

National Identity and Perceived Discrimination Predict Changes in Ethnic Identity Commitment: Evidence from a Longitudinal Study of Latino College Students

Thomas E. Fuller-Rowell*
University of Wisconsin, USA

Anthony D. Ong
Cornell University, USA

Jean S. Phinney
California State University, Los Angeles, USA

The current study tests the hypothesis that the influence of perceived discrimination on ethnic identity commitment is moderated by national identity (a person's psychological affiliation to their country of residence). A positive direct effect of national identity on ethnic identity commitment was also predicted. Analyses are based on a sample of Latino college students in the United States followed across eight consecutive semesters ($N = 97$; $M_{\text{age}} = 18$). In support of the hypotheses, a significant interaction was found between discrimination and national identity. In particular, perceived discrimination in the first year of college was positively associated with changes in ethnic identity commitment across the college years among participants with a weaker national identity, but negatively associated with changes in ethnic identity commitment among participants with a stronger national identity. Higher levels of national identity were also associated with greater increases in ethnic identity commitment over time.

INTRODUCTION

Ethnic identity plays an important role in the adjustment and well-being of ethnic minority adolescents and youth in the United States (Phinney, 1990).

* Address for correspondence: Thomas E. Fuller-Rowell, Robert Wood Johnson Foundation Health & Society Scholar, University of Wisconsin—Madison, 610 Walnut Street, WARF 707, Madison, WI 53726-2397, USA. Email: tom.fullerrowell@gmail.com

Support for this research was provided by the Robert Wood Johnson Foundation Health & Society Scholars program.

However, while a handful of studies have considered changes in ethnic identity over time (Quintana, 2007; Umaña-Taylor & Guimond, 2010), knowledge of the processes and antecedents of identity change is still in its early stages of development. Focusing on a sample of Latino college students, the current study considers the effects of (1) perceived discrimination and (2) national identity on changes in ethnic identity commitment across the college years. In line with acculturation research, we define *ethnic identity commitment* as a person's psychological affiliation to their ethnic group and heritage culture, while *national identity* is defined as a person's psychological affiliation to the country where they currently reside (David & Bar-Tal, 2009; Phinney, Horenczyk, Liebkind, & Vedder, 2001).

A range of work has explored the effects of discrimination on racial and ethnic identity (e.g. Branscombe, Schmitt, & Harvey 1999; Cross, 1991). However, the role of national identity as a moderator of the effect of perceived discrimination has not been considered, despite evidence suggesting that how discrimination is perceived and experienced may be influenced by a person's identification with the mainstream national culture or majority group (Brown, 2000; Stangor, Sechrist, & Jost, 2001; Tajfel & Turner, 1986). The current study seeks to address this gap in the literature by considering national identity and perceived discrimination at the beginning of the college years—and their interaction—as predictors of subsequent changes in ethnic identity commitment.

Discrimination and Ethnic Identity

Discrimination is a frequent experience in the lives of Latino adolescents (Cabrera & Nora, 1994; Greene, Way, & Pahl, 2006; Nora & Cabrera, 1996; Portes, 1990; Portes & Rumbaut, 2001). However, little clarity exists relating to the effects of discrimination on ethnic identity. The rejection-identification model, introduced by Branscombe et al. (1999), offers one viewpoint on this relationship, suggesting that, because social rejection activates a person's need to belong, experiences of discrimination may lead to increases in ethnic identity. Although empirical research has found that discrimination is associated with higher levels of group identity among African Americans and other stigmatised groups (Branscombe et al., 1999; Garstka, Schmitt, Branscombe, & Hummert, 2004; Jetten, Branscombe, Schmitt, & Spears, 2001; Schmitt, Branscombe, Kobrynowicz, & Owen, 2002; Schmitt, Spears, & Branscombe, 2003), the association between discrimination and ethnic identity is less clear among Latinos. Pahl and Way (2006), for example, found that, although discrimination was associated with increases in ethnic identity among African American adolescents, discrimination was not significantly associated with changes in ethnic identity among Latino adolescents. Furthermore, although some cross-sectional

analyses have found a positive association between discrimination and ethnic identity among Latinos (Cislo, 2008; O'Brien, Mars, & Eccleston, 2011; Umaña-Taylor & Guimond, 2010), other studies of Latino youth have found a negative association or no statistically significant relationship (Armenta & Hunt, 2009; Pérez, Fortuna, & Alegria, 2008; Romero & Roberts, 2003; Umaña-Taylor & Guimond, 2010; Umaña-Taylor & Updegraff, 2007). Overall, research on this topic could be interpreted to suggest that discrimination has no consistent effect on the development of ethnic identity commitment among Latinos. However, the diversity of findings across studies indicates that there is substantial variability in this association, and that an exploration of moderating variables may be important.

Individual Differences in Responses to Discrimination

Foundational theories suggest that individuals vary in their responses to discrimination (Allport, 1954; Tajfel & Turner, 1986). Allport (1954), for example, details various possible psychological responses to being a member of a group that is devalued or discriminated against by the larger society. In particular, Allport describes responses to discrimination fitting into two broad categories: *intropunitive* and *extropunitive* (p. 160). Intropunitive responses are said to be associated with self-blame, in-group blame, and group disidentification, whereas extropunitive responses are associated with increased group identification, and anger or hostility towards the dominant group (Allport, 1954).

