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Implications of Ethnic Identity Exploration and Ethnic Identity Affirmation and Belonging
for Intergroup Attitudes Among Adolescents

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Abstract

The present paper develops and tests two temporal models of the relationships among adolescents' ethnic identity exploration, ethnic identity affirmation/belonging and attitudes towards their racial/ethnic ingroup and outgroups. Structural equation models for Euro-Americans, Asian Americans, and Latinos revealed that all hypothesized relationships were positive and significant. The model in which ethnic identity exploration (at Time 1) predicts ethnic identity affirmation and belonging (at Time 2) was superior to the alternative model in which the relationship between them was reversed (i.e., affirmation and belonging at Time 1 predicts exploration at Time 2). Results 1) support the importance of exploration as a basis for establishing a secure attachment to one's ethnic identity, which in turn, has positive implications for attitudes toward one's own group and other groups and 2) suggest that maintenance of ethnic identity is compatible with positive attitudes toward ethnic outgroups.

Implications of Ethnic Identity Exploration and Ethnic Identity Affirmation and Belonging for Intergroup Attitudes Among Adolescents

While some research with adolescents shows that higher attachment to one's own group predicts more negative attitudes toward other groups (e.g., Masson & Verkutyn, 1993), other studies find this relationship to be positive (e.g., Phinney, Ferguson & Tate, 1997). The latter researchers examined Latino and African-American adolescents' attitudes toward familiar peers, in schools where these racial/ethnic groups were enrolled in roughly equal proportions and constituted the overwhelming majority. Using partial correlations, they showed that high levels of ethnic identity were associated with more positive ingroup attitudes, which were in turn associated with more positive outgroup attitudes, but ethnic identity was not directly associated with outgroup attitudes. To account for variation in the valence of such relationships across studies, Hinkle and Brown (1990) suggested that a strong ethnic identity may be positively or negatively related, or unrelated, to outgroup attitudes, depending on the circumstances.

Of particular importance to understanding the relationship between ethnic identity and outgroup attitudes among adolescents may be the degree to which they have engaged in actively learning about their ethnic group. Roberts et al (1999) characterized such ethnic identity exploration as a developmental process that informs the adoption of one's ethnic identity. A number of studies with adolescents (Roberts et al., 1999; Spencer, Icard, Harachi, Catalano & Oxford, 2000; Yancey, Aneshensel & Driscoll, 2001) have confirmed that exploration is highly related to, but distinct from, other components of ethnic identity. Phinney and Ong (in press) suggested that ethnic identity exploration is unlikely without at least some level of attachment to one's ethnic group membership and that a commitment to one's group is expected to promote exploration of one's ethnicity. We agree.

In the present study we test two competing models of the relationship among ethnic identity exploration (EIE), ethnic identity affirmation and belonging (EIAB) and intergroup attitudes, while providing a test of the valence of the relationship between these ethnic identity components and intergroup attitudes. Both models propose that attitudes toward outgroups are positively, but indirectly related to components of ethnic identity. Specifically, following Phinney et al (1997), we propose that the relationship between them is mediated by positive feelings toward one's own ethnic group. In Model 1 (see Figure 1), there is an indirect positive relationship between EIAB and outgroup warmth (OW), with EIAB positively predicting ingroup warmth (IW), which in turn positively predicts OW, but no direct relationship between EIAB and OW. Furthermore, Model 1 states that EIE predicts OW indirectly, through EIAB and IW. We test this preferred model against an alternative (Model 2) in which EIE and EIAB are reversed. In both models, we hypothesize that all direct paths are positive; that OW is positively predicted by IW; and that IW is a product of EIE and EIAB. We hypothesize that all indirect paths are significant, showing multiple mediating paths in the model (e.g. in Model 1, EIAB mediates between EIE and IW; EIAB and IW co-mediate between EIE and both OW measures; etc.). Finally, we hypothesize that the errors associated with the OW measures are positively correlated. That is, we expect that IW will not fully predict all the variance in either OW measure because other factors, not included in these models (e.g., social desirability, feelings toward outgroups in general) are likely to lead the error variances associated with the OW measures to be correlated.

