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Testing a Model of Minority Identity Achievement, Identity Affirmation and Psychological Well-Being among Ethnic Minority and Sexual Minority Individuals

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Abstract

How is social identity related to psychological well-being among minority individuals? Drawing on developmental models of identity formation (e.g., Erikson, 1968) and on Social Identity Theory (Tajfel & Turner, 1979), we tested a conceptual model examining links between two key aspects of social identity and psychological well-being. We proposed that the association between *identity achievement* (exploring and understanding the meaning of one's identity) and psychological well-being is mediated by *identity affirmation* (developing positive feelings and a sense of belonging to one's social group). Across three studies, including ethnic minority high school students (Study 1), ethnic minority college students (Study 2) and lesbian and gay male adults (Study 3), we found strong support for the model. Results suggest that the process of exploring and understanding one's minority identity can serve as an important basis for developing positive feelings toward and an enhanced sense of attachment to the group which can in turn confer psychological benefits for minority individuals. Implications and directions for future research are discussed.

Minority individuals who identify more strongly with their minority group report greater psychological well-being. This association has been shown both for ethnic minority individuals (Arbona, Jackson, McCoy, & Blakely, 1999; Arroyo & Zigler, 1995; Crocker, Luhtanen, Blaine, & Broadnax, 1994; James, Kim, & Armijo, 2000; Paul & Fischer, 1980; Phinney, 1989; Rotheram & Phinney, 1987) and for lesbians and gay men (Fingerhut, Peplau, & Ghavami, 2005; Reyst, 2001).

To enhance our understanding of this association, researchers have moved beyond examining global measures of the overall strength of social identity toward examining how different aspects of identity contribute to well-being (e.g., Ashmore, Deaux, & McLaughlin-Volpe, 2004; Leach et al., 2008; Phinney, 1992; Sellers, Smith, Shelton, Rowley, & Chavous, 1998; Umaña-Taylor, Yazedjian, & Bamaca-Gomez, 2004). Two key aspects of social identity are pertinent to the current research. A cognitive aspect of social identity involves "a set of cognitive beliefs associated with that [social] category such as stereotypic traits thought to be associated with that group or ideological positions that defines the group's goals" (Ashmore, et al., 2004, p. 82). The affective aspect of social identity includes the value and emotional significance one places on group membership along with the "affective commitment and closeness [one] feels to other members of that category"

(Ashmore et al., 2004, p. 82). To study ethnic identity, researchers have translated these general conceptions of cognitive and affective aspects of identity into reliable assessment instruments. In an influential program of research Phinney and colleagues (Phinney, 1992; Phinney & Kohatsu, 1997; Roberts, Phinney, Masse, Chen, Roberts, & Romero, 1999) developed self-report measures of both the cognitive and affective aspects of identity. In this line of work *identity achievement* is used to refer to cognitive processes of exploring and understanding the meaning of one's identity. The term *identity affirmation* refers to the affective process of developing positive feelings and a strong sense of belonging to one's social group

Research has demonstrated that identity achievement and affirmation each independently predicts psychological well-being (e.g., Phinney, 1992; Phinney & Kohatsu, 1997; Roberts et al. 1999). To date, however, no studies have examined whether and how these two aspects of identity work together to affect psychological well-being. Drawing on developmental models of identity formation (e.g., Erikson, 1968; Marcia, 1966) and on Social Identity Theory (Tajfel & Turner, 1979), we tested a conceptual model proposing that identity achievement is psychologically beneficial because it results in a greater sense of identity affirmation and belonging. In other words, we propose that affirmation mediates the association between identity achievement and psychological well-being.

In the sections that follow, we will briefly describe identity achievement and identity affirmation and then review prior research documenting that these two aspects of identity are each associated with psychological well-being. Next, we will describe our new mediational model of minority identity and well-being. We then present data from three studies that tested the new model, first with ethnic minority high school and college students and then with lesbians and gay men. Finally, we will discuss these findings and offer suggestions for future research on minority identity.

Identity Achievement and Psychological Well-Being

Identity achievement is a cognitive process that refers to exploring an identity and developing an understanding of the meaning of that identity in one's own life. Theorists have recognized the special significance that identity achievement has for minority individuals (Fassinger & Miller, 1996; Umaña-Taylor, 2003, Umaña-Taylor et al., 2004). Phinney (1990, pp. 502–503) characterized the process of exploring and developing an understanding of one's ethnic identity as "an often intense process of immersion in one's own culture through activities such as reading, talking to people, going to ethnic museums, and participating actively in cultural events." Individuals who have not examined their ethnic identity closely must make "efforts to learn more about one's background and [develop] a clear understanding of the role of ethnicity for oneself" (Phinney, 1992, p. 116).

Similarly, most stage models of gay and lesbian identity development propose that once individuals become aware of same-sex attractions, they begin to explore what it means to be gay or lesbian (e.g., Cass, 1979; Coleman, 1981–1982; Rotheram-Borus & Langabeer, 2001). As a result of this exploration, individuals begin to integrate the meaning of their sexual orientation into their global sense of self.