Building on this perspective, social identity theory (Tajfel & Turner, 1986) also suggests diversity in responses to discrimination. In particular, empirical research in this area has shown that the effects of discrimination on ethnic identity are moderated by individual factors such as the perceived stability or legitimacy of group relations (Brown, 2000; Hogg, 2003). While these findings offer support for specific aspects of social identity theory, national identity has not been explored as a moderator of discrimination, despite important implications of this construct to acculturation theory and to the adjustment of ethnic minority and immigrant youth (e.g. Berry, Phinney, Sam, & Vedder, 2006; Phinney et al., 2001). The current study will therefore explore the effects of discrimination experienced in the first few months of college on changes in ethnic identity, and examine national identity, measured prior to experiences of discrimination, as a predictor of variability in this relationship. Although perceived discrimination and national identity can both be conceptualised as constructs that change over time, the current study focuses on levels of each of these constructs at the beginning of the college years as predictors of subsequent changes in ethnic identity.

National Identity as a Moderator of the Effects of Discrimination

Important work provides insight into the role that national identity might play in modifying the effects of discrimination on ethnic identity. Specifically, theory and research suggest that the perspectives and preferences of in-group members have a greater influence on beliefs than the perspectives of out-group members (Brown, 2000; Stangor et al., 2001; Tajfel & Turner, 1986). For example, Stangor and colleagues (2001) have shown that when students are exposed to the perspectives of other students who attend the same college, they show greater change in their own attitudes than when they are exposed to the perspectives of students from a rival college. Furthermore, several studies within the social identity literature have suggested that individuals will tend to give more credence to the perspectives of in-group members and be more likely to align themselves with these perspectives (e.g. Ethier & Deaux, 1994; Turner, Pratkanis, Probasco, & Leve, 1992; Ullah, 1987). Extending this work, we expect that the more individuals identify as American (i.e. have a strong national identity), the more damage discrimination (inflicted by Americans) would be expected to have on the maintenance and development of their ethnic identity. In other words, when an individual identifies with a group who is expressing prejudice about their ethnicity, that prejudice may be less easily discounted and therefore may have a stronger negative influence on their ethnic identity. Based on these premises, we hypothesise that individuals with a strong national identity will tend to become less identified with their ethnic group over time in response to discrimination; however, those with a weak national identity will be expected to follow the rejection-identification model, and identify more strongly with their ethnic group in response to discrimination (Branscombe et al., 1999). A conceptual model depicting the hypothesised relationship between discrimination and ethnic identity with national identity as a moderator is shown in Figure 1. The negative path on

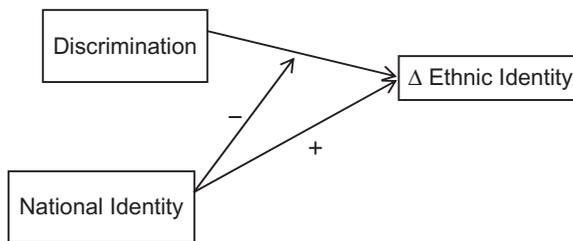


FIGURE 1. Conceptual model depicting the hypothesised effects of discrimination and national identity on ethnic identity development.

the figure (relating to the moderating effects of national identity) elucidates our expectation that higher levels of national identity will be associated with a more negative (or less positive) relationship between discrimination and ethnic identity.

Direct Effects of National Identity on Changes in Ethnic Identity

Studies suggest that having a strong psychological affiliation with both ethnic and national cultures—an integrated or bicultural identity—is the most adaptive identity profile (Berry et al., 2006; Phinney et al., 2001; Phinney, Cantu, & Kurtz, 1997; LaFromboise, Coleman, & Gerton, 1993). However, the dynamics of developing or maintaining such an identity are not yet well understood (Amiot, de la Sablonnière, Terry, & Smith, 2007). Specifically, although ethnic and national orientations have been shown to represent unique dimensions (Ryder, Alden, & Paulus, 2000), the question of how national identity might directly affect changes in ethnic identity over time has not been explored, despite the importance of this question to understanding the acculturation and adaptation of Latinos and other groups (e.g. Lara, Gamboa, Kahramanian, Morales, & Bautista, 2005). To address this question, we will also consider the direct influence of national identity on the development of ethnic identity over time.

While we are not aware of any empirical research that has addressed this question in particular, some related work is of relevance. For example, a range of perspectives suggests that the inherent “twoness” of maintaining a national identity alongside an ethnic identity is a fundamentally challenging predicament for ethnic minority youth (Cross, 1991; DuBois, 1903/1989, LaFromboise et al., 1993; Phinney, 1990). Along these lines, research has suggested that the process of acculturating into a mainstream national culture may lead to decreases in ethnic identity (Amiot et al., 2007; Lambert, 1977; Lambert & Taylor, 1983; Noels & Clement, 1996). However, other lines of work also suggest that, while balancing different identities may be a challenging task of adolescence and emerging adulthood, specific group identities need not be conflictual (Cross & Cross, 2007; Frable, 1997; Howard, 2000); and more specifically, national identity need not be in conflict with ethnic identity, especially in the context of a pluralistic society (Berry, 1997; Berry et al., 2006; Phinney, 2008; Verkuyten, 1997).

In addition to the idea that national identity may not hinder the development of ethnic identity, another important consideration is that identification in one domain may actually be positively associated with identity development in other domains. Along these lines, foundational theory and research suggests that, regardless of domain, group identification is generally experi-

enced as positive (Berry et al., 2006; Hogg, 2003; Lara et al., 2005; Phinney et al., 1997; Tajfel & Turner, 1986) and that positive experiences create a more flexible psychological state (e.g. Fredrickson & Joiner, 2002; Isen, Niedenthal, & Cantor, 1992; Isen, Johnson, Mertz, & Robinson, 1985; Isen, Daubman, & Nowicki, 1987), which may be conducive to further identity development. Furthermore, individuals who have already developed a strong national identity may have more psychological resources to focus on ethnic identity development. Following the logic of these perspectives, since a strong national identity is generally experienced as positive (Berry et al., 2006), it may be associated with identity development in other domains, including ethnic identity. We therefore hypothesise that national identity will contribute positively to the subsequent development of ethnic identity over time. The direct effect of national identity on the development of ethnic identity is depicted in Figure 1.

