one's culture through activities such as reading, participation in cultural tradition, and visiting historical/cultural museums. A*chieved ethnic identity* includes an internalization of one's membership in an ethnic group. For ethnic minorities, this may require the developing person to come to terms with cultural differences between their group and the majority culture, and the lower status of their group within the larger society (Phinney, Lochner & Murphy, 1990). Many behavioral scientists view these phases as unfolding on a continuum where people continually make adjustments in their conceptualizations of themselves as ethnic beings throughout the lifespan (Cross, Parham & Helms, 1991). Within the current study, ethnicity identity is measured to assess gains in positive ethnic identity development over the span of the intervention.

A positive ethnic identity is especially salient due to societal and systemic barriers that threaten the educational, relational, and psychological development of adolescents who are VREGs and from disadvantaged backgrounds (Sipe, 2002; Herrera et al., 2002). Succumbing to contextual risks can constrain adolescents' educational and occupational trajectories into adulthood by limiting their access to post secondary education opportunities and increasing the likelihood of imprisonment, and early parenthood (Belgraves, 2004; Lindsay-Dennis, Cummings & McClendon, in press). Recent research and intervention development to address this specific developmental phase has sought to understand and employ empirically sound mentoring methodologies as a means to boost protective factors and resiliency for contextual risk factors routinely experienced by VREG students within urban schools (Lindsay-Dennis et al., in press;

McClendon & Cummings, March 2009). Research that investigates the role of ethnic identity and culture in the mentoring process is needed to develop best practices for mentoring VREG students in a culturally conscious manner.

Academic Self-Concept

A major milestone during adolescence is the completion of high school. High school completion can have long reaching impact on students' academic and occupational opportunities. Unfortunately, there are many contextual factors that impact the psychosocial and academic development of VREGs. For example, African American youth are four times more likely to live in poverty which is associated with school failure and twice as likely to drop out of high school as their white counterparts. Additionally, African Americans score lower in math and standardized tests than their white and Latino counterparts and African Americans 16 years or older more likely to be unemployed regardless of their educational level (National Center for Educational Statistics, 2008). In light of these trends, the successful academic matriculation of students has become a national agenda. To support student achievement and matriculation, over 70% of new site-based mentoring programs have emerged in school-contexts (Rhodes, Grossman & Roffman, 2002). These programs are usually geared specifically to the goals and objectives of the academic context they are embedded in. A major focus of most youth mentoring initiatives within schools is academic achievement. These programs primarily match students with teachers, older students, or other adults with weekly activities to support their academic progression (e.g., tutoring; Rhodes, Grossman & Roffman, 2002). These efforts acknowledge that the school context is a place where many students develop significant positive relationships with non-familial adults with contextual goals centered on academics. Within the educational psychology literature, many researchers have substantiated the relationship between student performance and

their concept of themselves as learners (Middleton & Midgley, 1997; Elliot & Harackiewicz, 1996). Pajares, Britner and Valiantes (2000) investigated the role of academic achievement motivation, goals, and gender for middle school students (N=778) in their writing and science efficacy. They found that task goals (mastery goals) were positively associated with self efficacy, self concept, and self regulation. The increase in capacity to self-regulate in the school environment was associated with positive outcomes (Pajares et al., 2000). Overall, Pajares et al. substantiated prior findings that academic self-concept and achievement have a reciprocal relationship (i.e. low self-concept was highly predictive of low academic performance).

Valentine, DuBois and Cooper (2004) conducted a meta-analysis on the relationship between students' self beliefs and their academic achievement. Across the included studies, Valentine and colleagues found positive academic outcomes were moderately predictive of students' academic self concept. The reciprocal relationship between academic self-concept and academic achievement is acknowledged, but the research points to a developmental path where academic achievement informs the development of an academic self-concept (Valentine et al., 2005; Guay, Marsh, & Boivin, 2003). Guay, Marsh and Boivin (2003) worked to clarify the relationship between academic achievement and academic self-concept to see which developmentally preceded the other. Their longitudinal study of 2nd to 4th grades (N=387) from 10 French Canadian elementary schools revealed that through academic experiences, students developed a positive or negative academic self-concept. During this early developmental period for academic self concept, experiences of school success and mastery were integral in their assessment of school and their capacity as a student. These constructs then appear to function in a reciprocal relationship from late elementary school through adolescence. School-based mentoring initiatives can target students' academic potential through academic support or

boosting students' self-concept as learners through peer and mentor support.

Within Phelan, Cao and Davidson's (1994) research on high school youth, they discussed the fact that many VREG students negotiate the boundaries between multiple worlds. Their Multiple Worlds Framework focuses on the processes of movement between their family, peer, and school worlds. Learning to transition between these worlds during adolescence is imperative for academic and social success (Phelan et al., 1994). Within this model, four categories emerged: 1) Congruent worlds/smooth transition, 2) Different worlds/border crossing managed, 3) Different worlds/ border crossing difficult, and 4) Different worlds/border crossing resisted. Minority students usually fall within the last three categories as their cultures are not usually parallel with mainstream. The level of proficiency that students had in transitioning between these worlds was predictive of their academic success and school connectedness (Phelan et al., 1994; Blum; 2005). High achieving minority students learn to navigate these worlds but many times at a cost to their personal and ethnic identities (Phelan et al., 1994). Group mentoring offers a way to support students with varying skill in making these transitions by enhancing their capacity to navigate their family, peer, and school worlds (House, 2004; Phelan et al., 1994; Herrera et al, 2002) while supporting their personal and ethnic identity (Lapidus, 2004).

Research supports gains for school-based programs that target both academic self-concept and increased academic support to promote student success. With older students either approach can increase student performance and their positive exchanges with the school context (Valentine et al., 2005). Group mentoring also creates a network of peers that can assist in navigating school requirements and a structure of accountability within the school context. The benefits of improved academic self-concept and performance are far reaching, allowing greater

access to educational and occupational opportunities during and after high school. Recent research has also identified school connectedness and ethnic identity as promoters of academic success for Latino/a and African American students further substantiating a connection between these constructs that needs further investigation (Estela-Zarata, Bhimji, Reese, 2005; Altschul, Oyserman, Bybee, 2006). Group mentoring offers a modality to promote development in all three of these domains to promote student success.

School Connectedness

The school context is second only to family as a stabilizing force in adolescents' lives (Blum, 2005; McNeeley, Nonemaker, & Blum, 2002). There is an apparent value of connections within the school environment to adolescents' social and academic development. Blum's (2005) specified four criteria for students feeling connected that included the following: 1) high academic rigor and expectations, 2) support of learning, 3) positive adult-student relationships, and 4) physical and emotional safety. School connectedness is defined by Blum and Libbey (2004) as "the belief by students that adults in the school care about their learning and about them as individuals (p.230)." As a construct, school connected has been studied across multiple disciplines concerned with adolescent development as a predictor of health outcomes, educational attainment, and psychological functioning to name a few. Research in school connectedness shows seven factors that influence students' positive attachment to school: 1) having a sense of belonging and being a part of school, 2) liking school, 3) perceiving teachers/adults in school as supportive and caring, 4) having a good friend within school, 5) being engaged in their current and future academics, 6) believing that discipline in the school is fair and effective, and 7) participating in extracurricular activities (Battistich & Hon, 1997; Blum, 2005; Committee on Increasing High School Students' Engagement and Motivation to

Learn, 2004, Fin & Rock, 1993, Voelkl, 1995,). All of the factors associated with higher levels of school connectedness are highly predictive of school success. House, Kuperminc and Block-Lapidus (2005) found that group mentoring can promote a sense of school belonging for youth when youth perceive a positive relationship with the mentor and mutual support from group members. Karcher, Davis, and Powell's (2002) research on mentoring and connectedness further substantiated the benefits that come from mentoring relationships in promoting school connectedness and social skills among middle and high school students. His premise was that mentoring can promote social bonding and a sense of belonging that helps students connect to themselves, others, and the larger society (Karcher, 2001). Karcher's (2001) framework of adolescent connectedness shows that these types of connections can be generalized and assist students in their social and academic goals.

