

## Supplemental Materials

### Sensitivity Analyses: Testing ethnic/racial group differences

Additional sensitivity analyses were conducted to examine omnibus differences across the three ethnic/racial groups (i.e., African American, Asian American, Latinx American; Latinx as the reference group) for models 1 (exposure), 2 (reactivity), and 3 (recovery) using multivariate Wald tests. Differences in effect sizes by race were investigated with the level-2 pseudo R-square (i.e., the proportion of residual variance of ERD accounted for by ethnic-racial differences in the effect of ERI) using 3% as a cut-off for the average moderation effect size (Chaplin, 1991). When testing multiple parameters, Wald test statistics follow a  $\chi^2$  distribution. We used the multigroup design instead of a set of dummy variables for race/ethnicity because this design can produce the ERI effects for each ethnic/racial group directly and the model specification does not require a set of interaction terms, which might cause model convergence problems due to non-essential multicollinearity. The Wald test is the null hypothesis test of the interaction effect between race/ethnicity (African American, Asian American, Latinx American) and ERI (exploration, commitment, centrality/private regard). When testing one parameter, the Wald test is often known as the z test. The Chaplin (1991) test is not a null hypothesis test, rather Chaplin provides guidance on the average moderation effect size in behavioral research, which was used to interpret the effect size.

#### **Model 1: Differential Exposure to ERD by ERI**

Results observed no support for differences in exploration ( $\chi^2 (2, N = 350) = .68, p = .71$ ), commitment ( $\chi^2 (2, N = 350) = .30, p = .86$ ), or centrality/private regard ( $\chi^2 (2, N = 350) = 2.45, p = .29$ ). Differences in effect sizes by race for exploration, commitment, and centrality/private regard were investigated to compare Asian versus African American (*R*-square

mean = .23%, range = 0% to .5%), Asian versus Latinx ( $R$ -square mean = 1.53%, range = .06% to 2.70%), and African American versus Latinx ( $R$ -square mean = .81%, range = 0% to 2.18%).

The effect sizes for the three ethnic/racial groups are small ( $< 3\%$ ).

### **Model 2: Differential Reactivity to ERD by ERI**

**ERI exploration.** The Wald test did not observe significant differences by ethnicity/race. Although exploration did not significantly moderate the association between ERD and rumination, results indicated significant ethnic/racial differences ( $\chi^2 (2, N = 350) = 6.17, p = .05$ ; Supplemental Figure S1). Higher levels of ERI exploration was associated with a significant negative association between ERD and rumination for Latinx ( $b = -.30, S.E. = .13, p = .02$ ), but not for African American ( $b = .26, S.E. = .22, p = .25$ ) or Asian American youth ( $b = .06, S.E. = .16, p = .70$ ). Differences in effect sizes were computed to compare Asian versus African American ( $R$ -square mean = 10%, range = 0% to 63.16%), Asian versus Latinx ( $R$ -square mean = 3.08%, range = 0% to 12.5%), and African American versus Latinx ( $R$ -square mean = 11.24%, range = .54% to 50%). The effect sizes for the three ethnic/racial comparisons are above average ( $> 3\%$ ).

**ERI commitment.** Results did not support significant ethnic/racial differences ( $\chi^2 (2, N = 350) = 3.04, p = .22$ ). Differences in effect sizes were investigated to compare Asian versus African American ( $R$ -square mean = 5.2%, range = 0% to 22.22%), Asian versus Latinx ( $R$ -square mean = 2.96%, range = 0% to 12.5%), and African American versus Latinx ( $R$ -square mean = 8.12%, range = 0% to 30%). The effect sizes for the three ethnic/racial group comparison are above average ( $\geq 3\%$ ; Chaplin, 1991).

**ERI centrality/private regard.** Results indicated significant ethnic/racial differences ( $\chi^2 (2, N = 350) = 6.26, p = .04$ ; Figure S2), such that the attenuating effect of ERI centrality/private

regard was significant for African American adolescents ( $b = -.16, S.E. = .04, p = .04$ ), but not for Asian American ( $b = -.05, S.E. = .04, p = .16$ ) or Latinx youth ( $b = -.03, S.E. = 0.05, p = .55$ ). Differences in effect sizes were investigated to compare Asian versus African American ( $R$ -square mean = 1.84%, range = 0% to 11.11%), Asian versus Latinx ( $R$ -square mean = 8.40%, range = 0% to 48.39%), and African American versus Latinx ( $R$ -square mean = 9.63%, range = 0% to 46.67%). The effect size comparing Asian versus African American is small, while the effect sizes for the other two ethnic/racial group comparison are above average ( $> 3\%$ ).