Summary and Integration of Hypotheses

Overall, we have discussed two ways in which national identity can influence changes in ethnic identity: as a moderator of the relationship between discrimination and ethnic identity, and as a direct positive predictor of ethnic identity development (see Figure 1). Putting these two predictions together, we expect that at low levels of discrimination, the effects of a strong national identity on ethnic identity will be entirely positive (because at low levels of discrimination the path from discrimination to ethnic identity would not be expected to have a substantial subtractive effect). However, at higher levels of discrimination the negative pathway from discrimination to ethnic identity is expected to exert its effect, and thus the direct positive influence of national identity on ethnic identity will likely be tempered by the negative influence of discrimination on ethnic identity. At higher levels of discrimination, we therefore expect that changes in ethnic identity will not vary as greatly across individuals at different levels of national identity.

METHODS

Participants

Participants in the current study were 101 first year college students (73% female; 83% US born; $M_{\text{age}} = 17.93$, $SD = .61$) attending a large, ethnically diverse urban university in Southern California. All participants self-identified as Hispanic or Latino. The majority of students reported that their ethnic background was Mexican (83%), while the remaining students reported that their ethnic background was either Central American (12%;

primarily Guatemala, and El Salvador) or part Mexican and part Central American (5%). Parents' level of education was measured on the following 8-point scale: (1) No formal education, (2) 1–3 years (some elementary school), (3) 4–6 years (completed elementary school), (4) 7–9 years (some secondary school), (5) 10–12 years (completed secondary school), (6) some college, community college, trade or technical school, (7) college degree, BA, (8) graduate or professional education. In the current sample, parent education ranged from no formal education (1) to some college education (6), with some high school education as the mean ($M = 3.55$, $SD = 1.12$).

Procedure

Participants were asked to complete a self-report questionnaire once each semester for eight consecutive semesters, starting at the beginning of their first semester at college. Background measures, including gender, immigrant generational status, SES, and national identity were assessed in the initial questionnaire only, while other measures, including ethnic identity, were assessed longitudinally. Perceived discrimination at college was measured once, during the second semester of student's first year. The discrimination measure therefore assessed levels of discrimination experienced during the first semester of college, and up until the second semester questionnaire. The timing of the discrimination measure meant that experiences of discrimination at college occurred after national identity was assessed. Given the possible influence of discrimination on national identity (Jasinskaja-Lahti, Liebkind, & Solheim, 2009), this is a methodological strength which allowed for more adequate examination of the impact of discrimination on ethnic identity commitment as a function of national identity. Trajectories of ethnic identity commitment are based on seven waves of measurement, starting in the second semester of students' first year at college (when discrimination was measured) and going through students' senior year. The intercept for trajectories of ethnic identity commitment is therefore specified in all models to be at the second semester of college.

Measures

Ethnic Identity Commitment. Ethnic identity commitment was assessed each semester using the three-item commitment subscale of the Revised Multi-group Ethnic Identity Measure (MEIM-R; Phinney & Ong, 2007). Ethnic identity commitment refers to the strength of an individual's ties with their ethnic group, and their sense of clarity surrounding the meaning of their ethnic group membership (Phinney & Ong, 2007; Berzonsky, 2003). Items for

the subscale are, “I feel a strong attachment towards my own ethnic group”, “I have a strong sense of belonging to my own ethnic group”, and “I understand pretty well what my ethnic group membership means to me”. Participants reported on a 5-point scale how strongly they agree or disagree with each of the items. Cronbach’s α was between .85 and .88 across the seven waves used in our analyses.

Perceived Discrimination. Perceptions of discrimination were assessed during the second semester of participants’ first year of college using three items. The items measured the frequency with which students had ever been treated negatively or unfairly because of their race or ethnicity since arriving at college by (1) other students, (2) professors/instructors, and (3) staff (office personnel, administrators). Similar items have been used in previous studies as valid measures of discrimination among Latino college students (Ancis, Sedlacek, & Mohr, 2000; Cabrera & Nora, 1994; Helm, Sedlacek, & Prieto, 1998; Hurtado, Carter, & Spuler, 1996; Nora & Cabrera, 1996). Response options were on a 5-point scale ranging from never (coded as 0) to very frequently (coded as 4). A sum score for the three items was taken as an estimate of perceived discrimination. Cronbach’s α for the three-item scale was .79.

National Identity. National identity was assessed during the first semester of participants’ first year of college, one semester prior to assessing experiences of discrimination. Three items measured the degree to which participants endorse the values of mainstream American society, and the degree to which they feel part of American culture (Phinney & Devich-Navarro, 1997). Items were “I strongly endorse the values of mainstream American culture”, “I have a strong feeling of belonging to, or being part of, American culture”, and “I feel strongly attached to American society or culture”. Response options were on a 5-point scale ranging from “strongly disagree” (1) to “strongly agree” (5). A mean score was calculated from the three items. Cronbach’s α of the scale was .86.

Demographics. SES, immigrant generational status, and gender were reported by participants in the initial questionnaire administered during their first year. SES was assessed from adolescent reports of their parents’ levels of education on an 8-point scale ranging from no formal education (1) to graduate or professional education (8). Immigrant generational status was assessed through participant reports of whether they, and each of their parents, were born in the US. Sixteen per cent of participants were foreign born (first generation). The majority of participants (74%) were born in the US and had at least one parent who was born abroad (second generation), and a small number (7%) were born in the US and with both parents also

born in the US (third generation or greater). Since there were only a small number of third generation immigrants in the sample, the generational status variable was dummy coded such that US born participants were coded as zero (second or third generation) and foreign born participants were coded as one (first generation). Gender was coded dichotomously (female = 0; male = 1).