The school context is a critical venue for adolescent development beyond knowledge acquisition. Non-academic aspects of school (i.e. social interactions) are significant contributors to both school and student success (Blum, 2005). There are multiple strategies given to increase student attachment to the school through inclusion of parents, having high academic standards, and supporting teachers. One strategy within Blum's (2005) report was the development of at least one positive relationship with an adult at the school. He emphasized that this adult could be a teacher, a staff person, or a volunteer from the community. This relationship with a non-familial adult could increase school connectedness, model self-regulatory behaviors (aiding in behavior problems), and boost psychosocial skills (aiding in relationship maintenance with peers, family, and school personnel; Blum, 2005, Herrera et al., 2002, Rhodes et al, 2000). All these non-academic skills are imperative for successful navigation through school and navigating across students' multiple worlds (Phelan et al., 1994). Rhodes et al. (2000) further clarified the

role that mentoring can have on the student academic progression with mentors functioning as agents of change. By developing a relationship characterized by mutuality, consistency, and a commitment of time (6 months to a year); positive relationships can positively influence student academic and psychosocial outcomes (Grossman & Rhodes, 2002, Rhodes, 2002).

Questions and Hypotheses

Based on this review of the literature, the present study is designed to investigate the influence of group level diversity and the ethnicity of the mentor on student ethnic identity development, academic self-concept and school connectedness. Additionally, the function of participation in a school-based group mentoring program on students' ethnic identity, academic self-concept, and school connectedness were assessed. The role of ethnic identity was explored to identify the mechanism by which it affects academic and school level variables. Lastly, to more fully understand the group process and ethnic identity development, an exploratory qualitative analysis of different group compositions was conducted. The following questions were addressed in this study:

1. Does the ethnic composition of groups and the ethnicity of the facilitating mentor influence student ethnic identity development differently across nested groups?
    a. It was hypothesized that increases in ethnic identity would be observed among youth who participate in groups characterized by the presence of high levels of cultural diversity and facilitated by ethnic minority mentors.
2. Does participation in a school-based group mentoring program predict the development of students' ethnic identity, academic self concept and school connectedness in high school students?
    a. It was hypothesized that participants in group mentoring would experience gains

in academic self-concept, school connectedness and a positive ethnic identity relative to a demographically matched comparison group.

3. Does participation in group mentoring contribute to school connectedness and academic self-concept via its effects on ethnic identity development?
    a. It was hypothesized that ethnic identity would mediate the associations of participation in group mentoring with academic self concept and school connectedness.

Method

Setting

The Youth Development Program (YDP) took place in an urban school that is one of the most diverse schools in Georgia with students from more than 50 counties in Africa, Europe, South and Central America and Asia. The majority of students are from VREGs with approximately 1 in 4 students enrolled in English for speakers of other languages (ESOL) classes. The school population is largely Latino (59%) and African American (23%) with a smaller representation of Asian, (12%) and multiracial (2%) students. Students eligible for free or reduced lunch constitute 68% of the overall student population. Latino and African American students experience school failure and dropout at disproportionately high rates with, for example, these two groups making up 91% of the dropouts for the 2005-2006 school years. With the multiple risk factors of low SES, limited opportunities within the urban context, and minority status; mentoring initiatives like YDP seek to address the psychosocial needs of students beyond academics and increase student capacity to navigate the school context and pursue additional academic and occupational opportunities.

Program Description

YDP is a school-based group mentoring program that emerged from a partnership between an urban university and a high school. This partnership was initiated by school administrators concerned about the development of recently immigrated students and their need for additional support in navigating a new culture and school environment. The focus of YDP was primarily on psychosocial development rather than academics. Through this partnership, undergraduate psychology students function as mentors to small groups of high school students. Each mentor applied through the psychology department's practicum placement program to earn

applied credits toward their degree. Mentors met weekly within normal school operating hours for a full academic year[1].

An advanced psychology class on understanding and using appropriate interpersonal skills was a prerequisite for enrolling in this practicum. These skills included active listening, conflict resolution, self-awareness (reflective processes) and basic relationship theory. Students that met this prerequisite were interviewed by at least 2 team members to assess their fit to the program. Selected students were then required to attend pre-training with program faculty and graduate supervisors. This pre-training focused on ethical considerations in working with youth, strategies for initiating and maintaining healthy relationships with students, and ways to incorporate protégés needs and desires in group processes (Sipe, 1992; Herrera et al., 2000; Tierney & Branch, 1992; Rhodes, 2005). Mentors were exposed to relevant literature about the potential of close relationships to help or hinder students depending on consistency and dedication of mentors (Grossman & Rhodes, 2002). Activities and role play were used to train mentors to utilize a flexible, consistent, and fun approach for relating to protégés (Sipe, 2002). To further the potential of forming close relationships with protégés, mentors learned how to promote a safe environment for all protégés by establishing the expectation for group confidentiality, and through the creation of group rules with protégés. Also mentors learned and communicated to students the limits of confidentiality (i.e., mentors are required to report any intent of students to harm themselves or others and mentors are required to disclose group processes and concerns to their supervisors).

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[1] In a few cases new groups were formed in the spring semester of an academic year at the request of school personnel. These groups that met for only 1 semester were excluded from the present analysis.

Mentors were taught best practices for mentoring with the anticipation that they would create or modify provided activities to address the specific needs of their groups (Elements of Effective Mentoring, 2010). In this way, mentors had ownership of information presented and the freedom to be genuine in the group. This strategy also deliberately included protégés in the process of determining group discussion topics and activities. The goal of facilitating this level of flexibility and responsiveness to protégés in groups was to promote the development of close, meaningful relationships.

Mentors were given a list of students who were nominated by teachers and guidance counselors in the school from which their group members could be selected. Single gendered groups were formulated with the intention of creating safe environments for discussion and exploration of salient topics to participating students. Mentors approached the identified students and invited them to join their group. Once groups were formed, mentors received on-site supervision each week before and after their meeting with a psychology doctoral student. Mentors also received off-site supervision with an assigned doctoral student supervisor for approximately 1 hour per week. These meetings were usually conducted with another undergraduate mentor to facilitate sharing and a group learning process. Throughout the year, mentors and staff met for on-going training support, and review of the mentoring process.

To assist in the supervision process, mentors were required to keep weekly records of the group mentoring process and their personal experiences as a facilitator. These records were also used to assess growth within the groups over time and as a source of data for program evaluation. Groups were reflective of the diversity of host school and students were matched according to interest and specifications of mentors.

Participants

Recruitment. Program participants were recruited through teacher and counseling center referrals. Undergraduate mentors specified characteristics of the type of group they would be interested in working with and the information was given to teachers to elicit referrals. Mentors typically decided on characteristics such as gender, ethnicity, grade level, interests, and specific challenges such as academic or behavioral risk. Careful consideration was given to ensure that no groups were comprised of highly aggressive youth to combat iatrogenic effects as suggested by Dishion and colleagues (1999). Once teacher referral lists were obtained, mentors visited potential protégés, gave them a brief description of the program, and conducted a brief interview.

Interested students were asked to return a signed parent consent form and sign a student assent form. Recruitment for comparison students was conducted in English classes as all grades are represented as well as varying levels of academic ability. Investigators visited classrooms, gave a description of the study, and distributed parent consent forms. The study only included students who returned signed parent consent forms and signed a student assent form

Sample. The final sample included 152 students (102 participants and 50 comparison students). The participant group came from the 2001-2002, and 2002-2003, 2003-2004, and 2004-2005 school years and the comparison group came from the 2002-2003, 2003-2004, and 2004-2005 school years. Each student participated in a full year mentoring program. Out of the 23 groups, 4 individual groups were purposively selected for qualitative inquiry into group processes related to ethnic identity development. The procedure for selecting groups for qualitative analysis is described below. Group process characteristics were extracted through review of mentors' weekly progress notes.