We test Models 1 and 2 for each of three ethnic groups (Euro-Americans, Asian-Americans and Latinos) separately because 1) the two outgroups for a given ingroup differ, 2) evidence from prior studies (e.g., Levin, Sidanius, Rabinowitz & Federico, 1998) suggests that

relationships between ethnic identity and intergroup attitudes differ by ethnic group membership of the respondent, 3) the histories and statuses of each ethnic group in the broader society differ, suggesting that the experiences of individuals from each group in relation to those of other groups are unique, and should be investigated so as to allow their uniqueness to be examined and 4) the relative status of these three groups differs, both within American society as shown by status ratings (Sidanius & Pratto, 1999) and within Los Angeles County, as measured by family income (U.S. Census Bureau, 2005).

However, these four considerations do not point toward clear a priori hypotheses regarding these three ethnic groups. For example, while Asian American students may have relatively high status in a school context, they remain a non-dominant group in the larger society. In light of this, a theory about status in the school context would lead to a hypothesized model for Asian Americans similar to that for Euro-Americans (and different to that for Latinos), while a theory about dominance in society would suggest a hypothesized model for Asian Americans similar to that for Latinos (and different from that for Euro-Americans). In light of these considerations, we hypothesize the same model for all ethnic groups, while allowing for the eventuality that ethnic group differences may emerge.

Method

Participants

Participants were 571 U.S. ninth graders (49.0% male, 49.6% female, 1.4% declined to state) enrolled during one of four semesters (Fall 2002, Spring 2003, Fall 2003 or Spring 2004) in a suburban public high school in Los Angeles County. They were included in the study if they provided responses to a self-report questionnaire administered in their Life Skills class approximately one week prior to the intervention (Time 1), and an identical questionnaire eight

weeks later (Time 2). The participants ranged in age from 13 to 18 years, with a mean and median age of 14 years. Because nearly 90% of participants were aged 14-15 and over 95% were ninth-grade students, we did not include age as an independent variable in any subsequent analyses. Based on self-reports, the sample was 2.8% African American, 25.2% Asian or Asian American, 24% Euro-American, 18.9% Latino/Hispanic, 0.2% Native American, 14.6% multiracial and 12.1% other, with 2.3% not reporting their ethnicity. We included only Asian American ($n = 144$), Euro-American ($n = 137$), and Latino ($n = 108$) students in our sample, as the samples for the other ethnic groups were either too small (in the case of African Americans and Native Americans) or too heterogeneous (in the case of the multiracial and “other” groups).

Procedure

The anonymous survey data were collected from 23 sections of ninth-grade mandatory Life Skills classes that met five days a week for seven weeks. The Life Skills course encourages students to engage in ethnic identity exploration. All data were collected in accord with procedures previously approved by the University Institutional Review Board. All classes received the standard curriculum four days a week from their regular teacher. On the fifth day, some sections received the standard curriculum from their regular teacher and some were visited by college student interns who led discussions based either on a prejudice reduction curriculum or on a conflict prevention curriculum, under the direct, in-class supervision of the teacher.

We collapsed the data from the intervention groups and control classes, because the intervention comprised only 7 of 35 hours of class contact time and there was diffusion of treatments, whereby the teacher used material from the intervention curricula in the control classes. Furthermore, MANOVAs showed no statistically significant differences among the intervention and control groups on any of the variables included in the present study.

Consequently, our aim in the present study was to investigate the relationships among variables measured prior to and following the delivery of a common intervention.

The questionnaire consisted of eight sections on three pages, and took approximately 35 minutes for the students to complete, but only items from three of the sections of the questionnaire were used in the present analysis. Except for the demographic questions, all items used a 7-point Likert scale ranging from 1 to 7. (See Wittig and Molina (2000) for details.)

