

Contextual Moderators of a School-Based Ethnic-Racial Identity Intervention:

The Roles of Family Ethnic Socialization and Ethnic-Racial Background

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Abstract

Ethnic-racial identity (ERI) formation is a key developmental competency that contributes to adolescents' sense of self and psychosocial adjustment. A randomized controlled trial (RCT) has demonstrated the efficacy of a universal school-based health promotion intervention program to positively influence adolescents' ERI exploration and ERI resolution, compared to an attention control curriculum that was delivered by the same facilitators, had equivalent contact hours, and focused on post-secondary career and educational options. The current study extended prior tests of the RCT to better understand (a) how intervention-based ERI changes unfolded over two phases – temporally proximal pre- to post-test effects and long-term post-test effects across a 1-year follow-up period, and (b) identify for whom the intervention was more effective by testing theorized contextual moderators – baseline family ethnic socialization practices and youth ethnic-racial background (i.e., White majority vs. ethnic-racial minority). Bilinear spline growth models were used to examine longitudinal ERI trajectories in intervention and control groups across four survey assessments (baseline, 12 weeks, 18 weeks, 67 weeks; $N = 215$; $M_{\text{age}} = 15.02$; 49.1% female; 62.6% ethnic-racial minority). In support of an additive effect for the role of families in school-based interventions, post-test ERI exploration significantly increased (relative to control group) to a greater extent for youth with higher (compared to lower) baseline levels of family ethnic socialization. ERI resolution significantly increased from pre- to post-test for ethnic-racial minority youth in the intervention, and also increased across the 1-year follow-up period for White youth. These results highlight family ethnic socialization as a developmental asset for school-based ERI interventions and demonstrate differential pathways by which such interventions support ERI development for ethnic-racial minority and majority adolescents.

Keywords: *identity, race, ethnicity, family socialization, intervention, adolescents*

Adolescents who have developed a more cohesive sense of who they are also report better psychological well-being and academic adjustment (Crocetti 2017). An important component of adolescent identity development is *ethnic-racial identity* (ERI), a multidimensional construct that includes adolescents' beliefs and attitudes about their ethnic-racial group and the process of exploring these over time (Umaña-Taylor et al. 2014). In line with Erikson's (1968) psychosocial theory of development, the developmental processes of ERI include *exploration* (e.g., learning traditions/history) and *resolution* (e.g., gaining clarity). Supporting ERI exploration and resolution has important implications for prevention – adolescents who have explored and gained clarity regarding their ERI tend to have higher self-esteem, fewer mental health problems, and better academic adjustment (Rivas-Drake et al. 2014).

Acknowledging the complex landscapes in which adolescents navigate ERI formation, the *Identity Project* was developed as a universal school-based health promotion intervention program to equip youth with tools to explore and better understand their ERI (Umaña-Taylor et al. 2018a). The theory of intervention, grounded in Erikson's (1968) psychosocial theory of development and subsequent applications of this theory to ERI development (Phinney 1993; Umaña-Taylor et al. 2014), suggested that exploring one's values, beliefs, and history should result in a greater sense of resolve about one's identity, which in turn should promote a more confident sense of self (Erikson 1968). This psychological process of exploring and coming to a sense of resolution regarding one's identity related to ethnic-racial group membership (i.e., ERI) is a normative developmental process and necessary competency that equips youth with skills to understand and cope with ethnic-racial social norms and ethnic-racial-related experiences, such as stereotypes and discrimination (Umaña-Taylor et al., 2014). Thus, the *Identity Project* theory of intervention suggested that providing scaffolding for adolescents to engage in the processes of

ERI exploration and resolution would result in less identity confusion and greater identity cohesion and self-confidence (Umaña-Taylor and Douglass 2017); in turn, this more secure sense of self was theorized to promote adolescents' health and adjustment (Crocetti 2017). Results from a randomized controlled trial (RCT) in an ethno-racially diverse high school indicated that, as theorized, the intervention (compared to attention control group with equivalent contact hours) produced significant increases in adolescents' ERI exploration at post-test, which in turn increased ERI resolution 6 weeks later (Umaña-Taylor et al. 2018a) and led to higher global identity cohesion, self-esteem, grades, and lower depressive symptoms 1 year later (Umaña-Taylor et al. 2018b). These findings were particularly promising because adolescents randomly assigned to the attention control group completed an alternative curriculum (i.e., Academic Success) focused on learning about post-secondary career and educational opportunities; the attention control curriculum was delivered by the same facilitators who delivered the *Identity Project* and had the same amount of lessons and homework assignments, representing a rigorous comparison for the value added of the *Identity Project* intervention.