Descriptive statistics and zero-order correlations between all study variables are shown in Table 1. All continuous variables (SES, national identity, and discrimination) were standardised to have a mean of 0 and a standard deviation of 1 before entering them in the models described below. Standardisation of continuous variables makes model intercepts and parameter estimates more easily interpretable and is standard procedure when considering interaction terms (Cohen, Cohen, Aiken, & West, 2003).

Analysis Overview

We tested our hypotheses using Multilevel Random Coefficient Modeling (Raudenbush & Bryk, 2002). A multilevel-modeling approach allows for the simultaneous estimation of within- and between-person effects. At level 1 (within-person), outcomes are estimated as a function of time and time-varying covariates, and at level 2 (between-person), variability in the level 1 coefficients is modeled as a function of person-level time-invariant covariates. The strengths of this approach to longitudinal data analysis have been established, and are discussed in detail elsewhere (e.g. Raudenbush & Bryk, 2002; Singer & Willett, 2003).

Four models were estimated for the current study. An unconditional (null) model, with no predictors, was initially estimated in order to determine the proportion of variance in ethnic identity that could be attributed to within- and between-person differences, and to calculate an intraclass correlation coefficient (ICC). Next, a “slope only” model was estimated to test for a linear time trend in ethnic identity across the college years, and to determine the variance across individuals in this slope. In all models, time was coded to define the intercept at the second semester of college (the first time point in the ethnic identity commitment trajectory). Two conditional models were then estimated to test our primary questions of interest. First, a main effects model was estimated with national identity and discrimination as predictors of the intercept and slope of ethnic identity. The purpose of this model was to determine the main effects of national identity—measured upon arrival at college—and perceived discrimination—measured at the beginning of the second semester of college—on ethnic identity development. Background and demographic variables (gender, SES, and generational status) were also controlled to account for their possible associations with ethnic identity

TABLE 1
Correlations and Descriptive Statistics

Variables	1	2	3	4	5	6	7	8	9	10	11	
1. Gender	—											
2. Generation	.045	—										
3. SES	.139	-.021	—									
4. Nat.Iden.1	-.035	-.055	.203*	—								
5. Discrim.2	.180	.169	.116	-.074	—							
6. EI.2	-.023	-.017	-.149	-.122	-.048	—						
7. EI.3	-.101	-.100	-.179	-.072	.003	.582***	—					
8. EI.4	-.087	-.111	-.162	.071	.002	.585***	.685***	—				
9. EI.5	.106	-.103	-.144	.116	.042	.505***	.632***	.693***	—			
10. EI.6	.105	-.186	-.156	.263*	.004	.475***	.509***	.665***	.647***	—		
11. EI.7	-.044	-.057	-.083	.192	.178	.623***	.534***	.650***	.593***	.705***	—	
12. EI.8	.078	-.303*	-.075	.219	-.065	.597***	.504***	.731***	.599***	.796***	.742***	
Mean	.268	.165	3.552	3.625	3.887	3.765	3.725	3.889	3.786	3.790	3.942	3.768
SD	.445	.373	1.119	0.850	1.290	.930	.877	.868	.828	.898	.873	.908
Min	.000	.000	1.000	1.667	3.000	1.000	1.000	1.667	1.000	1.333	2.000	2.000
Max	1.000	1.000	6.000	5.000	7.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000

Note: Gender: 0 = female 1 = male, Generation: 0 = US born, 1 = foreign born, EI = ethnic identity commitment. The numbers following variable names indicate the wave in which the variable data were collected. * $p < .05$; ** $p < .01$; *** $p < .001$.

commitment. A final model then added an interaction term to determine whether the effects of discrimination on the slope of ethnic identity commitment was moderated by national identity.

Participants in the study completed an average of approximately five of the seven longitudinal surveys where ethnic identity was measured ($M = 5.28$, $SD = 1.99$). Missingness at level 1 (number of questionnaires out of seven that were not completed) was not associated with any of the demographic or substantive variables of interest (zero-order correlations were not statistically significant). At level 2, nine subjects had missing data on one or more of the variables of interest (generational status, SES, national identity, or perceived discrimination). To avoid the exclusion of all of these cases from the analysis (through listwise deletion), missing data at level 2 were imputed using pattern matching (Jöreskog & Sörbom, 1996–2002). This procedure involves matching missing-value cases with a subset of subjects that have a similar pattern of responses on non-missing variables (Kline, 2005). The matched cases are then used to substitute each missing value when enough similar cases are available to accurately do so. After this procedure was implemented, 97 individuals could be included in the final analyses. Imputation was conducted using PRELIS (Jöreskog & Sörbom, 1996–2002), and multilevel models were estimated using HLM (Raudenbush, Bryk, Cheong, & Congdon, 2004).

RESULTS

Establishing Unconditional Trajectories and Variance Components

Variance components from the unconditional (null) model yielded an ICC of .62, suggesting that the remaining 38 per cent of the total variability in ethnic identity can be accounted for by within-person changes across time. In order to model this variability, a “slope only” model—which included a fixed and a random effect for the linear slope but no predictors—was estimated. Each unit of time was defined to be 1 year (two semesters). Results from this model suggested that, on average, no significant overall increase in ethnic identity occurred across the study period ($B = .033$, $SE = .032$, $p = .306$). However, the random slope coefficient showed significant variability in the slope across individuals ($U = .036$, $SE = .014$, $p = .012$), suggesting that variance in the slope could be modeled as a function of person-level covariates. All models (except the null model, reported above) are shown in Table 2. Nonlinearity in trajectories was also explored by entering quadratic and cubic growth factors at level 1. None of these effects was statistically significant, suggesting that a linear random slope model was the most appropriate.