Despite differences among studies in terminology and ways of assessing identity achievement, empirical evidence points to a positive association between identity achievement and psychological well-being. Phinney (1989) found that Asian American, Black and Hispanic adolescents who reported greater identity achievement scored significantly higher on self-esteem than individuals with lower ethnic identity achievement. Furthermore, this association did not differ between boys and girls. In fact, studies examining the association between identity achievement and well-being generally fail to

find significant differences based on gender (e.g., Phinney & Alipuria, 1990; Phiney, 1992; Umaña-Taylor & Updegraff, 2007). In a review of the research on ethnic identity and well-being, Phinney and Kohatsu (1997) concluded that individuals who had examined their identity more fully have a more positive self-concept and experienced less psychological distress than individuals who had explored their identity less fully.

Currently, little is known about the association between identity achievement and well-being among lesbians and gay men. Although stage-model theorists have proposed that greater exploration and understanding of gay/lesbian identity enhance well-being, "the empirical base for these models is extraordinarily scant" (Savin-Williams, 2005, p. 75).

Identity Affirmation and Psychological Well-Being

In contrast to the more cognitive process of identity achievement, *identity affirmation* refers to a more affective process of developing positive feelings and a strong attachment to a group. Social identity theorists (e.g., Tajfel & Turner, 1979) have emphasized that individuals develop a sense of who they are from feeling connected to a group and feeling pride and positive affect toward that group. This sense of belonging and pride influences the individual's self-esteem. In her discussion of ethnic identity, Phinney (1992, p. 59) noted that identity affirmation may include "ethnic pride, feeling good about one's background, and being happy with one's group membership, as well as feelings of belonging and attachment to the group." Other researchers have also acknowledged the importance of identity affirmation and its special relevance for minority group individuals (e.g., Ashmore et al., 2004; Ellemers, Kortekaas, & Ouwerkerk, 1999; Phinney & Ong, 2007; Sellers, Rowley, Chavous, Shelton, & Smith, 1997; Simon & Klandermans, 2001). Similarly, in her stage model of gay and lesbian identity formation, Cass (1979) gave prominence to a stage of "identity pride."

Across studies using different conceptualizations and assessment tools, researchers have consistently found a significant, positive association between identity affirmation and psychological well-being among ethnic minorities. In a large study, Umaña-Taylor (2003) found that self-esteem was higher among Asian American, Black, Latino and White high school and college students who scored higher on a measure of affirmation than among those scoring lower on affirmation. Results from other studies using adults, college students and adolescents converge in showing that greater affirmation of one's minority identity is associated with higher self-esteem, a more positive self-concept, greater academic achievement, and fewer mental health problems (Ashmore et al., 2004; Phinney, 1989, 1992, 1993; Phinney & Alipuria, 1990; Roberts et al., 1999). Furthermore, these studies fail to document gender differences in the association between identity affirmation and psychological well-being (e.g., Phiney, 1992).

Research examining the association between gay or lesbian identity affirmation and well-being is very limited. Frable, Wortman, and Joseph (1997) found that gay men who had a more positive gay identity reported higher self-esteem and enhanced well-being. Using an online sample of lesbians and gay men, Reyst (2001) assessed what she termed the affective dimension of identity with 10 items such as "I have a strong sense of belonging to the glbt community" and "I feel good about being glbt." Higher scores on this measure were significantly correlated with greater life satisfaction and lower depression.

A Mediational Model of Identity Achievement, Affirmation and Psychological Well-Being

Studies clearly demonstrate that identity achievement and affirmation are each associated with psychological well-being. These findings are consistent with theories of identity development; however, they do not address the sequential process proposed by these

theorists. According to developmental theorists (e.g., Erikson, 1968; Marcia, 1966), identity development begins with a period of identity exploration when individuals seek knowledge about a particular group, examine their beliefs and values about that group, and begin to understand the meaning of their group membership. As a consequence of this emerging identity achievement, an individual may then feel better about the group and appreciate more fully being part of the group. This identity affirmation may, in turn, foster enhanced psychological well-being. In short, developmental theorists suggest that identity achievement leads to affirmation which in turn leads to greater well-being.

The goal of the current research was to test a model in which identity affirmation mediates the association between identity achievement and psychological well-being for minority group members. This model was tested in three studies, with ethnic minority individuals as well as lesbians and gay men. In contemporary society, both ethnic identity and sexual identity are prominent elements of an individual's social identity, affecting many aspects of daily life and potentially exposing individuals to stigma, prejudice and discrimination. Thus, it is likely that ethnic minorities, lesbians, and gay men are motivated to examine their minority identity, to try to understand the meaning of that identity, to clarify their feelings about the group, and to develop a stance toward group membership.

Three studies tested the same three predictions. First, greater identity achievement and identity affirmation will each independently be associated with greater well-being. Second, greater identity achievement will be associated with stronger feelings of affirmation. Third, the association between identity achievement and well-being will be mediated by affirmation.

Study 1: Ethnic Minority Identity among High School Students

In Study 1, we tested our mediational model among a sample of ethnic minority high school students. A substantial body of research has demonstrated that adolescence is a critical period for identity development. It is during adolescence that individuals begin a process of ethnic identity exploration through which they learn about their ethnic group and its meaning in their lives and develop a sense of belonging to their ethnic group (e.g., Roberts et al., 1999). No previous studies have tested a mediational model of identity and well-being among adolescents. In Study 1, we asked a sample of 9th graders to complete questionnaires assessing identity achievement, affirmation and psychological well-being.

Method

Participants—Ninth grade students from a public high school in southern California participated. Only those students indicating that their ethnicity was African American/Black (n = 7), Asian/Asian American (n = 29) or Latino/a (n = 175) were included in the analyses reported here[1]. The ethnic minority sample included 105 girls, 90 boys and 16 individuals who did not report their gender. Their age ranged from 13 to 17 years (*M* = 14.2, *SD* = .65).