The present study extended prior research to address a critical component of the intervention theory of change – how adolescents' ERI processes changed across two phases of the intervention design, including temporally proximal effects observed upon intervention completion (i.e., what is the immediate benefit?) and long-term effects across a 1-year follow-up period without additional intervention (i.e., do the benefits last over time?). Extending prior tests of the *Identity Project* RCT (Umaña-Taylor et al. 2018a, 2018b), the current study utilized a spline modeling approach to explore these two change phases in adolescents' developmental processes of ERI exploration and resolution as a function of the experimental design. Despite a significant number of longitudinal studies on ERI development (see Umaña-Taylor et al. 2014),

to our knowledge none have explored timing and progression of ERI changes following a school-based intervention. Longitudinal ERI process trajectories served as the focal outcomes in the current study because, consistent with the intervention theory of change, they were the primary targets of the *Identity Project* (Umaña-Taylor and Douglass 2017) and because growth in these developmental competencies has predicted other positive developmental outcomes in prior research. For example, in ethno-racially diverse samples of adolescents, increases in ERI exploration and/or commitment to one's E-R group over time have predicted more positive family relationships (Huang and Stormshak 2011; Kiang et al. 2010), higher self-esteem, higher academic motivation, and lower levels of depressive symptoms (Kiang et al. 2013; Rogers-Sirin and Gupta 2012).

Although the theory of change supported the design of the intervention as a universal program deliverable to all youth (Umaña-Taylor and Douglass 2017), ERI development is informed by both adolescents' ethnic-cultural heritage (e.g., family traditions, cultural values) and racialized experiences in a specific sociohistorical context (e.g., exposure to racial stereotypes, experiencing discrimination; Umaña-Taylor et al. 2014). Theoretically, both ERI development and intervention-based changes in ERI exploration and resolution are shaped by family influences and ethnic-racial group membership (Hughes et al. 2006; Phinney 1993; Umaña-Taylor et al. 2014). Indeed, family ethnic socialization (FES; i.e., explicit and implicit messages family members transmit to youth regarding cultural heritage, traditions, and pride) has been linked to positive youth adjustment via the promotion of ERI in studies of ethno-racially diverse adolescents (e.g., Hughes et al. 2006, 2009). Further, a recent meta-analysis provided strong support for the concurrent positive association between FES and ERI among youth of color (Huguley et al. 2019). ERI is a universal developmental process for all youth, but the

manner by which ERI development unfolds is theorized to vary by contextual considerations, such as youth's membership in ethnic-racial minority vs. majority groups (Phinney 1993; Umaña-Taylor et al. 2014). For example, youth of color explore and gain understanding about their ethnic-racial background with awareness of their membership in a group that is minoritized in U.S. society (e.g., while being presented with negative stereotypes about their group and experiencing ethnic-racial discrimination), whereas White youth navigate this same developmental process as members of an advantaged majority group for which ERI can be rendered relatively "invisible" (Helms 1994). Further, ERI is generally more salient for ethnic-racial minority compared to majority adolescents (Umaña-Taylor et al. 2014), setting up the potential for differential pathways in ERI intervention outcomes by minority and majority status.