TABLE 2
Multilevel Parameter Estimates for Ethnic Identity

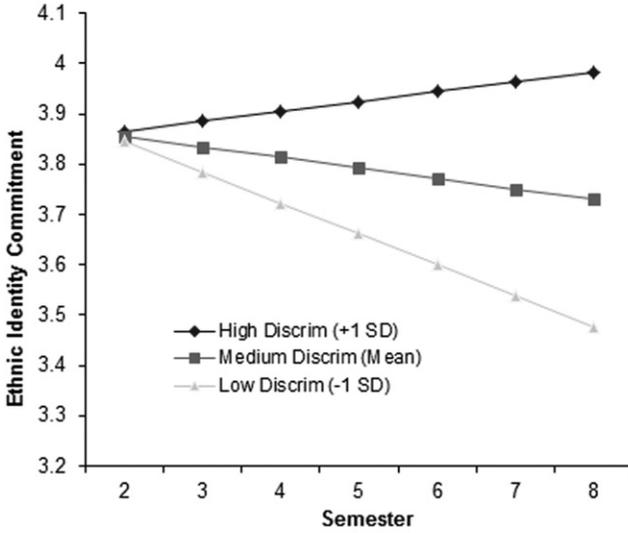
	<i>Unconditional</i>		<i>Conditional</i>		<i>Conditional</i>	
	<i>slope model</i>		<i>model 1</i>		<i>model 2</i>	
	B	SE	B	SE	B	SE
<i>Initial status:</i>						
Intercept	3.79***	.085	3.84***	.107	3.84***	.107
Gender	–	–	–.093	.197	–.089	.197
Immigrant status	–	–	–.097	.233	–.095	.232
SES	–	–	–.160	.088	–.159	.088
Discrimination	–	–	–.016	.089	.010	.087
National identity	–	–	–.065	.088	–.016	.089
<i>Slope:</i>						
Intercept	.033	.032	.040	.039	.033	.038
Gender	–	–	.070	.076	.082	.073
Immigrant status	–	–	–.174	.089	–.185*	.086
SES	–	–	–.017	.032	–.022	.031
Discrimination	–	–	.021	.033	.016	.032
National identity	–	–	.089**	.032	.075*	.031
Discrim* <i>Nat.identity</i>	–	–	–	–	–.065*	.031
<i>Variance components:</i>						
Initial status	.547***	.099	.516***	.095	.513***	.095
Slope	.036*	.014	.027*	.012	.020	.011
Residual	.261	–	.261	–	.262	–

Note: Gender and immigrant status are dichotomously coded (female = 0, male = 1; US born = 0, foreign born = 1); all other predictors are standardised to have a mean of 0 and a standard deviation of 1. * $p < .05$; ** $p < .01$; *** $p < .001$.

Effects of Discrimination on Ethnic Identity as a Function of National Identity

Having established variance components for the intercept and slope, conditional models were estimated to determine the effects of our variables of interest on trajectories of ethnic identity. Our first question was to consider the effects of discrimination on the development of ethnic identity and whether national identity might moderate this relationship. The second conditional model (shown in Table 2) was used to test these effects. Results of this model showed no overall effects of discrimination on the intercept or slope of ethnic identity commitment (intercept: $B = -.016$, $SE = .089$, $p = .868$; slope: $B = .021$, $SE = .033$, $p = .526$). However, as expected, the interaction between discrimination and national identity was found to influence the development of ethnic identity across the college years ($B = -.065$, $SE = .031$, $p = .039$). As depicted in Figure 2A, for those with a weak

(A) Low National Identity (-1 SD)



(B) High National Identity (+1 SD)

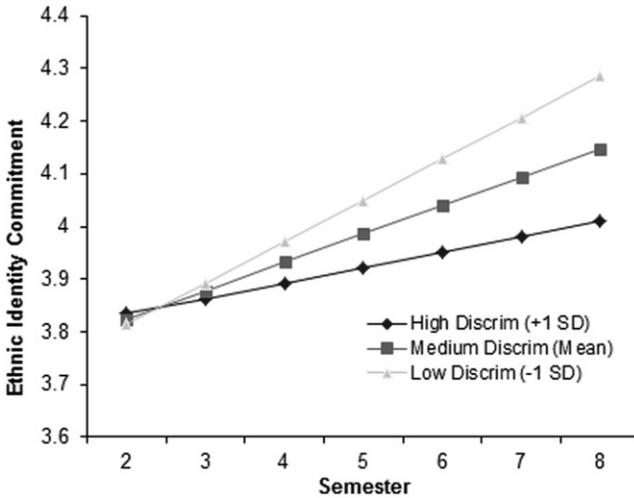


FIGURE 2. Fitted interaction plot depicting the effect of three levels of discrimination on the development of ethnic identity for those with (A) low national identity, and (B) high national identity.

national identity ($-1 SD$), higher levels of discrimination ($+1 SD$) were positively associated with the development of ethnic identity over time (.065 units greater increase in ethnic identity per year). As shown in Figure 2B, however, for those with a strong national identity ($+1 SD$), higher level of discrimination ($+1 SD$) was negatively associated with changes in ethnic identity (.065 units less increase in ethnic identity per year). A .065 unit magnitude on the ethnic identity commitment scale is equivalent to .074 SD units per year. Across a four-year span of college attendance this translates to .26 scale units, approximately one-third of a standard deviation. Interactions between discrimination and demographic variables (gender, SES, and generational status) were also explored but none was statistically significant.

The Direct Effects of National Identity on Development of Ethnic Identity

Our second question focused on whether national identity also had a direct effect on the development of ethnic identity. Parameter estimates from the first conditional model (shown in Table 2 as “Conditional Model 1”) showed that while national identity was not related to initial levels of ethnic identity ($B = -.065$, $SE = .088$, $p = .462$), it was positively associated with changes in ethnic identity over time ($B = .089$, $SE = .032$, $p = .007$). Thus, on average, those with a stronger national identity ($+1 SD$) had .089 units greater increase in ethnic identity each year than those with an average national identity, and .178 units greater increase in ethnic identity each year than those with a weaker national identity ($-1 SD$). A .089 unit magnitude is equivalent to .101 SD units per year, and a .178 unit magnitude is equivalent to .202 SD units.