Procedure—As part of a mandatory Life Skills course offered to 9th grade classes in the Los Angeles Unified School District, students completed a consent form and a variety of measures assessing their demographic background, ethnic identity and well-being. On average, students took approximately 30 minutes to complete the surveys. The study protocol was approved by the Institutional Review Board of the university with which the fourth and fifth authors are affiliated.

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[1]Twenty seven students (Boys = 16; Girls = 8; and 3 students who did not indicate their gender) identified as White. Because of the small sample, we did not test our mediational model with White 9th grade students.

A cross-sectional design was used to collect data during two semesters, each consisting of a different cohort of students. Students' participation in the surveys required assent from a parent or guardian as well as from the students themselves. During the first week of the course, students completed self-report questionnaires assessing their attitudes and experiences. The present analyses are based on measures of ethnic identity achievement and affirmation as well as measures of psychological well-being.

Because data were collected from two different groups of students across two semesters, it was important to ensure that the two student samples were comparable on all variables of interest. We conducted a one-way MANOVA using semester of data collection as the predictor and measures of identity achievement, identity affirmation and psychological well-being as outcomes. This analysis allowed us to test for possible mean differences between student responses in the two cohorts. Such differences would indicate that data from the samples are not comparable (Huberty & Olejnik, 2006, pp. 68–69). The MANOVA results revealed no significant differences between the variables of interest across the two semesters of data collection. Therefore the data from the two semesters were combined.

Measures—A subset of items from Phinney's (1992) Multigroup Ethnic Identity Measure (MEIM) was used to assess ethnic identity achievement and identity affirmation (Whitehead, Ainsworth, Wittig & Gadino, 2009; Wittig & Molina, 2000). Participants rated statements using a 7-point scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (7). Five items measured *ethnic identity achievement*, the extent to which individuals have actively investigated and come to understand the meaning of their ethnic identity in their life. Sample items included "I have spent time trying to find out about my ethnic group, such as its history, traditions and customs," and "I think a lot about how my life will be affected by my ethnicity." Scores were averaged to create a mean ethnic identity achievement score ($M = 4.56$, $SD = 1.05$; $\alpha = .70$).

Four items assessed *ethnic identity affirmation*, the extent to which individuals feel pride in their ethnic identity, are happy about group membership, and feel a strong attachment to their ethnic group. Sample items included "I am happy that I am a member of my ethnic group," and "I feel a strong sense of attachment to my ethnic group." Scores were averaged to create a mean ethnic identity affirmation score ($M = 5.77$, $SD = 1.07$; $\alpha = .81$).

To measure *psychological well-being*, we used the 5-item Satisfaction with Life Scale (SWL; Diener, Emmons, Larsen, & Griffin, 1985). This scale measures current life contentment. Sample items include "In most ways my life is close to my ideal" and "The conditions of my life are excellent." Responses ranged from "Strongly Disagree" (1) to "Strongly Agree" (7). In the original validation of the measure using a sample of 176 undergraduates, Diener, et al. (1985) showed that the 5-item scale had high internal consistency ($\alpha = .87$) and high test-retest reliability (two month test-retest r = .82). Additionally, in two samples of college students, Diener, et al. (1985) showed that scores on the SWL scale correlated significantly with other measures of life satisfaction such as Bradburn's (1969) Affect Balance Scale and a single item assessing happiness. In our sample, we averaged across the items to create a mean satisfaction with life scale score ($M = 4.87$, $SD = 1.20$; $\alpha = .79$).

Results

The goal of Study 1 was to test our mediational model in a sample of ethnic minority high school students. Because previous studies have not typically found gender differences in ethnic identity development (e.g., French, Sideman, Allen & Aber, 2006) or in the association between ethnic identity and self-esteem (e.g., Phinney & Alipuria, 1990;

Phinney, 1992), we had no reason to predict gender differences in our study. Thus, to maximize statistical power in the analyses, we combined the data.

We tested the mediational model using procedures suggested by Baron and Kenny (1986). Intercorrelations among variables are presented in Table 1. Results of the regression analyses for the final model are presented in Table 2. For the regression analyses, the assumptions for normality, skewness, kurtosis, multicollinearity and outliers were evaluated. Although there was no problem with multicollinearity, the assumptions of normality, skewness and kurtosis were violated for identity affirmation. We used log transformation to transform the identity affirmation variable and conducted the analyses on the transformed variable. We found no differences in the pattern of results between the transformed and non-transformed variable. Therefore, we report the results based on the non-transformed variable.

First, we predicted that identity achievement and affirmation would each predict psychological well-being. Consistent with this prediction, both identity achievement ($b = .26$, $p < .001$, $R^2 = .05$) and identity affirmation ($b = .29$, $p < .001$, $R^2 = .07$) significantly and positively predicted satisfaction with life. Second, we predicted that identity achievement would predict identity affirmation. As anticipated, identity achievement significantly and positively predicted affirmation ($b = .55$, $p < .001$, $R^2 = .30$). Third, we predicted that the association between identity achievement and well-being would be mediated by affirmation. To test this key prediction, satisfaction with life was regressed onto identity achievement and affirmation simultaneously. Results revealed that after controlling for affirmation, the relationship between ethnic identity achievement and satisfaction with life was no longer significant ($b = .14$, $p = $ n.s, $R^2 = .08$). A Sobel test confirmed that affirmation significantly mediated the association between ethnic identity achievement and satisfaction with life (*Sobel z* = 2.31, $p = .02$).