### **Model 3: Differential Recovery from ERD by ERI**

First, the same-day effects of ERD on adjustment were estimated. Results of the multivariate Wald test indicated no significant ethnic/racial differences ( $ps > .05$ ). Differences in effect sizes were investigated to compare Asian versus African American ( $R$ -square mean = 2.06%, range = 0% to 5.19%), Asian versus Latinx ( $R$ -square mean = 2.16%, range = 0% to 7.69%), and African American versus Latinx ( $R$ -square mean = 1.24%, range = 0% to 8.38%). The effect sizes for the three ethnic/racial group comparison are smaller than average ( $< 3\%$ ).

The next step was to test empirical support for the two recovery models (i.e., the carry-over effects of ERD on next-day adjustment). For the first recovery model (i.e., comparing adjustment on days when adolescents experience ERD ( $t$ ) to the following day ( $t + 1; \gamma_{10}$ )), results indicated no significant ethnic/racial differences ( $ps > .05$ ). Differences in effect sizes were investigated to compare Asian versus African American ( $R$ -square mean = 5.76%, range = 0% to 18.69%), Asian versus Latinx ( $R$ -square mean = .89%, range = 0% to 3.64%), and African American versus Latinx ( $R$ -square mean = 2.38%, range = 0% to 13.86%). The effect size comparing Asian versus African American is larger than average ( $> 3\%$ ), while the effect sizes for the other two ethnic/racial group comparisons are smaller than average ( $< 3\%$ ).

For the second recovery model (i.e., comparing the first ERD-free day to all other ERD-free days ( $-\gamma_{20}$ )), results of the Wald test indicated significant ethnic/racial differences for the recovery effect of ERD on daily somatic symptoms ( $\chi^2(2, N = 350) = 6.97, p = .03$ ), such that the recovery effect was significant among Asian American adolescents ( $b = .11, S.E. = .05, p = .01$ ), but not among African American ( $b = .00, S.E. = .12, p = .98$ ) or Latinx ( $b = -.12, S.E. = .04, p = .10$ ) youth. In other words, while African American and Latinx youth showed evidence of next day ( $\gamma_{10}$ ) and overall ( $-\gamma_{20}$ ) recovery for somatic symptoms, Asian American youth did not show evidence of overall ( $-\gamma_{20}$ ) recovery for somatic outcomes. Differences in effect sizes were investigated to compare Asian versus African American ( $R$ -square mean = 3.67%, range = 0% to 14.72%), Asian versus Latinx ( $R$ -square mean = 1.38%, range = 0% to 4.69%), and African American versus Latinx ( $R$ -square mean = 3.8%, range = 0% to 19.65%). The effect size comparing Asian versus Latinx is smaller than average ( $< 3\%$ ), while the effect sizes for the other two ethnic/racial group comparisons are above average ( $> 3\%$ ).

The final step examined whether the recovery effect from ERD varied by ERI. Results of the multivariate Wald test indicated no significant ethnic/racial differences ( $ps > .05$ ). Differences in effect sizes were investigated to compare Asian versus African American ( $R$ -square mean = 1.67%, range = 0% to 17.65%), Asian versus Latinx ( $R$ -square mean = 2.45%, range = 0% to 14.29%), and African American versus Latinx ( $R$ -square mean = 2.72%, range = 0% to 14.29%). The effect sizes for the three ethnic/racial group comparison were all below average ( $< 3\%$ ).

Supplemental Table S1

*Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) Items*

| Factor      | Item   | Cheon et al., in preparation Results |
|-------------|--|--------------------------------------|
| Exploration | • I have spent time trying to find out more about my own ethnic group, such as history, traditions, and customs.                   | Included                             |
|             | • I am active in organizations or social groups that include mostly members of my own ethnic group.                                | Included                             |
|             | • I think a lot about how my life will be affected by my ethnic group membership.  | Included                             |
|             | • I really have not spent much time trying to learn more about the culture and history of my ethnic group. (R)                     | Excluded                             |
|             | • In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.                    | Included                             |
|             | • I participate in cultural practices of my own group.   | Included                             |
| Commitment  | • I have a clear sense of my ethnic background and what it means to me.  | Included                             |
|             | • I am happy that I am a member of the group I belong to.  | Included                             |
|             | • I am not very clear about the role of my ethnicity in my life. (R)   | Excluded                             |
|             | • I have a strong sense of belonging to my own ethnic group.   | Included                             |
|             | • I understand pretty well what my ethnic group membership means to me in terms of how to relate to my own group and other groups. | Included                             |
|             | • I have a lot of pride in my ethnic group and its accomplishments.  | Included                             |
|             | • I feel a strong attachment towards my ethnic group.  | Included                             |
|             | • I feel good about my cultural or ethnic background.  | Included                             |