Program Implementation

Group sessions occurred during the school day for approximately 1 hour. Mentors came to school 30 minutes prior to sessions to meet with an onsite supervisor to review their plans for group and to ensure that required resources are available for their planned activities. Protégés met primarily in a conference room in the school library with on-site supervisors readily available. At the conclusion of each session, mentors met with the on-site supervisor to discuss and review what happened in the group. Mentors were required to fill out a process notes form for their on campus supervision the following week. Activities and discussion topics were primarily drawn from student suggestions but all reviewed groups covered diversity issues (e.g., group membership, discrimination), communication skills (e.g., peers and parents), future goals (e.g., college and career), high risk behaviors (e.g., sexual activity, drugs), and school related concerns (e.g., academic performance, challenges with curriculum).

Design and Procedure

This mixed method study used both quantitative and qualitative data sources. The quantitative component of the study utilized pre-post survey data collected from participating and comparison students on ethnic identity, academic self-concept, and school connectedness. The qualitative component utilized quantitative findings to purposefully select four groups for review of the process notes kept by mentors to assess group process and focus on ethnic identity. This method allowed the researcher to use qualitative data to explain quantitative findings from an interpretivist-positivist paradigm. This positivist paradigm aims to evaluate objectively the social world while the interpretivist strives to understand individual and group meanings ascribed to experiences (Creswell, 2003). This combined approach sought to maximize the strengths of both the positivist and interpretivist approaches.

Quantitative data

A pre-post test design with a nonequivalent comparison group was employed to test the effects of participation on ethnic identity development, academic self concept and school connectedness. Program participants and comparison participants were asked to participate in the study at the start of program implementation about one month after the start of the school year (September) and at program exit during the last 2 to 3 weeks of the school year (May). The current study focused on students that received a full academic year of mentoring with pre-post assessments to quantify changes in ethnic identity, academic self-concept, and school connectedness. Questionnaires were administered by trained graduate and undergraduate research assistants and took approximately 30 to 45 minutes to complete. Mentors were not involved in data collection and questionnaires included identification numbers to ensure confidentiality of participants' responses. Participants were reminded that only investigators would have access to their responses. Snacks were given to participants in appreciation for their participation.

Measures

Participants in the study completed several self-report scales designed to assess program effects on ethnic identity, academic self-concept and school connectedness. The comparison group received an identical battery of scales with the exception of 2 measures that assessed relational experiences participants had with the mentors and their mentoring group.

Background Information. Students completed a brief informational questionnaire indicating their ethnic group, sex, grade level in school, and whether or not they were born in the US. These individual characteristics were reviewed to ensure that participants and comparison students were matched.

School Connectedness. Students completed the *Psychological Sense of School Membership* (PSSM) scale (Goodenow, 1993). The PSSM includes 18 items that measure feelings of inclusion, respect, sense of acceptance, and encouragement for participation. Using a 4-point Likert scale (1=not at all true to 4=very true), students rated statements like "*Other students in this school take my opinions seriously*." Item scores are averaged to obtain a total school connectedness score. Research has linked school connectedness to self reports of school motivation providing support for the validity of the scale (Poyrazli, Ferrer-Wreder, Meiser, Forthun, Coatsword & Grahame, 2008). This scale has shown internal consistency with alphas ranging from .71 to .88 for middle school youth and .88 for high school youth (Goodenow, 1993; Hagborg, 1994). Students with a greater sense of school membership were more motivated, had a more positive self-concept, expressed greater school satisfactions, had more positive relationships with teachers and performed better academically (Hagborg, 1994; Blum, 2005). For the current sample, the internal consistency of this scale was stable with alphas at pretest of .79 and at posttest .82.

*Academic Self-Concept***.** Students completed an adapted 5-item scale derived from Harter's (1988) *Self-Perception Profile for Adolescents* (SPPA) scale that measures students self perceived scholastic capacity. Example items include: *"I feel I am just as smart as others my age"* and *" I do very well at my class work."* A 4-point likert scale was utilized in this modified measure with 1= Not at all true to 4=Very true. This scale has shown internal consistency with an alpha of .75 for high school populations (Kuperminc, Darnell, & Alverez-Jimenez, 2008). Consistent with prior research on this sample, the alphas at pretest were .72 and at posttest were .74.

Ethnic Identity. Students completed the 14-item *Multigroup Ethnic Identity Measure*

(MEIM) that measures two factors: 1) ethnic identity search and 2) affirmation, belonging and commitment to your identified group (Phinney, 1992). There are 3 subscales within the measure that assess: 1) sense belonging and feelings toward one's ethnic group, 2) one's ethnic behaviors and customs, and 3) achievement of ethnic identity through exploration and commitment. Scale items include statements like "*I feel a strong attachment towards my own ethnic group*" and "*I am happy that I am a member of the group I belong to*." Each statement is rated on a 4-point scale (1=strongly disagree to 4=strongly agree). A total score was calculated by first reverse scoring negative items, then averaging across all 14 items. This scale has been used with ethnically diverse groups of high school students with alphas over .80 (Phinney, 1992; Phinney, Ferguson, & Tate, 1997). The internal consistency for this scale with the current sample was stable with alphas for pretest and posttest of .78 and .83 respectively.

Group Diversity Composition. Each group received a score that reflected the level of diversity within each group. Students reported their ethnicity in an open-ended question within the background information section of the questionnaires. Students' answers were re-coded into six categories (Black/African decent, Latino, White, Asian, Multiracial, Unknown). This reclassification of race grouped students with distinct cultural differences into one category within this particular school due to the high percentage of international students (e.g., Somali and African American students were both coded as Black). For students with missing ethnicity data, review of the process notes that documented group activities helped ascertain student ethnicity. Students with no additional ethnicity information were categorized as Unknown (N=7). Group diversity was calculated as a ratio of the number of ethnicities represented in a group and the total number of group members, as shown in equation 1. For example, the diversity score for a group with four white students and one African American would consist of 2 groups and 4

students and a diversity score of .33. Each member of the group received the group diversity score for subsequent analysis.[2]

EQUATION 1: GROUP DIVERSITY SCORE

$$\text{Group Diversity Score} = \frac{N_{\text{ethnic groups}} - 1}{N_{\text{individuals in group}} - 1}$$

Mentor Ethnicity. Within the initial study, the ethnicity of the mentor was not a focus so they were not directly asked their ethnic group membership so very little information was available about mentors' ethnicity. For the current study mentors were assigned to either a white or ethnic category. Approximately 74% of the mentors were members of an ethnic group (N = 17). The majority of groups included 3 or more ethnicities within the protégés (*N*= 19). Of the 3 groups with ethnically homogeneous groups, two were facilitated by mentors to address needs specific to the populations targeted by an ethnically matched mentor (e.g., a group of Bosnian refugee youth facilitated by a mentor who was herself a Bosnian refugee).

Qualitative Data

The qualitative component of this study used an instrumental case study design that involves systematic investigation of a few cases to understand group process (Bless & Higson-Smith, 1995). Within this mixed method research design; the quantitative findings informed the selection of cases and the direction of inquiry.

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[2] Both the numerator and denominator were rescaled by subtracting 1 from the total; this reduced the effect of group size on the estimate of group diversity (e.g., without doing this, a group with only 2 members would have a minimum diversity score of .5 even if only 1 ethnic group was represented).

Inclusion criteria. Four groups were selected for further inquiry to review group processes in regards to ethnic identity development and ethnic identity's relation to academic self-concept and school connectedness. Groups were selected on the basis of two criteria; 1) the match between the mentor's and protégés' ethnicity (same or cross-matched), and 2) the level of diversity within the group (highest and lowest). A group of all white females was also included as a basis of comparison of the inclusion of ethnic identity issues within group processes. Description of the group composition and mentor ethnicity for selected groups are listed in Table 1. The names of mentors were changed to preserve confidentiality. These four groups span three different program years, but comparison across groups yielded no cohort effects.

TABLE 1

GROUP COMPOSITION FOR QUALITATIVE REVIEW

Name	Mentor Ethnicity	Group Composition	Description	Diversity Level
Laura	White Female	7W	Girls group: Same Race	Lowest
Bob	White Male	6B	Boys group: Cross Race	Low (ethnic)
Carla	African American Female	8B	Girls group: Same Race	Low (ethnic)
Gina	Asian American	1W, 3B, 1A, 1M	Boys group	Highest

Note. Gina's group is neither cross nor same matched due to the diversity of her group.