Measures

Ethnic identity affirmation and belonging and ethnic identity exploration, respectively, were measured using items from Phinney's (1992) multigroup ethnic identity measure (MEIM). The four items used to measure ethnic identity affirmation and belonging and five to measure ethnic identity exploration were those that had the highest loadings on their respective factors in previous samples for which all 20 MEIM items designed to assess those constructs were administered (Wittig & Molina, 2000). They are posted at <http://www/csun/edu/~ata20315/JRAEIE.htm>. Each item was answered on a scale ranging from 1 ("Strongly Disagree") to 7 ("Strongly Agree"). The Cronbach's alpha coefficients for the total sample were $\alpha = .88$ for the ethnic identity affirmation and belonging subscale and $\alpha = .68$ for the ethnic identity exploration subscale. Test-retest reliability for the ethnic identity affirmation and belonging factor was $\rho = .80$ and for the ethnic identity exploration factor it was $\rho = .63$.

Ingroup and outgroup attitudes were measured using items assessing warmth toward one's own group as well as toward each of four outgroups, with one item used to measure warmth towards each target group. Participants were asked to respond to the prompt "In general, how do you feel about each of the following groups?" This prompt was followed by a list of the five main ethnic groups in the U.S. (African American, Asian/Asian American, Euro-American,

Latino/a, and Native American), and participants were asked to indicate their feelings toward each group on a scale ranging from 1 (“Strongly Dislike”) to 7 (“Strongly Like”). For simplicity, social distance responses used in the analyses were limited to those concerning those ethnic groups whose data were retained in the current analysis: Asian Americans, Latinos and Euro-Americans. The test-retest reliabilities for the entire sample for warmth toward Asian Americans, warmth toward Latinos and warmth toward Euros were $\rho = .65, .56$ and $.65$ respectively. Because these social distance measures included only one item each, no alpha reliability analyses were performed for these measures.

Data Analysis

EQS software (Bentler, 2004) was used to generate the structural equation models (SEM) needed for the model testing. To test for predictive relationships across time, the exogenous variable specific to each model was assessed at Time 1 and its immediate hypothesized outcome was assessed at Time 2. For example, in Model 1, we used ethnic identity exploration at Time 1 to predict affirmation and belonging at Time 2. Time 2 assessments of the IW and OW variables were also used. Mediation was tested through the use of indirect effects (the Sobel method), as described in the SEM literature (e.g. MacKinnon, et al, 2002).

Results

Descriptive Statistics

The correlations, means and standard deviations for all the measured variables, separated by ethnic group, as well as results of a multi-group confirmatory factor analysis of EIE and EIAB (showing that the two factors emerged as predicted, consistent with Roberts et al’s 1999

findings, and that the two-factor structure fit well for all three groups with only minor modifications), are posted at <http://www.csun.edu/~ata20315/JRAEIE.htm>.

Test of Model 1

Euro-American sub-sample. Model 1 for Euro-Americans (Figure 2) fit the data well, with $\chi^2(50) = 72.882, p = .019, CFI = .969$ and $RMSEA = .058$ (see Table 1). A number of significant indirect effects emerged in the model, which are indicative of mediation. Specifically, EIAB significantly mediated the relationship between EIE and IW ($B = .140, SE = .051; Z = 2.765, p < .05$). EIAB and IW together mediated the relationship between EIE and warmth towards Latinos ($B = .105, SE = .040; Z = 2.659, p < .05$), while IW individually mediated the relationship between EIAB and warmth towards Latinos ($B = .271, SE = .068; Z = 3.982, p < .05$). Similarly, EIAB and IW together mediated the relationship between EIE and warmth towards Asian Americans ($B = .109, SE = .041; Z = 2.655, p < .05$), while IW individually mediated the relationship between EIAB and warmth towards Asian Americans ($B = .281, SE = .071; Z = 3.968, p < .05$).

Asian American sub-sample. Model 1 for Asian Americans (see Figure 3) also fit the data well, with $\chi^2(48) = 70.308, p = .020, CFI = .969$ and $RMSEA = .057$ (see Table 1). EIAB significantly mediated the relationship between EIE and IW ($B = .404, SE = .087, Z = 4.624$). EIAB and IW together mediated the relationship between EIE and warmth towards Euro-Americans ($B = .236, SE = .060, Z = 3.929$), while IW individually mediated the relationship between EIAB and warmth towards Euro-Americans ($B = .335, SE = .068, Z = 4.925$). Similarly, EIAB and ingroup warmth together mediated the relationship between EIE and warmth towards Latinos ($B = .261, SE = .066, Z = 3.957$), while IW individually mediated the relationship between EIAB and warmth towards Latinos ($B = .371, SE = .074, Z = 4.981$).