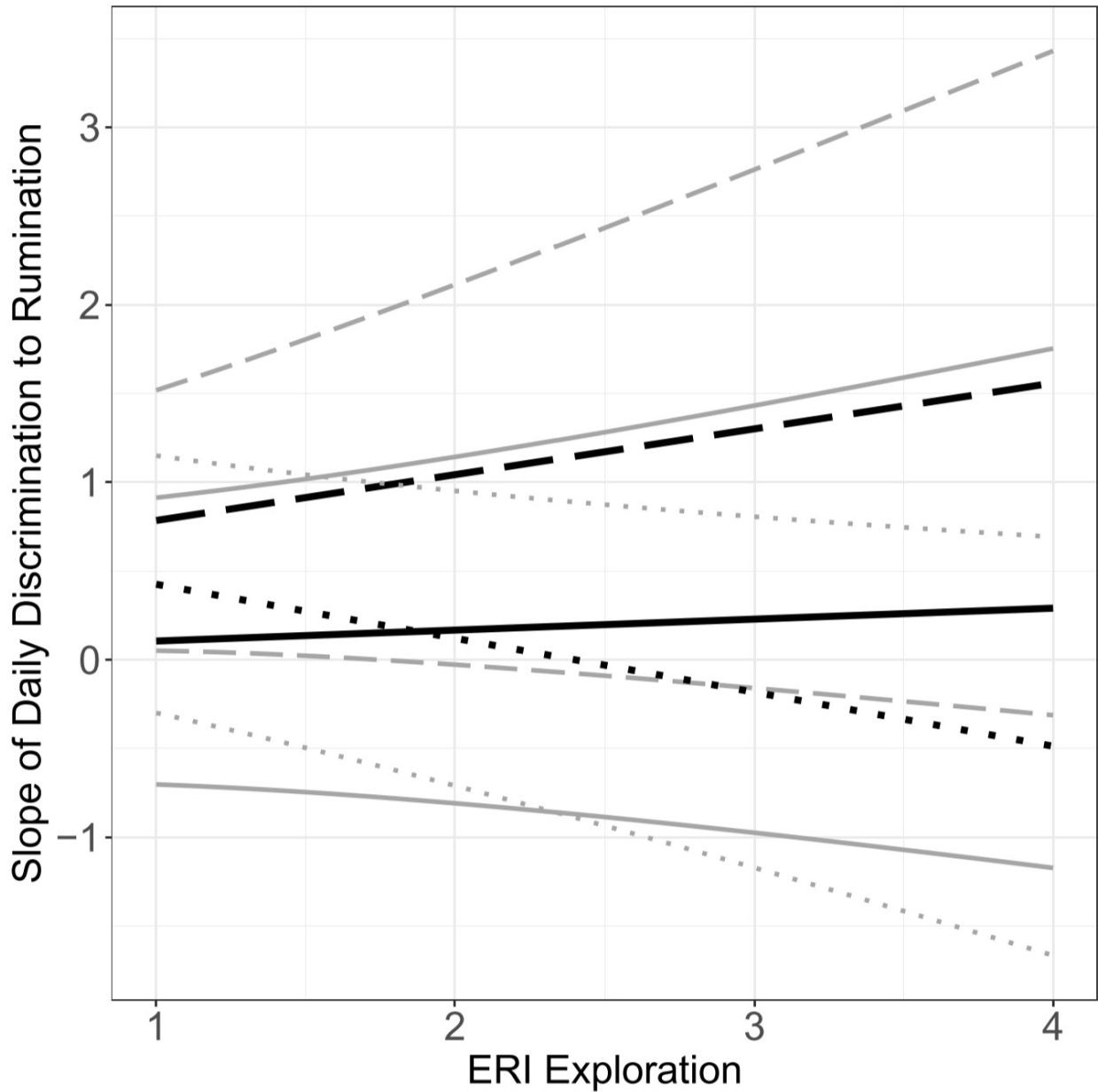
*Note.* (R) indicates reverse-coded items.