Document Review Procedures. Weekly process notes were maintained by each mentor to document group activities, discussion topics, emergent issues and overall group progress. Mentors filled out a form for each one hour meeting with the students and these documents were used for by supervisors to provide support and assistance. Process note forms were standardize with two distinct sections; pre-meeting (information about planned activity and mentor

readiness) and post-meeting (description of group session, student responsiveness to activity, mentors' rating of feeling like a teacher, parent, or friend, and the groups cultural focus). The forms for the included groups (N = 76) were reviewed and coded for five types of ethnic identity exploration; 1) discrimination/racism experiences, 2) coping strategies for discrimination/racism, 3) cultural norms of group membership, 4) importance of group membership, and 5) multiculturalism. Some forms were missing and groups with documentation were assessed and counted in the percentage of group time focused on ethnic identity development.

Results

The focus of the present study was the YDP program's influence on student's ethnic identity, academic self concept and school connectedness. Analysis focused on assessing change from pre- to post-test (fall and spring). Additional mid-year assessments were excluded from the analyses because of the study's longitudinal focus. Only participants that received the full year intervention were included. Due to the nested nature of the YDP data and the proposed hypothesis of individual and group level effects, multilevel models were employed to control for the non-independence of assessments of dependent variables. Additional qualitative analyses were conducted to understand aspects of the group mentoring process that may have informed students' ethnic identity development through program sessions.

Quantitative Analysis

Preliminary Analysis

Using SPSS software, descriptive statistics were run to check the data set for errors such as outliers, minimum and maximum values, and excessive missing cases (Pallant, 2001). The data were then checked for assumptions of normality using histograms and measures of skew and kurtosis. No violations of multivariate assumptions were found.

Descriptive statistics

Analysis of descriptive data for participants and comparison students revealed that they were matched on grade level, diversity, and gender representation. Frequencies for descriptive information (e.g. gender, ethnicity) are reported for both the participants and comparison groups in Table 2. Participant and comparison scores on pre and post tests for ethnic identity, academic self-concept, and school connectedness are reported in Table 3. Pretest and posttest scores and

distribution for participants and comparison were very similar for ethnic identity academic self-concept, and school connectedness with stable scores. There were no significant differences found in pretest and post test scores on outcomes variables across grade levels and ethnic group categorizations.

TABLE 2

DESCRIPTIVE INFORMATION FOR PROGRAM AND COMPARISON STUDENTS

		Program Participants (*N*=102)	Comparison Students (*N*=50)
Gender	Male	38	25
	Female	64	25
Student Ethnicity	Black	38	26
	Latino	29	11
	White	14	4
	Asian	12	8
	Multiracial	2	1
	Unknown	7	--
Grade	9th	17	9
	10th	47	22
	11th	28	11
	12th	9	8

Note. Only students that participated at least 1 school year and had pre and post tests were included in the sample.

TABLE 3

ETHNIC IDENTITY, ACADEMIC SELF-CONCEPT, AND SCHOOL CONNECTEDNESS PRE AND POST-TEST SCORES FOR PARTICIPANT AND COMPARISON STUDENTS

		Program Participants (*N* = 102)	Comparison Students (*N*=50)
Ethnic Identity (MEIM)	Pre	3.03(.49)	3.08 (.44)
	Post	2.98 (.55)	3.03 (.54)
Academic Self Concept (SPPA)	Pre	3.16(.58)	3.20(.51)
	Post	3.21(.58)	3.11(.57)
School Connectedness (PSSM)	Pre	3.07 (.47)	2.96 (.47)
	Post	2.99 (.46)	3.00 (.48)

Note. Scores are the group mean with standard deviation in parenthesis.

Tests of Group-level Differences

Multilevel analyses were conducted to test hypotheses for group membership effects on students' ethnic identity, academic self concept, and school connectedness. Using Bauer, Serba and Hallfors (2008) model for partially nested analysis, the overall participation effects were tested as well as whether participants in groups became more similar to one another. For example, everyone in one group may focus more on ethnic identity because the mentor is ethnic, while another group remains the same. The individuals in the first group may become more like one another due to exposure and focus; therefore, their answers (i.e., scores) may be more similar. This approach also allows the inclusion of contextual variables (e.g. group diversity composition) may influence the predicted outcomes. To assess whether there are significant differences between nested groups, multilevel models assess the homogeneity of findings for

participant groups and comparisons. MLM modeling accounted for individual (level one) and group level variables (level two) to assess the differential effect of being in a group on students' reports of ethnic identity, academic self-concept, and school connectedness. Each comparison student was treated as a group of one for modeling purposes (Bauer et al., 2008).

Using SPSS, the multilevel modeling accommodates potential differences within each group by allowing multiple slopes and intercepts. Data analysis includes a gradual integration of new model features (adding new variables or fixed versus random variables) to assess improvement in the overall predictive model.

Using SPSS, each model was tested with random and fixed variable parameters and variance component structure for random effects. The variance component structure assumes that all random effects are independent. An initial analysis was run without any predictors to assess the intracluster correlation coefficient (ICC) for the variables of interest (see Equation 2). Within model 1, participation was included as the primary predictor of ethnic identity. Heteroscedasticity was tested across the groups revealing no significant difference between the groups. The second model extended the model 1 to include additional level one covariates assess across both conditions (e.g., gender and ethnicity of the protégé). Finally, model 3 extends model 2 by including group level variables (e.g., group diversity quotient and mentor ethnicity: level 2 variables) that are only applicable to the treatment condition. This level of analysis teases apart the individual and group level effects of participation (Bauer et al, 2008). See Tables 4-6.

EQUATION 2: INTRACLUSTER CORRELATION COEFFICIENT

$$\text{ICC} = \frac{\sigma_{\text{between groups}}}{\sigma_{\text{between groups}} + \sigma_{\text{within groups}}}$$

Hypothesis one

The first hypothesis of the current study predicted effects due to the ethnicity of the mentor and the diversity composition of the group on the development of students' ethnic identity. Model 1 controlled for ethnicity pretest and tested the effect of program participation without any significant associations identified. Within model 2, student gender and ethnicity were added as covariates. Neither of these variables yielded a significant association with ethnic identity development. Model 3 included group diversity composition and the ethnicity of the mentor as level 2 variables. The predicted associations of these group level variables were not substantiated for ethnic identity development (see Table 4).

Hypothesis two

The second hypothesis posited that students that participated in the school-based mentoring program would report more positive academic self-concept, school connectedness, and ethnic identity. Model 1 controlled for pretest and assessed the effect of participation. No significant associations were identified within this model. Within model 2, gender and student ethnicity were added as covariates. For school connectedness, multiracial students had significantly lower scores than students in other ethnic groups. Student participation in the program yielded a trend for significantly lower levels of school connectedness (see Table 6; model 2). Within the final model, group diversity composition and the ethnicity of the mentor were added to assess the impact of these level 2 variables on outcome variables. A negative estimate emerged for school connectedness of multiracial students (see Table 6, model 3). With individual ethnicity, group diversity, and mentor ethnicity included in the model, there was a significant association of program participation with school connectedness; unexpectedly,

however, YDP participants reported declines in school connectedness relative to comparison students.

For academic self-concept, the multilevel model did not converge. The intraclass correlation coefficient for academic self-concept was ICC = .03, revealing a negligible amount of between group variance. Subsequent analysis treated cases as independent data points for nested and comparison students. Model 2 and 3, did not yield significant associations for covariates or group level variables (see Table 5). Thus, the hypothesis that group participation would contribute to increases in academic self-concept was not supported.

Hypothesis three

The third hypotheses focused on understanding the role of ethnic identity in students' development in academic self-concept and school connectedness. Because a significant association between program participation and ethnic identity was not substantiated, the mediating role of ethnic identity was not examined. Instead, the role of ethnic identity was further investigated within the qualitative component of this study to explore group processes that that influence the ethnic identity development of participating students.