Latino sub-sample. Model 1 fit the Latino sub-sample moderately well (see Figure 4), $\chi^2(51) = 80.443, p = .005, CFI = .910$ and $RMSEA = .073$ (see Table 1). The Lagrange Multiplier Test indicated that insertion of a direct path (with a negative loading) from the EIAB factor to warmth towards Euro-Americans would significantly improve the model fit. However, the overall model fit was still not optimal so the Lagrange multiplier was used to add a correlation between the first and last items of the affirmation and belonging subscale, which improved the fit, $\chi^2(1) = 7.453, p < .05$. The overall model now fit at an acceptable level, $\chi^2(49) = 66.588, p = .047, CFI = .946$ and $RMSEA = .058$. Consistent with the models for the other two ethnic groups, EIAB significantly mediated the relationship between EIE and IW ($B = .294, SE = .122, Z = 2.623$). Furthermore, IW mediated the relationship between EIAB and warmth towards both Asian Americans ($B = .327, SE = .089, Z = 3.664$) and Euro-Americans ($B = .484, SE = .114, Z = 4.230$). EIAB and IW together mediated the relationship between EIE and warmth towards Asian Americans ($B = .147, SE = .065, Z = 2.274$), but the indirect path from EIE to EIAB to IW to OW for Euro-Americans fell just below significance ($B = .092, SE = .058, Z = 1.594$).

Test of Model 2 and Comparison to Model 1

Model 2 proposes that students whose commitment to their ethnic identity is high at Time 1 tend to engage in more exploration of their ethnic identity at Time 2, resulting in positive consequences for ingroup and outgroup warmth. This alternative model was used to generate separate structural equations for each of the three ethnic groups, as was done for the original model. After making adjustments in accord with the LaGrange Multiplier tests, the models did not differ with respect to pathways between factors nor between variables. The only major difference concerns the temporal order of the ethnic identity factors (EIAB and EIE). Model 2, using ethnic identity commitment as an exogenous variable, did not predict ingroup and

outgroup warmth as well as Model 1 did. Table 1 compares Model 1 and Model 2 results for all three sub-samples. With respect to the EIAB-EIE relationship, the R^2 value in Model 1 is lower than in Model 2 for all three ethnic groups (e.g., 13% versus 40% for Euro-Americans).

However, the R^2 values for predicting IW are higher in Model 1 than in Model 2, for all three ethnic groups (e.g., 13.5 versus 8.8% in Euro-Americans). Thus, although the EIAB-EIE relationship is stronger (i.e., has a larger regression coefficient) in Model 2, it did not predict as much of the variability in ingroup warmth as the EIE-EIAB relationship did in Model 1.

Moreover, the χ^2 fit of the data is superior for Model 1, as compared to Model 2, for all three ethnic groups. In summary, the overall model fit to the data is superior for Model 1, as compared to Model 2, for all three ethnic groups based on a variety of fit indices (i.e. χ^2 , CFI, RMSEA).

To further compare these two non-nested models, the Akaike Information Criterion (AIC), a goodness-of-fit measure that adjusts model χ^2 to penalize for unnecessary model complexity (Garson, 1998) was used. An AIC value, defined as twice the negative log likelihood added to twice the number of parameters in the model, provides an estimate of the relative distance between a fitted model and the unknown true mechanisms that generated the observed data. $AIC_i = -2 \log L_i + 2V_i$, where L_i is the maximum likelihood for the candidate model i and V_i is the number of free parameters (Wagenmakers, 2004). A model with a lower AIC is the better fitting model. For each ethnic group, Model 1 consistently has lower AIC values than Model 2 (See Table 2 under the heading AIC_i). Next, for each pair of models, the difference between a given model's AIC value and the lower of the two AIC values was calculated, indicating the relative difference in performance of the models (Wagenmakers, 2004). See Table 2 under the heading: $\Delta_i(\text{AIC})$ for a summary of these results. Next, we calculated Akaike weights. "Weight $w_i(\text{AIC})$ can be interpreted as the probability that M_i (Model i) is the best model (in the AIC

sense, that it minimizes the Kullback-Leibler discrepancy – see Wagenmakers, 2004 for more information), given the data and the set of candidate models.” The equation is:

$$w_i(\text{AIC}) = \frac{\exp\left\{-\frac{1}{2}\Delta_i(\text{AIC})\right\}}{\sum_{k=1}^K \exp\left\{-\frac{1}{2}\Delta_k(\text{AIC})\right\}}, \quad \text{where } \sum w_i(\text{AIC}) = 1.$$