Thus, although the *Identity Project* is a universal health promotion intervention, key contextual factors that contribute to adolescent ERI development likely influenced adolescents' engagement with the intervention content and experiences during or following the program. Following the strong links between FES and ERI in cross-sectional research (Huguley et al. 2019), and consistent with person-environment fit theory (Eccles et al. 1993), we hypothesized that intervention effects would be more pronounced for adolescents with relatively higher initial levels of FES due to greater congruence between home and program contexts. We also hypothesized that intervention effects on ERI would be more pronounced for ethnic-racial minority relative to ethnic-racial majority adolescents, given increased salience of race and ethnicity for minoritized groups (e.g., Phinney 1993), thereby priming minority adolescents to engage more readily with curricular content. Though there is diversity in ERI among youth of color from different ethnic-racial backgrounds, this majority and minority status classification is conceptually justified because (a) the U.S. sociohistorical context is characterized by a distinct

racial dichotomy in which White youth are considered the “norm” and all others are assumed to be distinct from this norm, creating the shared experience of being minoritized (Devos and Benaji 2005), and (b) ERI processes are relatively more salient for ethnic-racial minority youth (Phinney 1993; Umaña-Taylor et al. 2014).

Method

Participants

Participants ($N = 218$) attended a Title I high school in a major metropolitan area in the southwestern United States ($M_{\text{age}} = 15.02$ years, $SD = 0.51$, range 14-18; 49.1% female; 92.7% born in U.S.). The sample was 37.4% White, 29.9% Latino, 24.2% Black, 2.4% Asian American, and 6.2% Native American.¹ The analytic sample ($N = 215$; intervention $n = 114$, control $n = 101$) excluded three participants (one due to dual dosage, and twins randomized into different conditions). Additional information regarding the RCT, including attrition analyses and CONSORT flow diagram, has been published previously (Umaña-Taylor et al. 2018a).²

Procedures

Participants were enrolled in an elective course targeted toward 9th graders focused on providing students with tools for success in high school. Of the eight sections of students enrolled in the course, four sections were randomly assigned to the intervention and four to the attention control condition (i.e., an Academic Success curriculum, focused on informing students about post-secondary career and educational options). Both comprised eight weekly 55-min sessions during school. Surveys were administered at Time 1 (T1; baseline) to all students in both conditions 1 week prior to the program, T2 (12-week post-test), T3 (18-week post-test), and

¹ Participants were invited to select all ethnic-racial identifications that apply to them. If they selected more than one group ($n = 76$), they were asked to select the group with which they identify the most.

² There were no significant differences between participants randomized into the treatment and control conditions by gender, $\chi^2(1) = 2.68, p = .10$, or ethnic-racial minority/majority group, $\chi^2(1) = 0.03, p = .87$.

T4 (67-week post-test). Surveys took approximately 40 minutes to complete at each assessment occasion.

Measures

Ethnic-racial identity. The Ethnic Identity Scale-Brief (EIS-B; Douglass and Umaña-Taylor 2015) assessed adolescents' ERI exploration (three items; e.g., "I have attended events that have helped me learn more about my ethnicity") and resolution (three items; "I am clear about what my ethnicity means to me"). Both scales were measured on a four-point Likert scale from *does not describe me at all* (1) to *describes me very well* (4). This measure has demonstrated equivalence and construct validity for ethnic-racial majority and minority groups (Douglass and Umaña-Taylor 2015; Sladek et al. 2020). Cronbach's alphas for the exploration (T1: .83, T2: .83, T3: .85, T4: .82) and resolution (T1: .85, T2: .87, T3: .89, T4: .83) subscales were high in the current sample.

Family ethnic socialization. The Familial Ethnic Socialization Measure (Umaña-Taylor 2001) assessed adolescents' perceptions of the extent to which their family socialized them about their ethnic/cultural background. The measure has demonstrated reliability and validity in ethnoracially diverse youth samples (e.g., Umaña-Taylor, Yazedjian, & Bámaca-Gómez, 2004). Twelve items (e.g., "My family encourages me to respect the cultural values and beliefs of our ethnic/cultural background") were scored on a five-point Likert scale from *not at all* (1) to *very much* (5). Higher scores indicated higher FES (T1: $\alpha = .93$).

Sociodemographic variables. Adolescents self-reported their gender (0 = Female, 1 = Male) and ethnic-racial (E-R) identification (E-R minority: 0 = Black or African American, Latino, Asian American, American Indian or Native American; E-R majority: 1 = White).

Including gender as a covariate did not alter model results; thus, it was not included in final models.