TABLE 4

ESTIMATES OF YDP EFFECTS ON ETHNIC IDENTITY

	Model 1	Model 2	Model 3
Fixed Effects			
Intercept	1.21 (.25)*	1.14 (.31)*	1.08 (.32)*
Sex (Male = 1, Female = 2)		.08 (.09)	.09 (.09)
Ethnic Identity (Pretest)	.59 (.08)*	.58 (.08)*	.59 (.08)*
YDP Participant	-.03 (.08)	-.01 (.09)	-.09 (.13)
Participant Ethnicity			
Black		.09 (.20)	.12 (.22)
Latino		.05 (.20)	.08 (.22)
White		-.16 (.22)	-.14 (.23)
Asian		.16 (.22)	.19 (.24)
Multiracial		-.10 (.33)	-.09 (.34)
Group – Group Diversity			.32 (.29)
Group – Mentor Ethnicity			-.01 (.16)
Variance Components			
Level 1	.21 (.03)*	.20 (.03)*	.20 (.03)*
Level 2	.01 (.02)	.02 (.03)	.03 (.03)
Model Fit			
-2 Log Likelihood	200.33	207.80	209.00
Parameters	5	11	13

Note: Unstandardized estimates are provided with standard errors in parentheses. Model 1 examines effect of program participation. Models 2-3 examine differences in experience due to student ethnicity and the impact of the level of diversity of groups and the ethnicity of the mentor. * $p < .05$. ICC = .0003

TABLE 5

ESTIMATES OF YDP EFFECTS ON ACADEMIC SELF-CONCEPT

	Model 1	Model 2	Model 3
Fixed Effects			
Intercept	.95 (.21)*	1.17 (.29)*	1.17 (.29)*
Sex (Male = 1, Female = 2)		-.06 (.07)	-.06 (.07)
Academic Self-Concept (Pretest)	.68 (.06)*	.64 (.07)*	.64 (.07)*
YDP Participant	.10 (.07)	.09 (.08)	.15 (.10)
Participant Ethnicity			
Black		.03 (.17)	.01 (.19)
Latino		-.15 (.18)	-.16 (.19)
White		.11 (.19)	.09 (.20)
Asian		-.21 (.20)	-.23 (.21)
Multiracial		-.41 (.30)	-.43 (.30)
Group - Group Diversity			-.25 (.21)
Group - Mentor Ethnicity			.05 (.12)
Variance Components			
Level 1	.18 (.02)*	.18 (.02)*	.18 (.02)*
Model Fit			
-2 Log Likelihood	181.23	182.86	184.33
Parameters	5	11	13

Note: Unstandardized estimates are provided with standard errors in parentheses. Model 1 examines effect of program participation. Models 2-3 examine the influence of participant ethnicity, group diversity and mentor ethnicity. * $p < .05$. ICC = .03

TABLE 6

ESTIMATES OF YDP EFFECTS ON SCHOOL CONNECTEDNESS

	Model 1	Model 2	Model 3
Fixed Effects			
Intercept	1.27 (.20)*	1.5 (.25)*	1.46 (.25)*
Sex (Male = 1, Female = 2)		-.09 (.07)	
School Connectedness (Pretest)	.59 (.06)*	.59 (.07)*	.59 (.07)*
YDP Participant	-.10 (.07)	-.12 (.07)†	-.18 (.09)*
Participant Ethnicity			
Black		-.18 (.15)	-.19 (.16)
Latino		-.17 (.15)	-.17 (.17)
White		-.15 (.17)	-.17 (.17)
Asian		-.19 (.17)	-.22 (.18)
Multiracial		-.51 (.26)*	-.56 (.26)*
Group - Group Diversity			.03 (.11)
Group - Mentor Ethnicity			.03 (.11)
Variance Components			
Level 1	.13 (.02)*	.13 (.02)*	.13 (.02)*
Level 2	.01 (.01)	.00 (.01)	.00 (.01)
Model Fit			
-2 Log Likelihood	134.13	143.07	146.90
Parameters	5	11	12

Note: Unstandardized estimates are provided with standard errors in parentheses. Model 1 examines effect of program participation. Models 2-3 examined participants' ethnic group, mentoring group composition, and ethnicity of mentor. * $p < .05$. ICC = .11

Qualitative Analysis

Additional analysis of hypothesis three included qualitative methods to assess group processes that potentially may have impacted students' ethnic identity development. All available process notes for the selected groups were reviewed. The span of records for mentors with missing process notes revealed that available notes included early, middle, and late sessions to show full mentoring process. Mentor process notes were kept on a standardized form across the duration of the program. Document data analysis focused on incidents of ethnic identity exploration within four domains: 1) discrimination/racism experiences (e.g., teachers assuming you are a bad kid because of how you dress), 2) coping strategies for discrimination/racism (e.g., developing a counter narrative of experience), 3) cultural norms of group membership (e.g., religion, gender roles, cultural traditions), 4) importance of group membership (e.g., pride in culture, integration into who I am) and 5) multiculturalism (e.g., diversity, universality). When discussion in these areas emerged, the session was identified as a mentoring session with an ethnicity focus. The type(s) of discussion (i.e., multiculturalism) was documented in an excel file with relevant examples if available. In most instances, the discussions were coded for 2-4 of the categories listed above as many of the categories are aspects of the same construct or experience (e.g., discussing discrimination and then coping strategies).

Analysis of group discussions revealed patterns in group mentoring that may contribute to identity formation for each of the selected groups. The groups that were selected represented four different mentor-mentee combinations. The groups reviewed included 1) a homogenous white female group facilitated by a white mentor, 2) a homogenous African American group facilitated by a white mentor, 3) a homogenous African American group facilitated by an African American mentor, and a 4) heterogeneous group that included students from 4 different

ethnicities facilitated by an Asian American. There were noted differences in the frequency of discussion about ethnic identity in each group (see Table 7). Groups that were comprised of students of color were more likely to discuss issues of ethnicity and aspects of ethnicity in different aspects of their lives. A description of each group will be provided to assess group processes in regards to ethnic identity development in students.

TABLE 7

FREQUENCY OF DISCUSSION OF ETHNIC IDENTITY WITHIN GROUP SESSIONS

	Number of Sessions	Sessions with Ethnicity Focus	% Ethnicity Focus	Discussion Types
Laura	22	5	23%	3, 5
Bob	26	5	19%	1,3
Carla	20	11	55%	1,2,3,4
Gina	8	2	25%	3,5

Note. The number of sessions reflects the number of records available for review. All groups were facilitated for a full academic year. Discussion Topics included the following: 1) discrimination/racism experiences, 2) coping strategies for discrimination/racism, 3) cultural norms of group membership, 4) importance of group membership, and 5) multiculturalism.

Group Descriptions

Laura. This group was an all White female group facilitated by a White woman. This group was included as a point of reference for understanding the patterns of ethnicity inclusion within the group process. There were 7 students that consistently attended group meetings. Over the 22 group meetings, 23% of the time was focused on discussion of aspects of ethnicity. Students within this group evidenced overall decreases in their ethnic identity scores (pre-post difference = -.13) with 4 out of 6 students having lower scores post intervention. Ethnicity focused discussion was primarily focused on cultural norms of group membership and multiculturalism.

Cultural norms. The students and mentor were all Bosnian immigrants. Students discussed their ethnicity from a nationalist perspective and discussed the difficulties of being the child of first generation immigrants. On many occasions, students discussed the strictness of their parents and their expectations for them to excel in “American schools”. During one activity in which they watched a video on the lives of girls from different cultural backgrounds, the mentor asked them to pick a girl they most identified with. The majority of the girls “related to the Asian girl in the movie because they have strict parents with high academic expectations.” Consistent with this observation, Laura’s group had the highest academic self-concept scores for all the groups at pre and post (3.67 out of 4) with only one student reporting a decrease post intervention. Some relational issues and expectations within the culture emerged within a role play activity on communication. The mentor recalled firm gender roles and expectations that she felt were culturally bound that emerged in a communication activity. Group discussion was dominated by issues relating to parents and their expectations.