Testing an Alternative Model—Although we proposed that identity achievement leads to affirmation which leads to greater well-being, it could also be the case that affirmation leads to achievement which results in greater well-being. Stated differently, it is possible that ethnic identity achievement mediates the association between affirmation and psychological well-being.

We addressed this possibility by testing an alternative model in which identity achievement is proposed to mediate the association between ethnic identity affirmation and satisfaction with life, using the analytic strategy described above. The results failed to support this alternative mediation model: the association between affirmation and satisfaction with life remained significant after identity achievement was taken into account ($b = .21$, $p = .01$; *Sobel z* = n.s.). Instead, these results add support to our proposed model.

Study 2: Ethnic Minority Identity among College Students

To complement our study of ethnic minority 9th grade students, we investigated the associations among ethnic identity achievement, affirmation and psychological well-being in a diverse sample of college students. Researchers generally agree that identity exploration is a life-long process that may be triggered by new social experiences such as attending college (e.g., Ethier & Deaux, 1994). College presents ethnic minority students with various opportunities to consider their minority identity, perhaps through ethnic studies or other courses, reading books, or talking with classmates and friends. Information gathering and reflection assist students in coming to an understanding of their ethnic identity and its personal meaning. As one example, greater knowledge can foster an appreciation of the struggles that one's ethnic group has endured and the importance of a sense of shared

purpose by the ethnic community. This process of identity achievement can, in turn, lead to a greater affirmation of one's group membership and a stronger sense of belonging to the group. As a result, students may experience enhanced well-being. To test whether identity achievement leads to identity affirmation which in turn leads to better psychological well-being, a diverse group of ethnic minority college students completed a survey regarding ethnic identity and self-esteem.

Method

Participants—Students from a four-year public university in southern California participated. Only those students indicating that their ethnicity was African American/Black (n = 26), Asian/Asian American (n = 38) or Latino/a (n = 76) were included in the analyses reported here[2]. The ethnic minority sample included 104 women and 36 men. Their age ranged from 19 to 55 (*M* = 24.5, *SD* = 5.52).

Procedure—As part of a Psychology of Personality laboratory course, students completed a consent form and a variety of measures assessing their demographic background, ethnic identity and well-being. On average, students took 45 minutes to complete the surveys. Data were collected across five semesters in the same course taught by the same instructor. The study protocol was approved by the Institutional Review Board of the university with which the fourth and fifth authors are affiliated. As in Study 1, we assessed whether student samples across the five semesters were comparable on all variables of interest. We conducted a one-way MANOVA using semester of data collection as the predictor and measures of identity achievement, identity affirmation and psychological well-being as outcomes. Because results revealed no significant mean differences on any of the variables across semesters, we combined the data. The present analyses are based on measures of ethnic identity achievement and affirmation as well as psychological well-being.

Measures—Phinney's (1992) 12-item Multigroup Ethnic Identity Measure (MEIM) was used. Participants rated statements using a 4-point scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (4). Seven items measured *ethnic identity achievement*. Scores were averaged to create a mean ethnic identity achievement score (*M* = 3.06, *SD* = .62; α= .76). Five items assessed *ethnic identity affirmation*. Scores were averaged to create a mean ethnic identity affirmation score (*M* = 3.43, *SD* = .58; α= .88).

To measure *psychological well-being*, the Global Self-Esteem subscale from the Personal and Academic Self-Concept Inventory (PASCI; Fleming & Whalen, 1990) was used. This 5-item subscale includes such items as "Do you think of yourself as a worthwhile person?" and "Do you think of yourself as a generally competent person who can do most things well?" Responses range from "Practically Never" (1) to "Very Often" (7). In the original validation of the measure using a sample of 222 high school and 338 college students, Fleming and Whalen (1990) showed that the subscale had high internal consistency among both the high school (α= .79) and the college (α= .81) samples. Test-retest reliability was assessed for the college sample only and demonstrated to be high (test-retest *r* = .88). Additionally, in their sample of high school students, scores on the Global Self-Esteem subscale correlated with the Rosenberg (1965) self-esteem measure (*r* = .74). In their college sample, scores on the subscale did not correlate with a measure of self-consciousness (*r* = .04; Fenigstein, Scheier, & Buss, 1975). In our sample, responses were averaged to create a mean global self-esteem score (*M* = 5.48, *SD* = .99, α = .76).

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[2]In the college sample, 130 students (Men = 24; Women = 106) identified as White/Caucasian. Following an identical analytic strategy, we tested our mediational model with White students. Results revealed that neither identity achievement (b = .24, p = n.s.) nor belonging (b = −.07, p = n.s.) significantly predicted self-esteem for our White college student sample.

Results

The goal of Study 2 was to test our mediational model in a sample of ethnic minority college students. Based on previous research, we did not predict gender differences and we therefore combined the data from men and women in our sample to maximize statistical power in the analyses. We tested the mediational model using procedures suggested by Baron and Kenny (1986). Intercorrelations among variables are presented in Table 3. Results of the regression analyses for the final model are presented in Table 2. For the regression analyses, the assumptions for normality, skewness, kurtosis, multicollinearity and outliers were evaluated. Although there was no problem with multicollinearity, the assumptions of normality, skewness and kurtosis were violated for identity affirmation. We used log transformation to transform the identity affirmation variable and conducted the analyses on the transformed variable. We found no differences in the pattern of results between the transformed and non-transformed variable. Therefore, we report the results based on the non-transformed variable.