Analytic Strategy

Multigroup bilinear spline growth models were used to account for ERI changes from T1 (baseline) to T2 (hereafter “*pre- to post-test*”), reflecting temporally proximal intervention effects, and from T2 to T4 (hereafter “*follow-up*”), reflecting longer-term changes across 1 year without additional intervention. Models were fit separately for ERI exploration and ERI resolution, with condition used as the grouping variable (0 = control group; 1 = intervention). The knot point was fixed at T2, which also served as the model intercept. Linear growth parameters were used to model the effect of time on ERI from pre- to post-test, reflecting months until T2 post-test, and the effect of time on ERI across follow-up, reflecting months since T2 post-test.³ T1 FES (grand-mean centered) and E-R majority status (0 = E-R minority; 1 = E-R majority) were introduced as predictors of T2 post-test levels (intercepts) and pre- to post-test and follow-up slopes. Models were fit in *Mplus* version 8.1 (Muthén and Muthén, 1998-2017) using maximum likelihood estimation to handle missing data (< 4% across waves).

Results

ERI Exploration Trajectories

Beginning with ERI exploration, a bilinear spline growth model fit significantly better than an unconditional model, $\chi^2(7) = 27.243, p < .001$. Model fit was excellent: $\chi^2(13) = 4.998, p > .05$; CFI = 1.000; RMSEA = .000; SRMR = .022 (Figure 1a). Adjusting for E-R majority status, higher T1 FES predicted a lower rate of increase in ERI exploration from pre- to post-test

³ Spline models with an added quadratic function for potential curvilinear follow-up effects did not converge for ERI exploration and resolution; the number of latent growth parameters exceeded the number of measurement occasions.

and higher T2 ERI exploration levels (relative to those with lower T1 FES; i.e., significant main effects), but did not predict differences in ERI exploration follow-up rates of change, on average.

Nested model tests with constrained parameters indicated the regression paths from T1 FES to T2 ERI exploration and to the follow-up slope differed by condition, $\chi^2(2) = 7.388, p = .03$, indicating moderation of intervention effects. Post-hoc analysis indicated the intervention produced increases in T2 ERI exploration levels (relative to control) for participants with higher levels of T1 FES (+1 *SD*; $n = 37$; 17.2% of the sample), $t(35) = 2.221, p = .03, d = 0.887$, compared to youth with lower levels of T1 FES (-1 *SD*; $n = 41$; 19.1% of the sample), $t(39) = 0.149, p = .88, d = .178$ (Figure 2a). The follow-up rate of change in ERI exploration was relatively more positive for youth with higher T1 FES in the intervention ($b = 0.007, p = .28$) compared to youth with similarly high T1 FES in the control group ($b = -0.014, p = .06$; Figure 1a). These follow-up slopes were not significantly different from zero, but they did significantly differ from each other, $\chi^2(1) = 6.942, p < .01$, indicating that T1 FES levels accounted for significant individual variation in the extent to which intervention effects on ERI exploration continued in the year following program completion.

Adjusting for T1 FES, E-R majority status predicted a lower rate of increase in ERI exploration from pre- to post-test and lower T2 ERI exploration levels (relative to E-R minority participants; i.e., significant main effects) but did not predict differences in the follow-up rate of change, on average. These regression paths did not significantly differ by condition, $\chi^2(3) = 0.740, p = .86$, and thus were not interpreted with respect to intervention effects.

ERI Resolution Trajectories

Turning to ERI resolution, a bilinear spline growth model fit significantly better than an unconditional model, $\chi^2(7) = 53.405, p < .001$. Model fit was acceptable: $\chi^2(13) = 20.994, p >$

.05; CFI = .975; RMSEA = .076; SRMR = .087 (Figure 1b). Adjusting for E-R majority status, higher T1 FES predicted a lower rate of increase in ERI resolution from pre- to post-test and higher T2 ERI resolution (i.e., significant main effects) but did not predict differences in ERI resolution follow-up rates of change, on average. These paths did not significantly differ by condition, $\chi^2(3) = 7.395, p = .06$, and thus were not interpreted regarding intervention effects.