While these findings suggest that national identity has a direct positive impact on the development of ethnic identity, it is also important to note that this direct effect operates alongside the moderation findings. Specifically, since our overall model predicted that, at higher levels of discrimination, the direct positive influence of national identity on ethnic identity will be cancelled out by the negative influence of discrimination on ethnic identity, we predicted an increasingly small main effect at higher levels of discrimination. Our findings supported this prediction, and are evidenced in Figure 2 by the nearly identical slopes at high levels of discrimination for those with low levels of national identity (top line on Figure 2A) and high levels of national identity (bottom line on Figure 2B). On the other hand, at average and low levels of discrimination (bottom two lines on Figure 2A compared to top two lines on Figure 2B), the effects of national identity are substantial, and are clearly driving the statistically significant main effect.

While not the focus of this study, we also found a statistically significant effect of generational status on the slope of ethnic identity ($B = -.185$, $SE = .086$, $p = .035$). The direction of this effect suggests that foreign born Latino students have less positive increases in ethnic identity across the college years. This finding is in line with previous work among late adolescent Latinos which has shown higher levels of ethnic identity among less recent immigrants (Ontai-Grzebik & Raffaelli, 2004).

Discussion

The current study considered national identity and perceived discrimination as predictors of changes in ethnic identity commitment across the college years. Our main prediction was that national identity would play a dual role as both a moderator of the effects of discrimination and a direct predictor of changes in ethnic identity commitment. Our findings supported both aspects of this prediction.

With respect to moderation, the influence of perceived discrimination on the slope of ethnic identity commitment was found to depend on national identity. At low levels of national identity, the findings were consistent with the model proposed by Branscombe and colleagues (1999), which suggests that perceived discrimination is positively associated with ethnic identity commitment. However, at high levels of national identity, an opposite effect was observed, such that higher levels of discrimination were associated with less positive increases in ethnic identity commitment (see Figure 2b). This later finding is in line with earlier theories of responses to discrimination among negatively stigmatised groups, which suggest that, for some individuals, threats to identity may stifle the development of ethnic group commitment (Allport, 1954; Tajfel & Turner, 1986).

The moderation findings are also consistent with theory and research suggesting that in-group members may have a greater influence on beliefs (including identity-related beliefs) than out-group members (Brown, 2000; Stangor et al., 2001; Tajfel & Turner, 1986). Specifically, the findings demonstrated that discrimination (presumably inflicted by Americans) tended to have a larger negative impact on ethnic identity commitment when individuals identified more strongly as American. In other words, the findings suggest that prejudice expressed by Americans towards a particular ethnic group may have a larger detrimental effect on the ethnic identity of members of that ethnic group if they identify as American. Regardless of interpretation, the results of this study suggest that, in order to understand the effects of discrimination on changes in ethnic identity commitment, it is important to consider an individual's national identity.

In addition to the moderation effects, we also predicted a direct impact of national identity on changes in ethnic identity commitment. Our findings

supported this prediction. Specifically, results indicated that Latino students who started college with a stronger national identity increased more in their levels of ethnic identity commitment across the college years than those who started with a weaker national identity. This finding undermines the notion that ethnic identity may be difficult to maintain over time when a strong national identity is also present. In addition, since national identity does not seem to hinder the subsequent development of ethnic identity, the current findings leave intact the idea that the dual-focused orientation towards acculturation referred to as “integration”—where individuals focus on developing connections to the mainstream national society while also maintaining and developing their ethnic identity—may be the most effective acculturation strategy (Berry, 2001; Berry et al., 2006).

While it was not within the scope of this research to determine the specific mechanisms behind the positive effects of national identity on the development of ethnic identity commitment, plausible explanations can be hypothesised from existing literature. In particular, one possibility is that, since social identification with any group is generally experienced as positive (Hogg, 2003; Tajfel & Turner, 1986), group identification may result in more flexible, open-minded, and exploratory ways of thinking (Fredrickson & Joiner, 2002; Isen et al., 1992), which would in turn be expected to lead to expanded identity development across domains. Furthermore, an already developed identity in a frequently encountered social identity domain (i.e. American identity) may also free psychological resources for development within other domains (i.e. ethnic identity). Future research will be necessary to test these possibilities.

Several limitations of the current study should be noted. First, although this investigation contains important methodological strengths (such as a longitudinal design), since no experimental manipulation was used the extent to which causal attributions can be made is limited, and alternative third-variable explanations for the findings cannot be ruled out. In addition, because the study was conducted on a moderately sized sample of Latino college students, findings may not generalise beyond this ecological context or ethnic group. It will therefore be useful for future research to consider the extent to which the patterns of association found in this study are present in other Latino samples in the United States, as well as in other contexts and among other ethnic groups. For example, although African American populations have, on average, shown stronger positive associations between discrimination and ethnic identity, in light of the current findings, it is possible that national identity could also serve as a moderator of discrimination for this group, as well as others.

Although the design of this study allowed for longitudinal investigation of the effects of national identity on subsequent changes in ethnic identity, since national identity was not measured longitudinally the opposite effects

could not be explored. Future research should therefore also consider the effects of ethnic identity on the development of national identity over time. Such research would complement the current investigation by offering further insight into the mutual interdependence of ethnic and national identities.