First, consistent with prediction, both identity achievement ($b = .33$, $p = .036$, $R^2 = .04$) and identity affirmation ($b = .50$, $p = .002$, $R^2 = .10$) significantly and positively predicted self-esteem. Second, as predicted, identity achievement significantly and positively predicted affirmation ($b = .70$, $p < .001$, $R^2 = .58$). Third, we predicted that the association between identity achievement and well-being would be mediated by affirmation. To test this key prediction, global self-esteem was regressed onto identity achievement and affirmation simultaneously. Results revealed that after controlling for affirmation the relationship between ethnic identity achievement and global self-esteem was no longer significant ($b = -.08$, $p = $ n.s., $R^2 = .10$). A Sobel test of mediation confirmed that affirmation significantly mediated the association between ethnic identity achievement and global self-esteem (*Sobel z = 2.21*, $p = .02$).

Testing an Alternative Model—Although we proposed that identity achievement leads to affirmation which leads to greater well-being, it could also be the case that affirmation leads to achievement which results in greater well-being. Stated differently, it is possible that ethnic identity achievement mediates the association between affirmation and psychological well-being.

We addressed this possibility by testing an alternative model in which identity achievement is proposed to mediate the association between ethnic identity affirmation and global self-esteem, using the analytic strategy described above. The results failed to support this alternative mediation model: the association between affirmation and global self-esteem remained significant after identity achievement was taken into account ($b = .50$, $p = .002$; *Sobel z* = n.s.). Instead, these results add support to our proposed model.

Study 3: Lesbian and Gay Identity

Study 3 extended our analysis of identity achievement and affirmation to a different minority group – lesbians and gay men. Because empirical work on identity development in this population is severely limited (Savin-Williams, 2005), a first step was to demonstrate an empirical association between measures of identity achievement and affirmation and psychological well-being among lesbians and gay men. A second goal was to examine the generalizability of our mediational model. We tested the same three predictions that had been confirmed in Studies 1 and 2.

Method

Participants—Self-identified gay men (n = 281) and lesbians (n = 217) completed an anonymous online survey. The sample was primarily Caucasian (83%), with 3.5% African American/Black, 1.5% Asian/Asian American, 3.5% Latino/a, and 8.5% other. Participants ranged in age from 18 to 76 (*M* = 32.73, *SD* = 11.97).

Procedure—Participants were recruited from across the United States through a variety of gay and lesbian organizations to complete an online survey assessing the life experiences of sexual minorities. All procedures, from recruitment to survey completion, took place online. Organizations such as the Los Angeles Gay and Lesbian Center and lesbian and gay organizations on university campuses were contacted and asked if they would forward a call for participation to their listservs. Those organizations that agreed received an electronic call for participation which described the purpose of the study, the researchers' contact information and a web address for participants to access the study.

Upon logging into the website, participants completed an online consent form and then completed a series of questions regarding their gay and lesbian identity, psychological well-being, and demographic background. The survey also included other measures not relevant to the current report. Participants were not paid but at the end of the survey indicated one of five gay and lesbian charities to receive a donation. They were then debriefed. Participation took approximately 45 minutes.

Measures—Sexual identity was assessed by asking participants to select from four sexual orientation categories: lesbian, gay, bisexual or heterosexual. Only participants who indicated they were gay or lesbian were included in the present analyses.

Gay/lesbian identity achievement and *affirmation* were assessed with a version of Phinney's (1992) Multi-Ethnic Identity Measure adapted to apply to lesbians and gay men (Fingerhut et al., 2005). All items were rated on a 5-point scale from "Strongly Disagree" (1) to "Strongly Agree" (5). Seven items assessed *identity achievement* including "I have spent time trying to find out about the gay/lesbian community, such as its history, traditions and customs," and "I think a lot about how my life will be affected by my sexual orientation." Items were averaged to create an identity achievement scale (*M* = 4.00, *SD* = .61; α =.71). Five items assessed *identity affirmation* including "I am happy that I am a member of the lesbian/gay community," and "I have a lot of pride in the gay/lesbian community." Items were averaged to create an affirmation scale score (*M* =3.96, *SD* = .84; α =.89).

Four measures of *psychological well-being* were included. As in Study 1, to assess current life contentment, we used the 5-item Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). Sample items include such statements as "In most ways my life is close to my ideal" and "The conditions of my life are excellent." Responses ranged from "Strongly Disagree" (1) to "Strongly Agree" (5), and were averaged to create a mean satisfaction with life scale score (*M* = 3.59, *SD* = .84; *α* =.87).

To assess self-esteem, the 10-item Rosenberg self-esteem scale (RSES; Rosenberg, 1965) was used. Sample items include such statements as "All in all, I am inclined to feel like a failure" and "On the whole, I am satisfied with myself." Responses ranged from "Strongly Agree" (1) to "Strongly Disagree" (5). Herek, Cogan, Gillis and Glunt (1997) found the scale to be reliable in a sample of gay, lesbian and bisexual individuals (α = .93). In a study of college students, Silber and Tippett (1965) examined the validity of the RSES and showed that scores on the RSES correlated significantly with an outside interviewer's assessment of a participant's self-esteem. In our sample, responses were averaged to create a mean self-esteem scale score (*M* = 4.04, *SD* = .68; *α* = .89).

The Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977) is a widely used 20-item scale measuring depressive symptoms and psychological distress. Illustrative items include "I was bothered by things that usually don't bother me" and "I felt afraid." Participants rated how often during the past week they experienced each feeling or symptom, using a scale ranging from "Rarely; less than 1 day" (1) to "Most or all of the time; 5–7 days" (4). In a sample of 150 gay men and lesbians recruited from a Sacramento street fair, Herek, et al. (1997) reported high reliability for this scale (gay men: $\alpha = .94$; lesbians: $\alpha = .93$). In the original validation of the CESD, Radloff (1977) showed that scores on the CESD correlated with interviewers' ratings of participants' depression as well as with scores on Bradburn's (1969) Negative Affect subscale. Additionally, though moderate, scores on the CESD were inversely correlated with scores on Bradburn's (1969) Positive Affect subscale. In our sample, responses were averaged to create a mean depressive symptoms scale score. This scale was highlyreliable ($\alpha =.92$). The lesbians and gay men in this sample reported relatively low levels of depressive symptoms ($M = 1.58$; $SD = .54$).

Participants also completed 20 items from the State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, & Lushene, 1970). Using a scale ranging from "Almost never" (1) to "Almost always" (4), participants rated how often they feel "nervous and restless," "like a failure," "calm, cool, and collected, "secure," "inadequate," etc. A review of studies utilizing the STAI reported an average alpha coefficient for the trait anxiety scale of .89 (N = 51) and a test-retest coefficient of .88 (N = 7) (Barnes, Harp & Jung, 2002). Responses were averaged to create a mean trait anxiety scale score. The scale was highly reliable in this sample ($\alpha =.92$). Both lesbians and gay men reported low levels of anxiety ($M = 1.90$, $SD = .49$).

Results

Study 3 had two main goals. A first goal was to evaluate whether identity achievement and identity affirmation each significantly predict well-being among lesbians and gay men. A second goal was to test the mediational model with members of another stigmatized minority group. An alternative to the proposed mediational model was also tested. Because little is known about the associations among identity achievement, affirmation and psychological well-being among gay men and lesbians, we first examined these associations separately for lesbians and gay men. However, our analyses yielded comparable results for gay men and lesbians, both with respect to the means levels on the variables of interest and the correlations among them. Therefore, we combined the data for gay men and lesbians report results for the total sample below.

Intercorrelations among variables are presented in Table 4. Results of the regression analyses for the final model are presented in Table 2. For the regression analyses, the assumptions for normality, skewness, kurtosis, multicollinearity and outliers were evaluated. Although there was no problem with multicollinearity, the assumptions of normality, skewness and kurtosis were violated for identity affirmation, and measures of anxiety and depression. We used log transformation to transform each of the variables and conducted the analyses on the transformed variables. We found no differences in the pattern of results between the transformed and non-transformed variables. Therefore, we report the results based on the non-transformed variables.

First, as anticipated, greater identity achievement significantly predicted greater satisfaction with life ($b = .27$, $p < .001$, $R^2 = .04$), higher self-esteem ($b = .28$, $p < .001$, $R^2 = .07$), fewer depressive symptoms ($b = -.20$, $p < .001$, $R^2 = .05$), and less anxiety ($b = -.19$, $p < .01$, $R^2 = .06$). A stronger sense of affirmation also significantly predicted greater satisfaction with life ($b = .35$, $p < .001$, $R^2 = .12$), higher self-esteem ($b = .27$, $p < .001$, $R^2 = .11$), fewer depressive symptoms ($b = -.19$, $p < .001$, $R^2 = .09$), and less anxiety ($b = -.20$, $p < .001$, $R^2 = .12$).

Next, we showed that greater identity achievement was significantly associated with greater affirmation ($b = .87$, $p < .001$, $R^2 = .56$). As the final step, we conducted separate regression analyses for each measure of psychological well-being. In each, we regressed the well-being indicator onto identity achievement and affirmation simultaneously. Results revealed that after controlling for affirmation, the association between identity achievement and well-being was no longer significant for any of the measures: satisfaction with life ($b = −.04$, $p =$ n.s., $R^2 = .12$), self-esteem ($b = .09$, $p =$ n.s., $R^2 = .11$), depressive symptoms ($b = −.06$, $p =$ n.s., $R^2 = .09$) and anxiety ($b = −.04$, $p =$ n.s., $R^2 = .12$).

As shown in Table 4, a Sobel test of mediation confirmed that affirmation significantly mediated the association between identity achievement and each measure of psychological well-being: satisfaction with life (Sobel $z = 5.65$, $p < .001$), self-esteem (Sobel $z = 4.26$, $p <.$ 001), depressive symptoms (Sobel $z = −3.98$, $p = .001$) and anxiety (Sobel $z = −5.17$, $p < .$ 001). These findings indicate that, consistent with the mediational model, the exploration of one's lesbian or gay identity was associated with greater feelings of affirmation about one's lesbian or gay identity, which in turn, predicted better psychological well-being.

Testing an Alternative Model—As in Study 1 and 2, we also tested an alternative model, specifically that gay and lesbian identity achievement mediated the relationship between affirmation and satisfaction with life, self-esteem, depression and state anxiety. Analyses failed to reveal any evidence of mediation; the associations between affirmation and satisfaction with life, depression and state anxiety measures remained significant after identity achievement was taken into account (all *Sobel z*'s= n.s.).