For example, for Asian Americans in Model 1:

$$w_i(\text{AIC}) = \frac{\exp(-0.5(0))}{\exp(-0.5(0)) + \exp(-0.5(0.416))} = \frac{1}{1 + 0.812} = 0.552.$$

We statistically compared the fit of Model 1 to Model 2 for a given ethnic group by taking the ratio of their respective pairwise Akaike weights. As shown in Table 2, Model 1 is 1.23, 30.25, and 100.00 times more likely to be the best model when compared to Model 2 for Asian Americans, Euro-Americans, and Latinos, respectively.

Discussion (reduced by 484 words, from 1029 to 545)

We believe we are the first to use ethnic identity exploration to address the controversy concerning the relationship between adolescents’ attachment to their ethnic group and their feelings toward other ethnic groups. Results of our competitive model testing showed that adolescents’ feelings of warmth toward racial/ethnic outgroups are better explained by a model in which exploration of the meaning of their ethnic group membership precedes such attachment, as compared to a model in which the temporal sequence of these variables is reversed. Furthermore, results are consistent with those obtained by Phinney et al (1997), with respect to the (positive) valence of the hypothesized paths and the significance of the relationships among relevant variables. The fact that all intervening variables in the model were significant mediators suggests that encouraging adolescents to explore their ethnic identity could lead to improvements in both ingroup and outgroup warmth. Because errors associated with outgroup warmth were

significantly correlated for each group, future research should include 1) additional variables that may influence outgroup warmth, 2) more comprehensive assessments of ingroup and outgroup warmth than the single item used for each target ethnic group in the present study and 3) items assessing social desirability. The present report used data collected at two time points, enabling us to temporally separate the predictor and mediator in the respective models. In our current research, we are collecting data at more time points, allowing us to temporally separate predictors, mediators and outcomes.

Due to their unique histories and positions in society, it is likely that different racial/ethnic groups experience intergroup relations in different ways. In the absence of specific hypotheses about the differences between groups, those differences we found suggest areas for future research. It would also be instructive to investigate whether the confirmed model holds as well for African-Americans as it did for the ethnic groups included in the present study. Furthermore, the roles of other group differences (e.g., group statuses and social class-related variables) should be studied. Research in schools and geographical areas characterized by less racial and ethnic diversity than in the present study are needed to assess the generalizability of our findings and to investigate the influences of the broader social-cultural context. Intervention studies are needed to examine whether increasing participants' ethnic identity exploration decreases outgroup prejudice.

Consistent with developmental and multicultural perspectives, our results suggest that exploration of what it means to be a member of an ethnic group provides an important foundation for developing adolescents' sense of belongingness to an ethnic group, which in turn provides a basis for positive feelings toward one's own group and other groups. Ethnic identity need not be a barrier to positive feelings toward other ethnic groups, as long as that identity is

based on an examination of the history and traditions of one's ethnic group. Because we found that feelings of warmth toward other ethnic groups are associated with the part of ethnic identity affirmation and belonging that is predicted by ethnic identity exploration, we believe that multicultural educational programs should include efforts to enhance adolescents' exploration of their ethnic heritage. In this way, adolescents can be encouraged to increase the proportion of their ethnic group affirmation and belonging that results from ethnic identity exploration, and thus improve their attitudes towards other ethnic groups.