Conclusions

The current study adds to an important literature on the identity development of negatively stigmatised groups. In particular, the findings presented suggest that national identity plays a multifaceted role in the development of ethnic identity over time. On the one hand, those with a strong national identity generally show greater increases in ethnic identity over time. On the other hand, however, a strong national identity is also associated with less increase in ethnic identity when racial discrimination is experienced. Taken together, these findings show that, under conditions of low discrimination, a strong national identity may be a very adaptive strategy, in the sense that it does not hinder the development of ethnic identity over time. However, in contexts where higher levels of discrimination are expected, a strong national identity may lead to lower increases in ethnic identity. Overall, the findings of this study suggest that, in trying to understand changes in ethnic identity commitment, in addition to considering levels of perceived discrimination, it is important to consider national identity.

REFERENCES

- Allport, G.W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Amiot, C.E., de la Sablonnière, R., Terry, D.J., & Smith, J.R. (2007). Integration of social identities in the self: Toward a cognitive-developmental model. *Personality and Social Psychology Review, 11*, 364–388.
- Ancis, J.R., Sedlacek, W.E., & Mohr, J.J. (2000). Student perceptions of the campus cultural climate by race. *Journal of Counseling and Development, 78*(2), 180–185.
- Armenta, B.E., & Hunt, J.S. (2009). Responding to societal devaluation: Effects of perceived personal and group discrimination on the ethnic group identification and personal self-esteem of Latino/Latina adolescents. *Group Processes Intergroup Relations, 12*, 23–39.
- Berry, J.W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review, 46*, 5–68.
- Berry, J.W. (2001). A psychology of immigration. *Journal of Social Issues, 57*, 615–631.
- Berry, J.W., Phinney, J., Sam, D., & Vedder, P. (2006). *Immigrant youth in cultural transition: Acculturation, identity, and adaptation across national contexts*. Mahwah, NJ: Erlbaum.

- Berzonsky, M. (2003). Identity style and well-being: Does commitment matter? *Identity: An International Journal*, 3, 131–142.
- Branscombe, N.R., Schmitt, M.T., & Harvey, R.D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology*, 77, 135–149.
- Brown, R. (2000). Social identity theory: Past achievements, current problems and future challenges. *European Journal of Social Psychology*, 30, 745–778.
- Cabrera, A.F., & Nora, A. (1994). College students' perceptions of prejudice and discrimination and their feelings of alienation: A construct validation approach. *Review of Education, Pedagogy, and Cultural Studies*, 16, 387–409.
- Cislo, A.M. (2008). Ethnic identity and self-esteem. *Hispanic Journal of Behavioral Sciences*, 30, 230–250.
- Cohen, J., Cohen, P., Aiken, L.S., & West, S.G. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd edn.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cross, W.E., Jr. (1991). *Shades of black*. Philadelphia, PA: Temple University Press.
- Cross, W.E., Jr., & Cross, T.B. (2007). Theory, research, and models. In S.M. Quintana & C. McKown (Eds.), *Race, racism and the developing child* (pp. 154–181). New York: Wiley.
- David, O., & Bar-Tal, D. (2009). A sociopsychological conception of collective identity: The case of national identity as an example. *Personality and Social Psychology Review*, 13, 354–379.
- DuBois, W.E.B. (1989). *The souls of Black folk*. New York: Penguin. (Original work published 1903.)
- Ethier, K.A., & Deaux, K. (1994). Negotiating social identity when contexts change: Maintaining identification and responding to threat. *Journal of Personality and Social Psychology*, 67, 243–251.
- Frable, D.E.S. (1997). Gender, racial, ethnic, sexual, and class identities. *Annual Review of Psychology*, 48, 139–162.
- Fredrickson, B.L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, 13, 172–175.
- Garstka, T.A., Schmitt, M.T., Branscombe, N.R., & Hummert, M.L. (2004). How young and older adults differ in their responses to perceived age discrimination. *Psychology and Aging*, 19, 326–335.
- Greene, M., Way, N., & Pahl, K. (2006). Trajectories of perceived adult and peer discrimination among Black, Latino, and Asian American adolescents: Patterns and psychological correlates. *Developmental Psychology*, 42, 218–238.
- Helm, E.G., Sedlacek, W.E., & Prieto, D.O. (1998). The relationship between attitudes toward diversity and overall satisfaction of university students by race. *Journal of College Counseling*, 1, 111–120.
- Hogg, M.A. (2003). Social identity. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity* (pp. 462–497). New York: Guilford Press.
- Howard, J.A. (2000). Social psychology of identities. *Annual Review of Sociology*, 26, 367–393.