Adjusting for T1 FES, E-R majority status predicted a lower rate of increase in ERI resolution from pre- to post-test and lower T2 ERI resolution levels (relative to E-R minority participants; i.e., significant main effects). These paths differed by condition, $\chi^2(3) = 9.341, p = .03$, indicating moderation of intervention effects. Post-hoc analysis indicated that ERI resolution increased at a faster rate from pre- to post-test for E-R minority participants in the intervention, $b = 0.079, p = .02$, relative to E-R minority participants in the control group, $b = 0.031, p = .35$, whereas ERI resolution did not significantly change from pre- to post-test for E-R majority participants (intervention: $b = -0.068, p = .32$; control: $b = -0.032, p = .62$). In contrast, ERI resolution increased at a faster rate across follow-up for E-R majority participants in the intervention, $b = 0.030, p = .049$, relative to control, $b = -0.011, p = .46$. ERI resolution did not significantly change across follow-up for E-R minority participants (intervention: $b = -0.006, p = .45$; control: $b = 0.010, p = .15$; Figure 2b). In summary, ERI resolution trajectories were significant and positive from pre- to post-test for E-R minority participants and across follow-up for E-R majority participants in the intervention; there were not significant changes in ERI resolution for E-R minority or majority participants in the control group.

Discussion

The current study provided important extensions to initial analyses of the *Identity Project* RCT to test *how* the primary intervention targets of ERI developmental processes progressed

over time and *for whom* the intervention effects were strongest. Utilizing longitudinal modeling techniques to isolate unique change phases for temporally proximal post-test effects and longer-term follow-up effects, the results demonstrated that (a) post-test effects on ERI exploration (i.e., learning about traditions/history) were more pronounced for adolescents whose families had engaged in ethnic socialization practices to a greater extent prior to the intervention at the start of high school, and (b) post-test effects on ERI resolution (i.e., gaining a sense of clarity about ERI) were more pronounced for ethnic-racial minority adolescents, whereas follow-up effects over the course of 1 year were more pronounced for ethnic-racial majority adolescents. These findings contribute novel understanding of individual and group differences in the timing and progression of ERI development processes during and following a school-based intervention. Furthermore, findings illustrate differential pathways toward promoting ERI as a universal developmental asset in prevention science. Promoting ERI development during adolescence is important because positive ERI growth patterns have been shown to predict other key developmental outcomes over time (Kiang et al. 2013; Rogers-Sirin and Gupta 2012).

Although effect sizes were relatively modest in the RCT (Umaña-Taylor et al. 2018a, 2018b), moderation tests in the current analyses revealed the magnitude of the primary target effect on post-test ERI exploration was more than four times larger for adolescents with higher (compared to lower) baseline levels of family ethnic socialization. Further, youth who entered the *Identity Project* intervention with higher baseline family ethnic socialization maintained these higher ERI exploration levels across the yearlong follow-up to a greater extent than youth in the control group with similar family ethnic socialization. In developmental studies outside the context of an intervention, some evidence suggests that increases in ERI exploration for ethnic-racial minority and majority youth naturally plateau around 10th grade (e.g., Pahl and Way 2006;

Kiang et al. 2010). Similarly, in the current study, there were not significant overall increases in ERI exploration across the 10th grade year for intervention or control groups. However, variation in this follow-up effect suggested important family-related differences in how adolescents continued to engage in exploring their ethnic-racial background once the program was complete. Future research is needed to examine how family members' engagement enhances the goals of the intervention.

These findings are consistent with research documenting the critical role of family socialization practices in ERI development for ethno-racially diverse adolescents (Huguley et al. 2019), though to date this research has not been applied directly to ERI interventions. Further, these results support person-environment fit theory (Eccles et al. 1993), which suggests that the degree of match between students and school programs is critical for adolescent adjustment. Family members who engage youth in learning about ethnic traditions and cultural customs provide important developmental scaffolding for personal ERI exploration (Hughes et al. 2006). The current study suggests that the combination of family ethnic socialization at home *and* providing a context for ERI exploration within the school setting produces an *additive effect* in support of adolescents' ERI development. Future work should consider avenues to foster this sense of cultural congruity between home and school contexts to maximize the effects of school-based prevention programs. In addition, these results suggest it is important to identify how ERI-related interventions like the *Identity Project* should best engage youth who have not learned as much about their ethnicity or culture from family before the program begins, such as by providing skilled training to program facilitators in order to support family engagement with the program. Another important result from these analyses indicated that intervention effects on ERI

exploration were similar for ethnic-racial minority and majority youth, providing further support for the *Identity Project* as a universal health promotion program.