Multiculturalism. Students within the group expressed appreciation for the diversity within the school environment but were generally focused on their limited integration into American culture. There was very little discussion about coping strategies for managing ethnic issues and no conversation on experiences of discrimination or racism. Despite there being no discussion of discriminatory experiences within the school context, the level of school connectedness dropped for the overall group (pre-post difference = -.30) with 4 out of 6 students scoring lower at post test.

Bob. This group included 6 African/African American male students and a White male mentor. This group had very little ethnic diversity but was included because it was racially cross-matched within the mentor-mentee relationship. Within the 26 group meetings, 19% of the

sessions included aspects of ethnic identity. Bob's group had an overall decrease in their ethnic identity scores (pre-post difference = -.22) with 4 out of 6 students having lower scores post intervention. Discussion of aspects of ethnicity focused primarily on cultural norms of group membership and discrimination/racism experiences.

Cultural norms. The students were all of African descent, but one young man was Ethiopian and a recent immigrant. Throughout their meetings, cultural differences were a catalyst for discussion of ethnicity. For example, in one meeting the mentor began a discussion on being responsible. The students talked about the care necessary for a pet and the Ethiopian student revealed that in his native country his pet was a monkey. The other student made fun of this difference but the mentor took note and took this opportunity to divert the conversation to something else without addressing these differences directly. In two other instances, the group discussed differences in faith (Ethiopian student was Muslim), gender roles and holiday traditions. When topics of culture emerged, students asked provocative questions such as when one student asked the Ethiopian student "if he liked Saddam Hussein" and got an honest answer that "he used too but that Hussein had gotten too radical". This discussion occurred shortly after the 9/11 terrorist attacks making such an admission potentially dangerous or marginalizing. This honest dialogue about culture and values offers promise of a group dialogue that could facilitate questions of identity and values.

This mentor also incorporated a lesson for Black History Month to "find out how much they group knows about black history and to get their feelings on certain areas of black history". The students knew a lot about Black history, surprising the mentor, but there was no further incorporation of this information into their identity formation. The mentor did not frame these figures as potential role models or exemplars for students to integrate into their concepts of self.

Discrimination/racism experiences. Bob also made space for students to discuss their experiences of discrimination in the school setting within one session. Students talked about the discrimination they experienced with teachers and staff everyday in the school and how angry it made them. One student expressed that "teachers assume that you are a bad kid just because of your race and how you dress" another student commented that "they call you out whenever something goes down in the class, even if you didn't do anything." The mentor was supportive but did not offer any coping or navigational methods. He normalized the experience by commenting on the consistency of the experience of discrimination across all the boys and expressed a desire to help address it with teachers. Discussing and reliving these experiences may have impacted the students' level of school connectedness. Phinney's model discusses ethnic identity search that occurs when an event (i.e., discrimination) brings our group membership to the forefront of our identity (1990). This negative consequence of group membership may have impacted their level of school connectedness. Their scores indicated a substantial decrease in the group's overall school connectedness scores (pre-post difference = -.26) with 5 out of 6 students reporting lower connectedness at post. Despite a lack of connectedness to the school context, the academic self-efficacy of the overall group increased after participating in YDP (pre-post difference = .20). Five out of six students reported higher levels of academic self-concept.

Carla. This group included an African American female facilitator of an all African American female student group. She had 20 mentoring sessions with 55% of the group time focused on issues of ethnicity and culture. Students within this group evidenced an overall increase in their ethnic identity scores (pre-post difference = .18) with 3 out of 6 students having higher scores post intervention. Ethnicity discussions were primarily focused on experiences of

discrimination/racism, coping strategies for discrimination/racism, cultural norms of group membership, and the importance of group membership.

Experiences of discrimination/racism. In her group, students participated in an activity focused on identity called "Who Am I" that linked students' family history, cultural norms, and race. Unlike the previous group compositions, questions were raised about identity and group membership in a racist society. Within this group, the saliency of the students' ethnicity guided the mentoring process and curriculum. For example, Carla records indicated a discussion of discrimination and racism arose when a student brought up a scandal on the news at a university involving students wearing blackface. The saliency of racism within systems for participants provided direction for the mentor in discussion. The mentor facilitated discussions about what had been done wrong and why it was disrespectful.

Importance of group membership and *Cultural norms.* Within this group there was also a focus on pride in being African American and an acknowledgment of the stereotypes associated with this VREG. Carla's process notes indicated that protégés discussed positive characteristics of African American women such as strength, beauty, and role in the perseverance of families. Additionally, discussion was focused on the specific experiences of African American women allowing for greater depth of exploration at the impact of being a double minority. In a group discussing stereotypes and labels, the mentor discussed aspects of colorism within the African American community. Carla focused on the "stereotypes and labels used in society (i.e. stereotypes related to profession, hair or skin color, gender, and national affiliation)" to heighten students awareness of the assumptions we all make about others.

Coping strategies for discrimination/racism. The ethnically matched mentor was able to provide guidance as an insider due to an understanding of the cultural norms of the culture, and

her shared experiences of group and gender discrimination. In one group, a discussion on students' experiences of racial or gender discrimination emerged. Carla and girls discussed experiences and group members discussed different ways to respond (positive and negative) and the consequences of those responses. Despite discussion of discrimination, this group reported gains in school connectedness (pre-post difference = .39) with 4 out of 6 students showing improvement from pretest. Academic self -concept also evidenced increases post intervention for the group (pre-post difference =.23) with 4 out of 6 girls having better concepts of self as an academic beings after participating.

Gina. This mentor had a very diverse group with four different groups represented among her 6 students. Gina is an Asian American woman facilitating a group for boys. She had one of the more diverse groups within the program allowing some comparison to the previous more homogenous groups. There were files for 8 sessions with 25% of the sessions focused on issues of ethnicity. Discussions of ethnicity focused primarily on cultural norms of group membership and multiculturalism.

Cultural norms. Within these discussions the mentor couched the discussion of ethnicity within larger adolescent concerns. For example, she discussed stereotypes within the context of choosing a girlfriend and preventing unwanted pregnancies. Among her group members they discussed characteristics they wanted in a mate in which cultural concerns emerged. The boys expressed a desire for mates who are "pretty, loyal, and spoke English". Indirectly they acknowledged that among their choices, a girl proficient in English would benefit the relationship and negotiating their social world.

Multiculturalism. Gina's group focused more on individual differences than differences in ethnic groups or cultural beliefs and values. When ethnicity came up in group it was usually

initiated by group members in relation to dating and preferences in music or food. Despite the lack of explicit discussion, this group had contextual saliency of ethnicity due the diversity of the group that may have increased the saliency of group membership for each individual. Within the records there is no discussion of discrimination or racism. There is also a very broad approach to culture that does not explicitly approach ethnicity as a construct of identity. Despite this, students in this group had increases in ethnic identity (pre-post difference = .65) with all students reporting a stable or more positive ethnic identity post intervention. In contrast, these students had lower academic self concept (pre-post difference = -.15) and school connectedness (pre-post difference = -.21) with 2 out of 4 students reporting lower academic self concept and 3 out of 4 reporting lower school connectedness.

Within all four groups, the topic of ethnicity was dependent on its saliency to the participating students creating differing levels of exploration. Darling and colleagues (2006) discussed how understanding mentoring and ethnic identity development requires understanding the salience of ethnicity, the meaning of ethnicity within cultural contexts, and the role of culture in both mentors and protégés. The saliency of ethnic identity informs its inclusion within student-focused programs like YDP. The all white group with a matched-mentor had some discussion of ethnicity but mainly as s consequence of their recent immigration to the US. Review of the process notes for the two ethnic homogenous groups revealed more discussion about race, ethnicity, and discrimination. The homogenous group with a matched mentor had an additional coping strategy component within discussions of ethnicity and culture. The highly diverse group had very little discussion of ethnicity as a construct of identity and no discussion of discrimination. A multicultural perspective emerged with a focus more on individual difference. Greater diversity within groups may have increased the saliency of students' ethnic

identity (visibly different from one another) but may have also limited the time and space for discussion of students' specific ethnic experiences. The majority of groups involved in the larger quantitative sample were comprised of 3 or more ethnicities creating a setting that would promote diversity but may have limited the individual exploration of VREG membership; therefore limiting the groups' applicability to ethnic identity development.