- Hurtado, S., Carter, D.F., & Spuler, A. (1996). Latino student transition to college: Assessing difficulties and factors in successful college adjustment. *Research in Higher Education, 37*, 135–158.
- Isen, A.M., Daubman, K.A., & Nowicki, G.P. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology, 52*, 1122–1131.
- Isen, A.M., Johnson, M.M.S., Mertz, E., & Robinson, G.F. (1985). The influence of positive affect on the unusualness of word associations. *Journal of Personality and Social Psychology, 48*, 1413–1426.
- Isen, A.M., Niedenthal, P., & Cantor, N. (1992). The influence of positive affect on social categorization. *Motivation and Emotion, 16*, 65–78.
- Jasinskaja-Lahti, I., Liebkind, K., & Solheim, E. (2009). To identify or not to identify? National disidentification as an alternative reaction to perceived ethnic discrimination. *Applied Psychology: An International Review, 58*, 105–128.
- Jetten, J., Branscombe, N.R., Schmitt, M.T., & Spears, R. (2001). Rebels with a cause: Group identification as a response to perceived discrimination from the mainstream. *Personality and Social Psychology Bulletin, 27*, 1204–1213.
- Jöreskog, K.G., & Sörbom, D. (1996–2002). *PRELIS 2: User's reference guide*. Chicago, IL: Scientific Software International.
- Kline, R.B. (2005). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- LaFromboise, T., Coleman, H., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin, 114*, 395–412.
- Lambert, W.E. (1977). Effects of bilingualism on the individual: Cognitive and socio-cultural consequences. In P.A. Hornby (Ed.), *Bilingualism: Psychological, social and educational implications* (pp. 15–28). New York: Academic Press.
- Lambert, W.E., & Taylor, D.M. (1983). Language in the education of ethnic minority immigrants. In R.J. Samuda & S.L. Woods (Eds.), *Perspectives in immigrant and minority education* (pp. 267–280). Washington, DC: University Press of America.
- Lara, M., Gamboa, C., Kahramanian, M.I., Morales, L.S., & Bautista, D.E.H. (2005). Acculturation and Latino health in the United States: A review of the literature and its sociopolitical context. *Annual Review of Public Health, 26*, 367–397.
- Noels, K.A., & Clement, R. (1996). Communicating across cultures: Social determinants and acculturative consequences. *Canadian Journal of Behavioural Science, 28*, 214–228.
- Nora, A., & Cabrera, A.F. (1996). The role of perceptions of prejudice and discrimination on the adjustment of minority students to college. *Journal of Higher Education, 67*, 119–148.
- O'Brien, L.T., Mars, D.E., & Eccleston, C. (2011). System-justifying ideologies and academic outcomes among first year Latino college students. *Cultural Diversity and Ethnic Minority Psychology, 17*, 406–414.
- Ontai-Grzebik, L.L., & Raffaelli, M. (2004). Individual and social influences on ethnic identity among Latino young adults. *Journal of Adolescent Research, 19*, 559–575.
- Pahl, K., & Way, N. (2006). Longitudinal trajectories of ethnic identity among urban Black and Latino adolescents. *Child Development, 77*, 1403–1415.

- Pérez, D.J., Fortuna, L., & Alegría, M. (2008). Prevalence and correlates of everyday discrimination among US Latinos. *Journal of Community Psychology, 36*, 421–433.
- Phinney, J.S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*, 499–514.
- Phinney, J.S. (2008). Bridging identities and disciplines: Advances and challenges in understanding multiple identities. In M. Azmitia, M. Syed, & K. Radmacher (Eds.), *The intersections of personal and social identities. New Directions for Child and Adolescent Development, 120*, 97–109.
- Phinney, J.S., Cantu, C., & Kurtz, D. (1997). Ethnic and American identity as predictors of self-esteem among African American, Latino, and White adolescents. *Journal of Youth and Adolescence, 26*, 165–185.
- Phinney, J.S., & Devich-Navarro, M. (1997). Variations in bicultural identification among African American and Mexican American adolescents. *Journal of Research on Adolescence, 7*, 3–32.
- Phinney, J.S., Horenczyk, G., Liebkind, K., & Vedder, P. (2001). Ethnic identity, immigration, and well-being: An interactional perspective. *Journal of Social Issues, 57*, 493–510.
- Phinney, J.S., & Ong, A.D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*, 271–281.
- Portes, A. (1990). From south of the border: Hispanic minorities in the United States. In V. Yans-McLaughlin (Ed.), *Immigration reconsidered: History, sociology, and politics* (pp. 160–186). New York: Oxford University Press.
- Portes, A., & Rumbaut, R.G. (2001). *Legacies: The story of the immigrant second generation*. New York: The Russell Sage Foundation.
- Quintana, S.M. (2007). Racial and ethnic identity: Developmental perspectives and research. *Journal of Counseling Psychology, 54*, 259–270.
- Raudenbush, S.W., & Bryk, A.S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd edn.). Thousand Oaks, CA: Sage.
- Raudenbush, S.W., Bryk, A.S., Cheong, Y., & Congdon, R.T. (2004). *HLM 6: Hierarchical linear and nonlinear modeling*. Chicago, IL: Scientific Software International.
- Romero, A.J., & Roberts, R.E. (2003). The impact of multidimensions of ethnic identity on discrimination and adolescents' self-esteem. *Journal of Applied Social Psychology, 33*(11), 2288–2305.
- Ryder, A., Alden, L., & Paulus, D. (2000). Is acculturation unidimensional or bidimensional? *Journal of Personality and Social Psychology, 79*, 49–65.
- Schmitt, M.T., Branscombe, N.R., Kobrynowicz, D., & Owen, S. (2002). Perceiving discrimination against one's gender group has different implications for well-being in women and men. *Personality and Social Psychology Bulletin, 28*, 197–210.
- Schmitt, M.T., Spears, R., & Branscombe, N.R. (2003). Constructing a minority group identity out of shared rejection: The case of international students. *European Journal of Social Psychology, 33*, 1–12.
- Singer, J.D., & Willett, J.B. (2003). *Applied longitudinal analysis: Modeling change and event occurrence*. New York: Oxford University Press.

- Stangor, C., Sechrist, G.B., & Jost, J.T. (2001). Changing racial beliefs by providing consensus information. *Personality and Social Psychology Bulletin*, 27, 486–496.
- Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago, IL: Nelson-Hall.
- Turner, M.E., Pratkanis, A.R., Probasco, P., & Leve, C. (1992). Threat, cohesion, and group effectiveness: Testing a social identity maintenance perspective on groupthink. *Journal of Personality and Social Psychology*, 63, 781–796.
- Ullah, P. (1987). Self-definition and psychological group formation in an ethnic minority. *British Journal of Social Psychology*, 26, 17–23.
- Umaña-Taylor, A.J., & Guimond, A.B. (2010). A longitudinal examination of parenting behaviors and perceived discrimination predicting Latino adolescents' ethnic identity. *Developmental Psychology*, 46(3), 636–650.
- Umaña-Taylor, A.J., & Updegraff, K.A. (2007). Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. *Journal of Adolescence*, 30(4), 549–567.
- Verkuyten, M. (1997). Discourses of ethnic minority identity. *British Journal of Social Psychology*, 36, 565–586.