Consistent with the theory of intervention (Erikson 1968; Phinney 1993), original tests of this RCT demonstrated that increases in adolescents' ERI exploration led to increases in ERI resolution (Umaña-Taylor et al. 2018a). The current analyses extended this developmental cascade model to further articulate individual trajectories in the timing of ERI resolution changes, with evidence that trajectories differed by adolescents' ethnic-racial majority or minority status. Specifically, the intervention increased post-test ERI resolution for ethnic-racial minority adolescents (compared to minority adolescents in the control group), indicating a positive *proximal effect* observed a few weeks after the end of the program. In a racialized society where minoritized identities are "othered" by mainstream (i.e., White) culture (Helms 1994; Phinney 1993), these gains in adolescents' sense of clarity regarding their ERI serve as a critical developmental competency and potential buffer against the negative effects of discrimination for youth of color (Rivas-Drake et al. 2014; Umaña-Taylor et al. 2014). Given that extant ERI literature is mostly cross-sectional (Rivas-Drake et al. 2014; Yip et al. 2019), future research is needed to continue testing ERI resolution as a protective factor in longitudinal studies.

In contrast, the intervention also increased ERI resolution for White adolescents (compared to their White peers in the control group), but this pattern emerged across the yearlong follow-up period. This suggests a *sleeper effect*, in which ethnic-racial majority adolescents may require additional time to process and apply lessons learned from the *Identity Project* to arrive at a more consolidated understanding of their ERI over time. In other words, the intervention equipped all youth with tools to further their ERI development, but these findings

provide novel evidence for differential pathways through which the program conferred benefits by ethnic-racial minority/majority status. Though there were not significant overall increases in ERI resolution across the year following intervention for ethnic-racial minority adolescents, this could be due to their consistently higher levels of ERI over time and/or because more proximal pre- to post-test gains led to a ceiling effect. It will be important for future research to consider ways to support adolescents' continued reflection and understanding of their ERI over time, such as by providing space and time for youth to continue engaging in the ERI development process with their peers through subsequent "check-up" or "booster" sessions.

Limitations of this study included a sample size that precluded examination of specific ethnic-racial group comparisons. Future research must consider participants' and facilitators' ethnic-racial backgrounds, as well as classroom- and school-level ethnic-racial composition. For example, this study was unable to test whether intervention effects varied for Latino, Black, Asian American, or Native American participants, specifically. Further, the conclusions of this study rely on estimates from a bilinear model indexed by four measurement occasions; future research with more frequent assessment intervals may reveal more complex models of change. In addition, there was not adequate statistical power to test whether variation in ERI growth trajectories as a function of study moderators was, in turn, associated with increases in identity cohesion or other health outcomes, which is an important avenue for future research. Finally, the RCT was implemented in one school setting in one region with a generally high degree of ethnic-racial diversity. Future *Identity Project* implementations should include attention to generalizability of the intervention for varying school types and student populations.

The present study highlighted two key considerations for practitioners of the *Identity Project* and other similar ERI-related school-based programs. First, the variability in how much

adolescents have learned about their cultural heritage from family was related to how much the intervention prompted ERI exploration; program effects were stronger for youth with initially higher levels of family ethnic socialization. Second, both youth of color and White youth gained clarity regarding their ERI over time, but there was variability in the timing at which ethnic-racial minority and majority youth arrived at this resolution, further illustrating diversity in ERI developmental pathways. This study also advanced a relatively novel modeling strategy to isolate intervention effects at first post-test and over longer-term follow-up, which may be useful in designing future timelines and optimizing efficiency of program booster sessions.

Compliance with Ethical Standards

Conflict of Interest: The authors declare that they have no conflict of interest.

Ethical approval: All procedures performed involving human participants were in accordance with the ethical standards of the Arizona State University Institutional Review Board.

Informed consent: Youth participants provided assent and guardians provided informed consent.