Discussion

This study explored the effects of participation in a school-based group mentoring program within a diverse school context on student's ethnic identity, academic self-concept, and school connectedness. This research extends past studies by using a mixed model that acknowledges the partially nested nature of group mentoring initiatives like the current program that addresses the non-independent nature of the data. The group process was also addressed by assessing within group homogeneity in program outcomes and group-level experiences. This approach allowed exploration of both individual and group level variations in mentor ethnicity and group diversity composition. Group mentoring was also reframed as a more culturally congruent approach for students from VREGs because of similar cultural values within a collectivistic worldview that parallels many group level processes.

While some of the predicted relationships emerged, many hypotheses did not yield significant results. Hypothesis one posited that changes in ethnic identity within the nested groups would be affected by increased diversity within the student group and the ethnicity of the facilitating mentor to create groups more focused on ethnic identity development. Group diversity and mentor ethnicity were not found to be related to participating students' ethnic identity development. These results were consistent with Rhodes et al.'s (1996) research that found race matching unnecessary for effective mentoring relationships.

The second hypothesis proposed that students that participated in a school-based group mentoring program would have more positive academic self-concept, greater school connectedness and a more positive ethnic identity relative to a demographically matched comparison group. Participating students did not yield significant gains in academic self-concept

or ethnic identity over that of comparison students. Additionally, school connectedness *decreased* significantly for students receiving the intervention. These findings are aligned to past research on this population that found negative trends in school connectedness for participating students (Lapidus, 2004). Students that identified as multiracial also reported significantly lower school connectedness than the other student group categories.

Lastly, the third hypothesis predicted that positive ethnic identity development would function as a mediator for academic self concept and school connectedness within the group mentoring process. A significant association of participation with ethnic identity was not substantiated in earlier analysis and further analysis to explore the function of ethnic identity in other outcome variables could not be done. Additional qualitative analysis was conducted to further explicate the mentoring process and ethnic identity's role in facilitated groups[3].

The hypotheses within the study sought to understand complex phenomena within the group mentoring process and identity formation in adolescence. The complexity of both the group process and identity consolidation in adolescence is not fully understood within the current literature (Herrera et al., 2002; Lapidus, 2004; Cokely, 2002; Darling, 2005). This study sought to bridge these gaps in the research, but limitations in data and a lack of models of the group mentoring process led to hypotheses that lacked sufficient sophistication for understanding the relationship of group mentoring, student outcomes and ethnic identity. There are a number of reasons specific to this context and population that may have confounded the predicted relationship between ethnic identity, student outcomes, and these group level covariates. These issues include the focus and intent of the YDP program, limitations in how ethnicity was categorized for students and mentors, and limitations in capturing the full mentoring process.

[3] The results of the qualitative component on this study are discussed on page 52.

Program Focus. Most school-based mentoring programs focus on academic support or decreasing behaviors that inhibit student performance (i.e., maladaptive behaviors, truancy; Rhodes, Grossman & Roffman, 2002). Many of the students involved in this program are recent immigrants to the U.S. with specific needs in regards to navigating a new school and a new culture. For that reason YDP was focused on psychosocial development and enhancing navigational skills for school, family and community. Although the YDP program was not directly focused on ethnic identity development or academic behaviors, inclusion of an ethnic identity measure within the evaluation was appropriate due to the high level of diversity in the student population and the potential impact of participation on this aspect of student development. Lapidus' (2004) earlier study of group processes within this sample, identified within group processes that included exploration of experiences of discrimination, group membership and cultural differences; however, this was only one aspect of the overall mentoring experience. The individual groups were guided by the needs and interest of the protégés, so the foci of each group varied by its members. This fluidity allowed mentors to tailor group meetings to student interests but it also made it difficult to assess what group processes worked and which needed additional development.

The group structure and process also addressed many issues of communication and peer interaction that could assist students in bridging their multiple worlds without specifically addressing identity (Phelan et al., 1994). No set curriculum was utilized and the intent of the intervention was unclear beyond supporting at-risk youth. In programs with a more direct focus like DREAMS and the Adolescent Diversion Project, we see more direct gains in scholastic and identity variables (DREAMS- black identity, school performance, and value for school; Adolescent Diversion Project: increased network, lower recidivism; Bilchik, 1999). YDP

outcomes may have been different if the programmatic structure included fixed objectives that curriculum addressed across the groups.

The second hypothesis investigated participation's impact on positive academic self-concept, school connectedness, and ethnic identity. Academic self concept did not have significant results from participation in the program. In retrospect, this was not surprising as YDP was not design to directly address academic issues or to provide academic support to protégés. Gains in academic self-concept were hypothesized based on the school context and its inherent expectations for academic performance. Participation in the mentoring program did significantly predict changes in school connectednes. Interestingly, protégés reported less school connectedness. This is aligned to the past studies on YDP that found less school belongingness (Lapidus, 2004) but conflicted with Blum et al.'s (2004) assertion that school connectedness increases when students have a caring adult on the school campus that they develop a close relationship with. In prior research, group sessions that included aspects of ethnic identity focused on the negative consequences of group membership. Additionally, among students within the current study, students that identified as multicultural exhibited significantly less school connection. These findings could be related to heightened saliency of identity or the added difficulty of negotiating multiple ethnic group memberships and experiences of marginalization. Understanding the difficult process of identity formation for multiracial students would allow for program development and evaluation that acknowledges the unique contribution of each culture.

Limitations of Ethnic Categorizations. Within this study, there were specific limitations in the categorization of ethnicity of the mentors and protégés. Students identified their ethnicity on an open ended question within pretest measures. Many students identified their place of

origin, race, or group membership. These answers were reviewed and consolidated down to six groups (Black/ African decent, Latino, White, Asia, Multiracial, Unknown). This categorization may have oversimplified the diversity of students by grouping students with distinctly different ethnic and cultural backgrounds together (e.g., students from China and India both grouped as Asian). The unknown variance within each categorization may have impacted the diversity quotient which was calculated for all groups. This score utilized in analysis accounted for diversity of the group by taking the number of student racial categorizations and dividing that by the number of participants (see Equation 1) [4]. This measure of diversity scored an all white group and an all black as both having no diversity. This measure did not take into account the subjective difference between these groups and the salience of ethnicity for each. For VREGs, being visibly different than mainstream heighten consciousness of VREG membership guiding the mentoring experience.

Additionally, mentors were never directly asked to define their ethnic or racial group. Review of process notes and supervisor records were used to identity whether mentors were ethnic or white. In reducing mentors' ethnic backgrounds to white or ethnic, exploration is limited for matched groups because differences in mentors' ethnic culture or experiences are treated as the same. This lack of distinction did not accommodate for differences between ethnic groups and the impact of those differences on the mentoring process. Research has primarily focused on same-race and cross race matching in mentoring programs with no real difference found between the two. Few researchers have focused on matching mentors and protégés by ethnicity (i.e. culture, values and norms). Research is needed that acknowledges that two people who have similar racial identities and qualitatively different ethnic backgrounds and cultural

[4] See Page 29.

experiences. Race is a sociopolitical categorization in which people are grouped, while ethnicity includes cultural norms, traditions, and values found within a group. This distinction may impact the formation of close relationship with students within mentoring relationships (Cooper et al., 1995). Darling (2005) argued the need to match adolescent protégés with mentor on the basis of shared interest, but a shared heritage and culture may function in the same way for VREG students. These shared aspects of the mentor and protégés lives lends relevancy to mentors disclosed experiences and advice. Collins (2000) called this relevant dialogue 'real talk' in which the mentor has insider knowledge and experiences that protégés accept because they emerge from lived experiences. Future research should investigate culturally matched mentor and protégés taking the discussion beyond Rhodes et al.'s and Ogbu's assertions about race-matching (1996; 1990). Campbell and Campbell (2007) have looked at this with ethnically and gender matched undergraduate students and professors, showing that ethnic congruence facilitated better GPAs, higher retention and graduation rates. Research on ethnically matched group mentors for adolescence is needed to determine best practices for VREG students.