General Discussion

The present research provided consistent support for a mediational model of how two aspects of minority identity – identity achievement and identity affirmation -- work together to predict psychological well-being. These results suggest that identity achievement is psychologically beneficial to the extent that it results in the affirmation of one's minority identity. In other words, exploring the history and contributions of one's minority group and understanding the meaning of a minority identity in one's personal life are beneficial insofar as these processes contribute to positive feelings toward the group and a greater sense of group attachment. This model proved applicable to individuals from two very different minority groups (ethnic and sexual minorities), across differing age groups (high school, college and adults), and recruited in different ways. The model was supported using several different measures of psychological well-being including self-esteem, satisfaction with life, depression, and state anxiety.

In addition, this work demonstrates the generalizability of our model across two distinct minority identities – ethnicity and sexual orientation. We agree with Phinney and Ong (2007) that the study of minority identity can benefit from approaches that focus on commonalities among diverse groups and also from approaches that emphasize distinctive aspects of different social groups. With regard to commonalities, our study addressed very general processes of learning about one's group, understanding the personal meaning of a minority identity and developing feelings of affirmation to a social group. At the same time, the minority groups we studied differ in important ways, including the degree of social stigma that group members face and the potential to conceal one's group membership. In the future, it will be useful to have studies focusing on aspects of identity development unique to specific groups. For example, whereas most ethnic minority individuals come from families that recognize and affirm their ethnic identity, gay and lesbian individuals are typically challenged to reveal their identity to heterosexual family members who may be

unaware and disapproving. Many identity-relevant experiences, values, attitudes and behaviors may be group specific.

Even though our research makes important contributions to the literature on identity processes and well-being, several potential limitations merit discussion. Because we relied on correlational data from a single assessment, we cannot definitively determine the causal relations among variables. Drawing on developmental models of identity formation, we proposed that a sense of affirmation mediates the association between identity achievement and well-being, but other causal directions are possible. We addressed this issue by testing and ruling out an alternative mediational model in which identity achievement mediated the association between affirmation and well-being. No support was found for this model in either the ethnic minority or gay/lesbian samples. A recent study by Whitehead, Ainsworth, Wittig and Gadino (2009) further corroborates the direction of our predictions. Using a longitudinal design, Whitehead et al. assessed the association between identity achievement and affirmation in an intergroup context where Euro-American, Asian American and Latino adolescents reported on their feelings towards their own ethnic group as well as those toward other ethnic groups. Structural equation models (SEM) demonstrated that a model in which ethnic identity achievement at Time 1 (beginning of the semester) predicts ethnic identity affirmation at Time 2 (8 weeks later) was superior to the alternative model in which the association between them was reversed – that is, affirmation at Time 1 predicts achievement at Time 2. Their results suggest that the exploration of one's ethnic identity can serve as a basis for establishing a secure attachment to one's ethnic group, which in turn, has implications for feelings toward one's own and other groups. These results support our proposed model in which exploration of what it means to be a member of an ethnic group provides an important foundation for developing one's sense of belongingness to an ethnic group, which in turn may confer benefits. Future research using longitudinal methods would be valuable in replicating these findings and also testing other plausible alternatives.

Although there was enough variance among scores on identity achievement and affirmation to detect significant patterns of association, participants generally scored fairly high on these measures. To some extent, this probably reflects characteristics of the samples we recruited, not necessarily of the general population. In Study 2, ethnic minority students' scores may reflect their experiences at a university with a large minority population and/or the fact that they had already engaged in exploration of their identity and developed positive group attitudes at a younger age. In Study 3, lesbians and gay men were recruited through gay/lesbian listservs for a study of the life experiences of sexual minority individuals. These gay and lesbian respondents are likely to be active in the gay/lesbian community, may have spent more time exploring their identity and may feel better about their gay/lesbian identity than other segments of the gay and lesbian population. Furthermore, the fact that our survey took approximately 45 minutes and that gay and lesbian participants were not paid might have discouraged some individuals from taking part, resulting in a sample of more highly motivated individuals who might differ from those who chose not to complete the survey.

Another limitation of our gay and lesbian sample is the low number of ethnic minority participants. Though our sample did not consist exclusively of White participants, the number of ethnic minorities in our sample was not large enough to allow us to test the model among ethnic minority lesbians and gay men. Although we believe that the mediational model tested in this research would apply to a wider range of ethnic minority and sexual minority individuals including individuals who are both ethnic and sexual minorities, it would be worthwhile to test this point empirically. Several measures could be taken by future researchers to ensure the ethnic diversity of gay and lesbian respondents. One approach would be to engage ethnic minority gay/lesbian communities by establishing connection with community leaders, attending community events and recruiting community

members to assist not only with participant recruitment but also with developing research questions and measures. In this manner, researchers would not only take a step toward ensuring diversity within the sample but they would also benefit from the insights provided by the community members to improve the study design. Additionally, with the popularity and accessibility of the internet, another way to increase ethnic diversity would be to advertise the research on the websites of organizations that directly serve ethnic minority sexual minorities such as the Gay Asians Pacific Alliance or the National Latina/o Lesbian, Gay, Bisexual & Transgender Human Rights Organization or on popular blogs that have ethnic minority gay and lesbian readership such as Ron2.0.