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Bilinear Spline Growth Models of ERI by Intervention Condition, Family Ethnic Socialization, and Ethnic-Racial Majority Status

Figure 1a – Ethnic-Racial Identity (ERI) Exploration

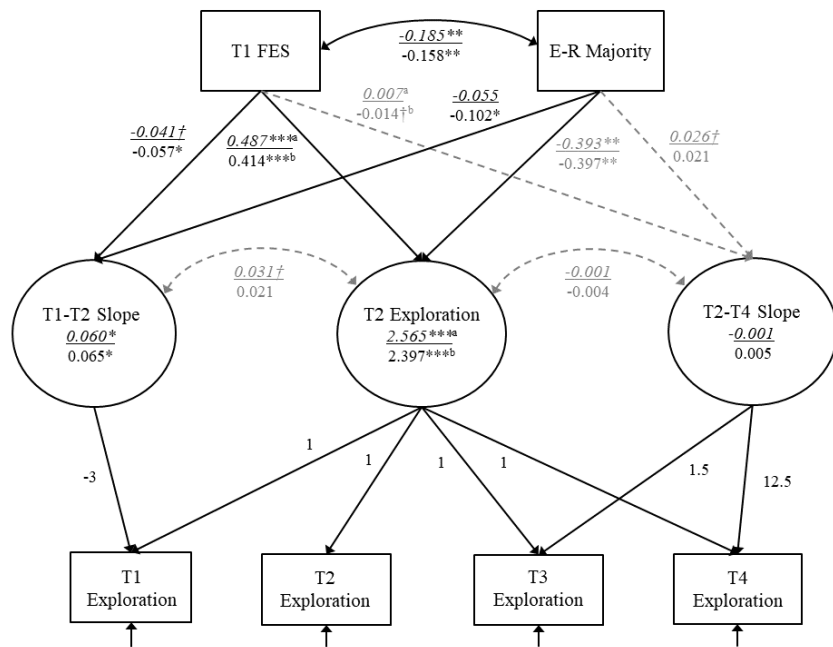
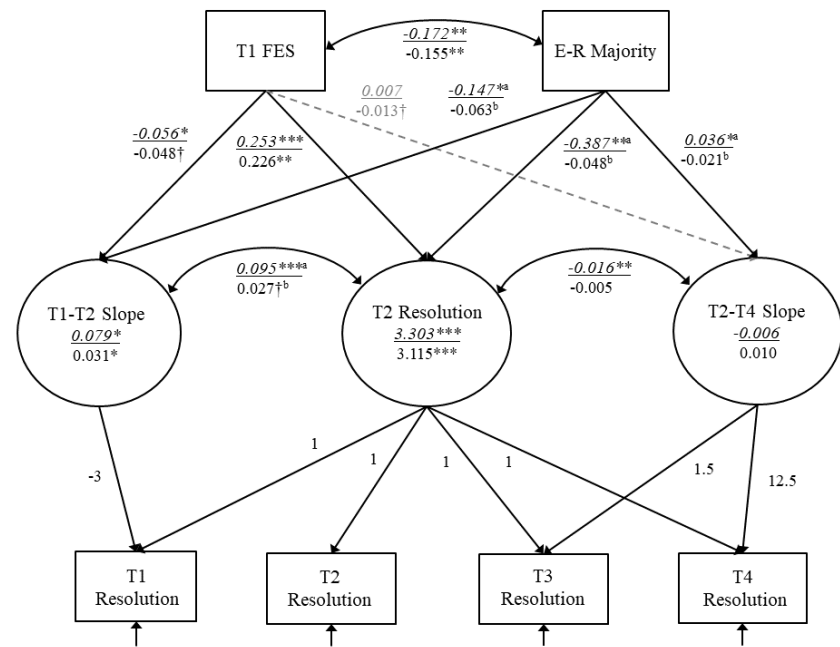