References

- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Bentler, P. (2004). EQS for Windows (Version 6.1). Encino, CA: Multivariate Software.
- Garson, G. D. (1998). *Structural Equation Modeling*. Retrieved December 12, 2006, from North Carolina State University, College of Humanities and Social Sciences Website: <http://www2.chass.ncsu.edu/garson/pa765/structur.htm>
- Hinkle, S., & Brown, R. J. (1990). Intergroup comparisons and social identity: Some links and lacunae. In D. Abrams & M.A. Hogg (Eds.), *Social identity theory: Constructive and critical advances* (pp. 48-70). London: Harvester Wheatsheaf.
- Levin, S., Sidanius, J., Rabinowitz, J. L., & Federico, C. (1998). Ethnic identity, legitimizing ideologies, and social status: A matter of ideological asymmetry. *Political Psychology, 19*, 373-404.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test the significance of the mediated effect. *Psychological Methods, 7*(1), 83-104.
- Masson, C., & Verkuyten, M. (1993). Prejudice, ethnic identity, contact and ethnic group preferences among Dutch young adolescents. *Journal of Applied Social Psychology, 23*, 156-168.
- Phinney, J. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*, 156-176.
- Phinney, J., Ferguson, D. L., & Tate, J. D. (1997). Intergroup attitudes among ethnic minority adolescents: A causal model. *Child Development, 68*(5), 955-969.

- Phinney, J., & Ong, A. D. (in press). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology*.
- Roberts, R. E., Phinney, J., Masse, L. C., Chen, Y. R., Roberts, C. R., & Romero, A. (1999). The structure of ethnic identity of young adolescents from diverse ethnocultural groups. *Journal of Early Adolescence, 91*, 301-322.
- Sears, D. O., & Henry, P. J. (2003). The origins of symbolic racism. *Journal of Personality and Social Psychology, 85*(2), 259-275.
- Sidanius, J. & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge, UK: Cambridge University Press.
- Spencer, M. S., Icard, L.D., Harachi, T. W., Catalano, R. F., & Oxford, M. (2000). Ethnic identity among monoracial and multiracial early adolescents. *Journal of Early Adolescence, 20*(4), 365-387.
- U.S. Census Bureau (2005). *Median household income* [Online]. Available:www.census.gov.
- Wagenmakers, E., & Farrell, S. (2004). AIC model selection using Akaike weights. *Psychonomic Bulletin and Review, 11*(1), 192-196.
- Wittig, M. A., & Molina, L. (2000). Moderators and mediators of prejudice reduction. In S. Oskamp (Ed.), *Reducing prejudice and discrimination* (pp.295-318). Mahwah, NJ: Lawrence Erlbaum Associates.
- Yancey, A. K., Aneshensel, C. S., & Driscoll, A. K. (2001). The assessment of ethnic identity in a diverse urban youth population. *Journal of Black Psychology, 27*(2), 190-208.

Table 1 Comparison of Results for Model 1 and Model 2: χ^2 , CFI, RMSEA and B values

| Sub-sample | Model 1 | | Model 2 | |
|---------------|------------------------------|---------------------|------------------------------|--------------|
| | Parameter | Value | Parameter | Value |
| Euro-American | χ^2 Value, P-Value | 72.882, .019 | χ^2 Value, P-Value | 81.719, .002 |
| | CFI | 0.969 | CFI | 0.947 |
| | RMSEA | 0.058 | RMSEA | 0.070 |
| | R ² (EIE to EIAB) | 13% | R ² (EIAB to EIE) | 40.0% |
| | R ² (EIAB to IW) | 13.5% | R ² (EIE to IW) | 8.8% |
| Asian | χ^2 Value, P-Value | 70.308, .020 | χ^2 Value, P-Value | 82.036, .002 |
| | CFI | 0.969 | CFI | 0.949 |
| | RMSEA | 0.057 | RMSEA | 0.069 |
| | R ² (EIE to EIAB) | 48% | R ² (EIAB to EIE) | 48.4% |
| | R ² (EIAB to IW) | 29% | R ² (EIE to IW) | 19.0% |
| Latino | χ^2 Value, P-Value | 66.588, .047 | χ^2 Value, P-Value | 80.957, .001 |
| | CFI | 0.946 | CFI | 0.894 |
| | RMSEA | 0.058 | RMSEA | 0.084 |
| | R ² (EIE to EIAB) | 16.0% | R ² (EIAB to EIE) | 31.5% |
| | R ² (EIAB to IW) | 40.0% | R ² (EIE to IW) | 18.8% |

Numbers in bold are superior values for a given model relative to its counterpart for the other model.