Several directions for future research would be valuable. Although, we tested our model with ethnic and sexual minorities who were at different stages of the life span (adolescents, college students and adults), the range of ages in each of the samples were not large enough to allow us to divide them into meaningful age groups. Future research would benefit from examining these identity processes across various age groups. Furthermore, to assess the generalizability of the mediational model, it would be useful to test the model with minority groups other than those included in the present research. This might include studies of religious minorities or of individuals with physical disabilities.

It would also be important to consider how identity achievement, identity affirmation and the mediational model might apply to the experiences of biracial or multiracial individuals (Shih & Sanchez, 2009). The process of identity development for multiracial individuals may differ from that of monoracial individuals. For example, Sanchez and Shih (2009) suggest that multiracial individuals may experience a stage in which they feel great tension and conflict about their racial identity and may feel forced to choose from among their different component identities. The extent to which the unique challenges of multiracial identity affect the person's likelihood of exploring and understanding the meaning of their multiracial identity and developing a sense of belonging to multiple racial groups is currently not known. Nor do we know how these identity processes impact the psychological well-being of multiracial individuals. Additionally, although our work examined ethnic identity and sexual identity independently, the fact remains that individuals necessarily embody multiple identities (e.g., being both black and gay). Future research would benefit from examining whether and how these intersecting identities affect identity processes and their implications for psychological well-being.

Finally, there is growing evidence that the impact of minority identity on well-being depends not only on aspects of minority identification but also on the individual's connection to the broader majority culture. Researchers studying acculturation and acculturation processes (e.g., Berry, 1984; Rudmin, 2003) have shown that ethnic minority individuals who develop both a sense of identification with their own minority group and a sense of connection a d belonging to the larger society have greater psychological well-being than ethnic minority individuals who show a strong connection to their minority group or the mainstream majority culture. Similarly, Fingerhut, Peplau, and Ghavami (2005) demonstrated that lesbians who were more strongly identified with both lesbian/gay and mainstream heterosexual communities reported greater satisfaction with life. More detailed analyses of the nature and consequences of identity achievement and affirmation toward both minority groups and the broader majority community would be useful.

Conclusions

Taken together, our work contributes to and extends existing literature on minority identity and well-being. Our results highlight the importance of conceptualizing and assessing group identity as a multifaceted construct in order to better understand why social identity is psychologically beneficial for minority individuals. By distinguishing between identity

achievement and identity affirmation, we were able to investigate both their independent and joint contributions to psychological well-being. Our findings are consistent with developmental models of identity formation in showing that the process of identity achievement can serve as an important basis for developing positive feelings about and a sense of belonging to one's minority identity which in turn contributes to psychological well-being. Moreover, this research confirms the social identity theory view that a sense of affirmation or group pride serves as an important basis for an individual's well-being. We believe that our work can have important implications for interventions programs by suggesting that there may be a number of positive psychological benefits for those individuals who engage in a meaningful process of exploration of their minority identity which can in turn lead to the affirmation of one's minority identity and a sense of belonging to one's group.

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Table 1

Intercorrelations Among Identity Achievement, Affirmation and Psychological Well-Being in an Ethnic Minority Adolescent Sample (Study 1)

Variables	1	2	3
1. Identity achievement	.55**		.26*
2. Identity affirmation		--	.23**
3. Satisfaction with Life			--

Note.

*
$p < .05,$

**
$p < .01$

Table 2

Regression Coefficients, Standard Errors and Sobel z Statistics for The Association Between Identity Achievement and Psychological Well-being After Controlling for Identity Affirmation in Studies 1, 2 and 3.

Study	b	SE	Sobel z
1. Ethnic Minority High School Students			
Satisfaction with Life			2.31[*]
Identity achievement	.14	.09	
Identity affirmation	.21[*]	.09	
2. Ethnic Minority College Students			
Global Self-Esteem			2.21[*]
Identity achievement	−.08	.24	
Identity affirmation	.56[*]	.25	
3. Lesbians and Gay Men			
Life Satisfaction			5.65[***]
Identity achievement	−.04	.11	
Identity affirmation	.36[***]	.06	
Rosenberg Self-Esteem			4.26[***]
Identity achievement	−.09	.08	
Identity affirmation	.22[***]	.05	
Depressive symptoms			−3.98[***]
Identity achievement	−.06	.07	
Identity affirmation	−.16[***]	.04	
Anxiety			−5.17[***]
Identity achievement	−.04	.08	
Identity affirmation	−.19[***]	.04	

Note:

[*] p < .05,

[**] p < .01,

[***] p < .001

Table 3

Intercorrelations Among Identity Achievement, Affirmation and Psychological Well-Being in the Ethnic Minority College Student Sample (Study 2)

Variables	1	2	3
1. Identity achievement	.75**		.20*
2. Identity affirmation		--	.29**
3. Global Self-esteem			--

Note.

*
$p < .05$,

**
$p < .01$

Table 4

Intercorrelations Among Identity Achievement, Affirmation and 4 Measures of Psychological Well-Being in the Lesbian and Gay Sample (Study 3).

Variables	1	2	3	4	5	6
1. Identity Achievement	--					
2. Identity Affirmation	.63	--				
3. Satisfaction with Life	.20	.35	--			
4. Self-esteem	.25	.33	.61	--		
5. Anxiety	−.24	−.35	−.64	−.81	--	
6. Depressive symptoms	−.22	−.29	−.55	−.60	.64	--

Note: All correlations are significant at $p < .001$.