Figure 1b – Ethnic-Racial Identity (ERI) Resolution

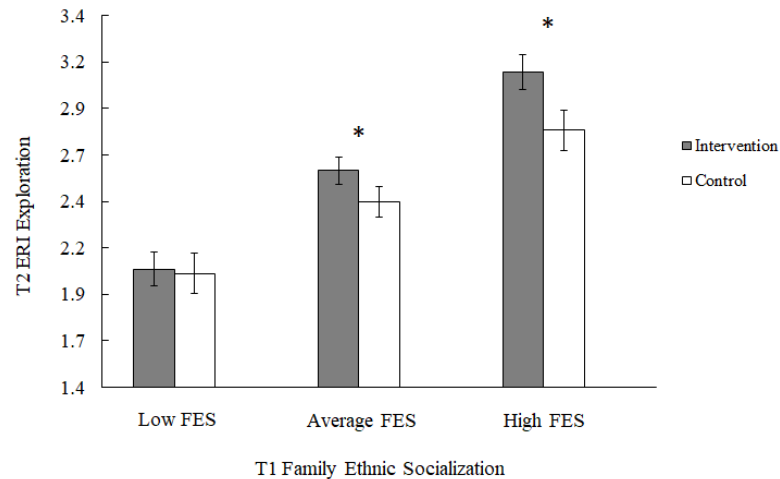


Note. $N = 215$. Unstandardized parameter estimates. Intervention condition ($n = 114$) estimates italicized and underlined; control condition ($n = 101$) estimates in standard text. Non-significant regression paths and covariances ($p > .05$) represented by dashed lines. T1 = baseline pre-test, T2 = 12-week post-test, T3 = 18-week post-test, T4 = 67-week follow-up. E-R Majority: 0 = Black, Latino, Asian American, Native American; 1 = White. FES = family ethnic socialization. E-R = ethnic-racial. Different superscript letters indicate significant χ^2 difference test comparing intervention and control groups, $p < .05$.

† $p < .10$. * $p \leq .05$. ** $p < .01$. *** $p < .001$.

Figure 2a

Post-Test (T2) Ethnic-Racial Identity Exploration by Condition and Family Ethnic Socialization, Controlling for E-R Majority Status

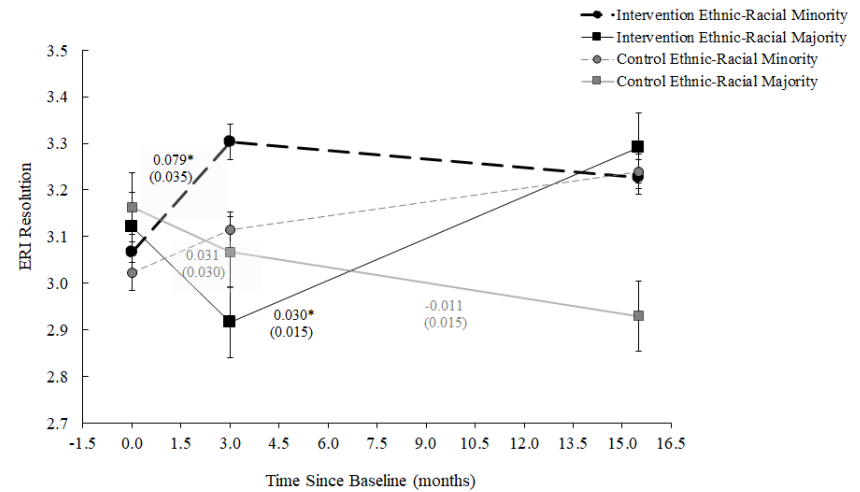


Note. Simple intercepts plotted at the mean and ± 1 SD from the mean of T1 family ethnic socialization (FES). Error bars reflect ± 1 SE of the estimated intercept. ERI = ethnic-racial identity. E-R = ethnic-racial.

* $p < .05$.

Figure 2b

Simple Slopes of Ethnic-Racial Identity Resolution by Condition and E-R Majority Status, Controlling for Family Ethnic Socialization



Note. Simple slopes plotted for ethnic-racial minority (Black, Latino, Asian American, Native American) and ethnic-racial majority (White) adolescents. Black lines for intervention condition; gray lines for control condition. Slope estimates followed by standard errors in parentheses. ERI = ethnic-racial identity. E-R = ethnic-racial. See results section for all slope estimates.

* $p < .05$ (slope significantly different from zero).