Table 2. Comparison of Results for Model 1 and Model 2: AIC Values and Weights

| Model 1 | # Free Parameters | AIC _i | Δ_i (AIC) | w _i (AIC) | Ratio of Akaike weights |
|---------------|-------------------|------------------|------------------|----------------------|-------------------------|
| Asian | 29 | -16.380 | 0 | 0.552 | 1.23 |
| Euro-American | 30 | -23.118 | 0 | 0.968 | 30.25 |
| Latino | 30 | -42.036 | 0 | 0.999 | 100.00 |
| Model 2 | | | | | |
| Asian | 29 | -15.964 | 0.416 | 0.448 | 0.81 |
| Euro-American | 32 | -16.281 | 6.837 | 0.032 | 0.03 |
| Latino | 29 | -11.043 | 30.993 | 0.000 | 0.00 |

Figure 1. Hypothesized model of relationship among ethnic identity variables, ingroup, and outgroup warmth.

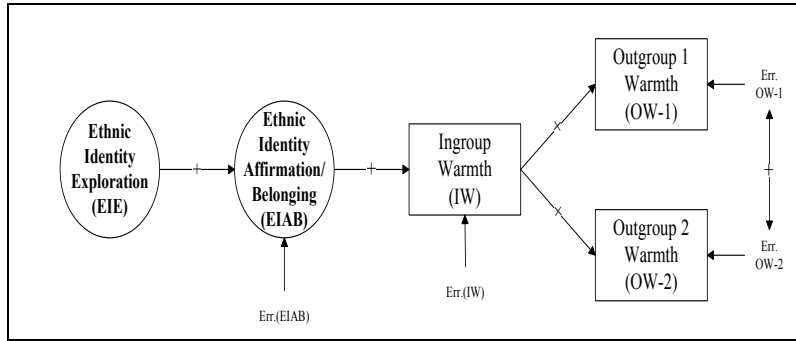


Figure 2. Model 1 applied to Euro-American sample.