Integrating Qualitative Data

The qualitative component of this study focused on hypothesis three that predicted that ethnic identity would facilitate students' academic self-concept and school connectedness. The four groups selected provided distinctly different experiences in the group mentoring process. Inquiry focused on the amount and type of ethnic focused discussion within the group mentoring sessions. All four groups had discussions focused on some aspect of ethnic identity. For example, within the white female group discussions focused on gender roles, academic expectations, immigrant status, and cultural conflict with American beliefs and expectations emerged. Contrastingly, group discussion in the cross matched group that included a white

mentor and black students focused on experiences of discrimination. The mentor and students never seemed to find resolution or to reframe the discriminatory experiences. Discussing these experiences allowed students to voice their concerns but nothing was resolved which may have left students with heightened awareness of discrimination but no means for changing or coping with the experience. The qualitative component of Lapidus' (2004) research also revealed that discussions of discrimination with no resolution were often accompanied with a decreased connection to the school. These findings call into to question the effectiveness of mentoring relationships when dealing with sensitive issues like discrimination. Additional research is needed to understand best practices for group mentoring in managing sensitive issues. Practitioners need to utilize empirically tested techniques and to thoroughly train and support mentors to facilitate discussions on ethnicity.

Contrastingly, the homogenous group with African American participants and mentor also discussed discrimination experiences and strategies to reframe these experiences or overcome discriminatory events. This group also focused on concepts of pride in being a member of their VREG. Within this group there were gains in ethnic identity, academic self-concept, and school connectedness. Possibly, this mentor's insider status due to ethnic congruence may have given her additional insight due to similar experiences making her advice more relevant to students (Collins, 2000). It may be that for VREG youth struggling with experiences of discrimination, an effective mentor would be one who identifies with the issues they are addressing, in part because of a shared ethnic background. The highly diverse group also saw gains in students' ethnic identity but decreases in academic self-concept and school connectedness. These group discussions regarding ethnic issues focused on multiculturalism and framing ethnic group membership as an individual characteristic rather than a basis for identity.

This approach celebrates the diversity within the group and the salience of being a member of a VREG, but does not acknowledge the challenges these students may still face in the school context. Further inquiry is needed to understand how group mentoring may provide students with supports systems and networks to combat the negative effects of discrimination in the school context. These findings also have ethical implications because protégés evidenced decreases in school connectedness due to participation which bring into question the benefit to such an intervention. The qualitative component of the study indicated that complex processes took place in each group in addressing ethnic identity development. The fact that these discussions emerged in groups required mentors to address sensitive issues of identity that they themselves may not have addressed. In this way, the utilization of undergraduate students as mentors may be unethical.

Ethnic Specificity vs. Multiculturalism. The experience of students within groups changed depending on the diversity of the groups and what the mentor could add to discussions about ethnicity. The two groups that were non-white and ethnically similar (Clara and Bob) had more discussion of discriminatory experiences regardless of mentor ethnicity. These mentors were also able to facilitate activities and discussions that were very specific to the students' ethnicity (i.e., Black History activity). The homogenous groups may have been able to develop trust and universality quickly allowing more exploration into structures of identity (Dies, 1991). The capacity to be ethnically specific also allowed space and context for disclosure of group specific culture, history, and coping strategies. In contrast, the group with the highest level of diversity discussed ethnicity from a multicultural perspective that may have facilitated positive feelings about group membership. This perspective focuses on the universal human experience, developmental milestones (i.e., finding a mate), and views group membership as a characteristic

of the individual. There were no discussions about discrimination or racism within the group. These positive experiences in group may not have been mirrored in school interactions; therefore, decreasing school connectedness (increased marginalization).

These preliminary findings suggest various avenues for future research in regard to group process, diversity and the impact of mentor ethnicity on group mentoring initiatives. Dies (1991) discusses the group formation process with five distinct phases: 1) cohesion building, 2) testing the limits, 3) resolving authority, 4) working on self, and 5) moving on (termination). The differences that were seen in the qualitative data could be framed as different levels of group development. Within the group with the most diversity (Gina), discussion focused on universality and multiculturalism. This group may have only reached the initial phase where members are building cohesion, trust, and a contractual relationship over the intent of the group. At this stage, members reveal and explore only surface aspects of themselves because there is limited trust among members. The ethnically matched homogenous group (Carla) had a more integrated group with high levels of disclosure, cohesion, and trust. Her group would fall within phase 4. This more developed group could easily delve into questions of identity and what group membership means because group members were all working on themselves. Further integration of group therapy technique in mentor training and evaluation could help facilitate group processes that maximize student development and program outcomes.

Study Limitations

The current study used multilevel modeling to account for the nested nature of the YDP data. Unfortunately, with only 23 distinct groups, the application of multilevel modeling was likely underpowered, and may have limited the ability to detect significant association within the quantitative component of this study. The suggested number groups for this type of analysis are

at least 30 groups (Luke, 2004). Also, the short duration of the program may not have encapsulated the developmental process of identity consolidation. Many researchers frame ethnic identity as a life-long exploration of what group membership means to that individual. An additional follow-up may have assessed some delayed program effects or the longevity of effects, creating a more complete picture. A third limitation to the current study is that both the participants and comparison students attended the same school so, raising the possibility of contamination. A fourth limitation was the study's focus on beliefs about identity, school, and academics. This study would have benefited from a more direct measure of academic and social behaviors. Future research should also include behavioral outcomes that were more central the program's design and intent (i.e, social skills, social network).

This study also has very limited generalizability due to a very specific highly diverse school context. Additionally, the student population was highly transitional due to recent immigrant status. History effects may have influenced group discussion as the sample includes students from 2001-2005. During this time, the September 11th terrorist attack occurred and this topic came up in some group discussions in relation to immigration status, culture and integration into the American culture. The qualitative data was limited to skeletal process notes that only provided a glimpse into the group process. Future research on group process would benefit from rigorously collected observational data, checklists to measure the prevalence of the outcome variables, and analysis of group mentoring processes.

Conclusion

This study sought to evaluate a school based mentoring program for its effects on students' ethnic identity, academic self-concept and school connectedness. In acknowledging the nested nature of the program, this study went beyond prior research by using multilevel

modeling analysis design to account for individual and group level variations. The study found that students that participated reported less connection to the school. Participation did not predict ethnic identity and academic self-efficacy development. These findings are indicative of the complex nature of identity consolidation and group mentoring processes. Further research is needed to understand how group processes relate to the cultural norms and values of VREG students and whether ethnic matching would create stronger, more relevant groups to address their specific needs.

A major take home message from this research was that the type of discussion facilitated in groups may influence students' beliefs about their ethnic identity and its function in the larger world. Exploration of sensitive topics like discrimination brings to the forefront student's group membership but focuses on the negative consequences (Phinney, 1989). For these sensitive discussions, mentors need additional training and exposure to the cultural norms, values and beliefs of VREGs to first acknowledge students' negative experiences but also point out benefits and positive aspects of group membership. This insider knowledge would allow them to facilitate exploration and resolution of experiences of discrimination and racism. Mentors that are ethnically matched may benefit from a shared culture with students that they can use to enrich the discussions and establish relevancy. More research is needed that shifts the focus of research on cross- and same-race matching to an ethnic or cultural rather than race-based perspective to assess whether similarities in culture aid in relationship development among mentors and protégés (Darling, 2005).

This study used a mixed method that incorporated quantitative and qualitative data sources to investigate both the outcomes and processes within YDP in regards to ethnic identity, academic self-concept, and school connectedness. The use of analysis that accommodates the

partially nested nature of the intervention also addressed grouping effects and assumptions of heteroscedasticity (whether groups become more alike due to membership; Bauer, Serba & Hallfors, 2008). This method allows a more concise assessment of intervention effects and should be used in evaluating group-based interventions with nested groups like YDP. Many of the anticipated effects were not substantiated but the qualitative data points to potential benefits from having mentors trained to facilitate groups that are safe places for exploration and support. The complexities of the group mentoring process need further explication to understand the mechanisms that may facilitate identity formation, academic capacity, and connectedness to the school context.

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