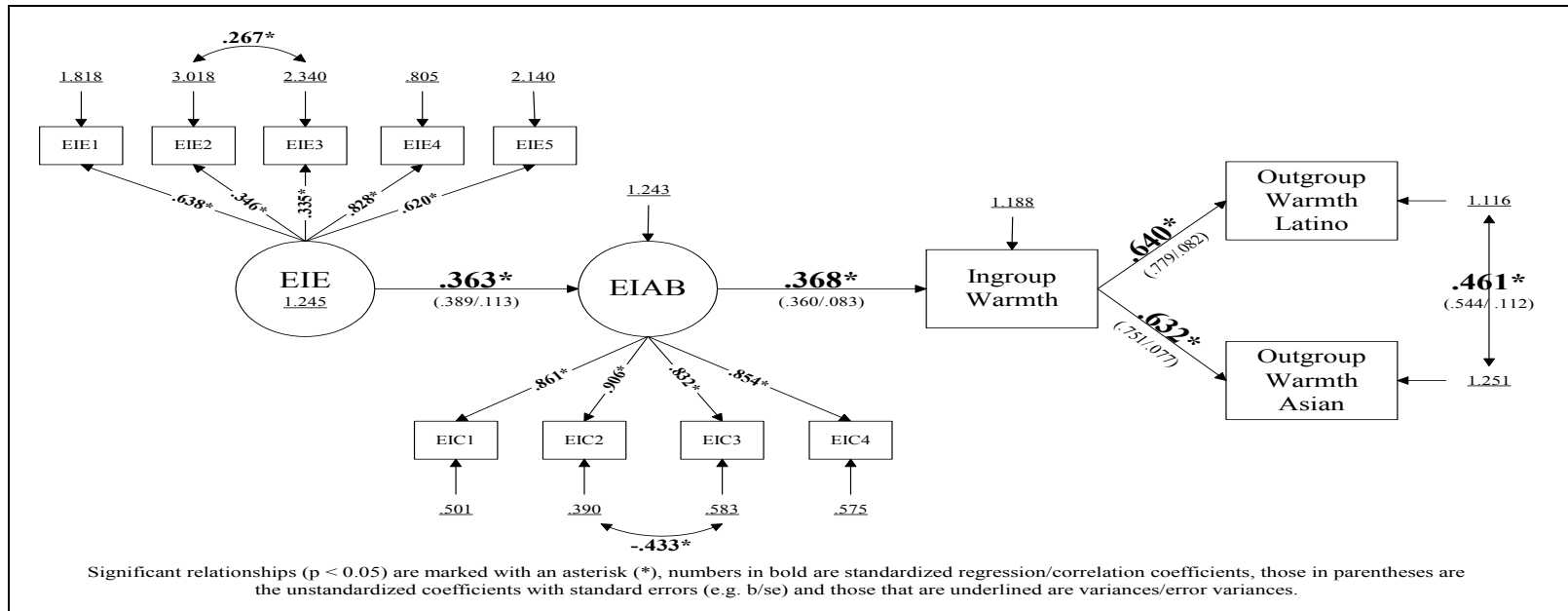


Figure 3. Model 1 applied to Asian American sample.

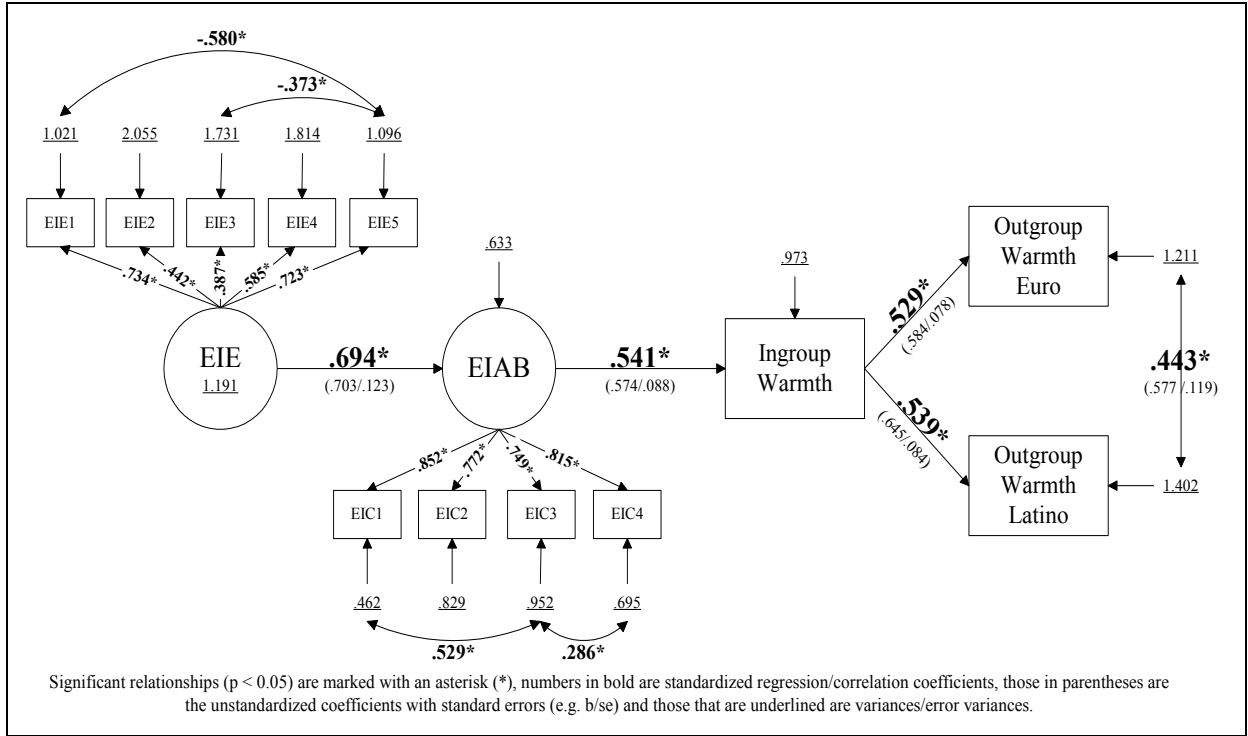


Figure 4. Model 1 applied to Latino sample.