Supplemental Table S2

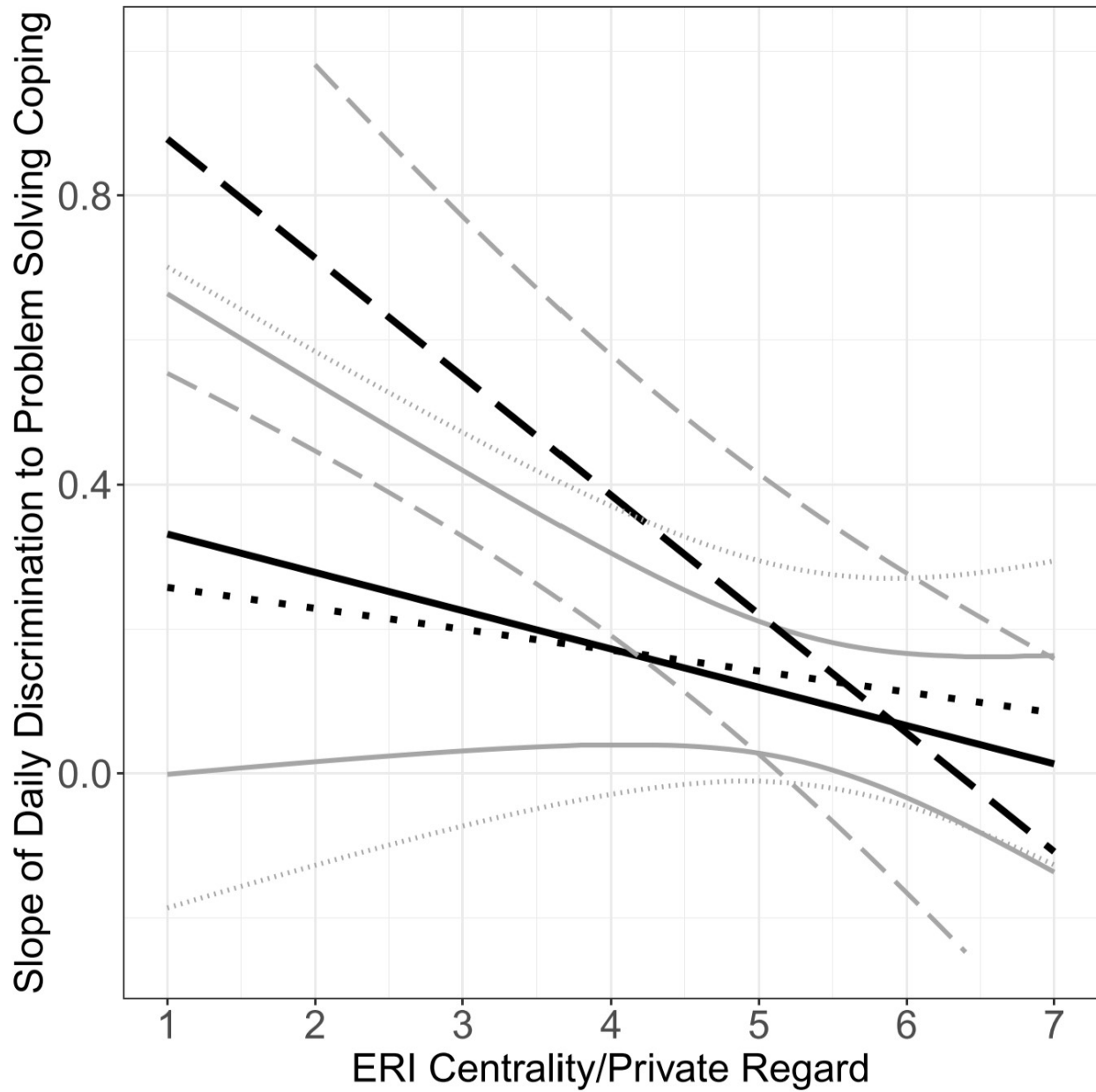
*Adapted Multidimensional Inventory of Black Identity Scale (MIBI; Sellers et al., 1997) Items*

| Factor         | Item   | Cheon et al., in preparation Results |
|----------------|--|--------------------------------------|
| Private Regard | • I am happy that I am a member of my racial/ ethnic group.                                      | Included                             |
|                | • Overall, I often feel that people from my racial/ ethnic group are not worthwhile. (R)         | Excluded                             |
|                | • People of my racial/ethnic group contribute less to society than others. (R)                   | Excluded                             |
|                | • I believe that because I am a member of my racial/ ethnic group I have many strengths.         | Included                             |
|                | • I feel that people of my racial/ethnic group have made major accomplishments and advancements. | Included                             |
|                | • I feel good about people from my racial/ ethnic group.   | Included                             |
|                | • I often regret that I am a member of my racial/ ethnic group. (R)                              | Excluded                             |
| Centrality     | • In general, I my race/ ethnicity is an important part of my self-image.                        | Included                             |
|                | • I have a strong sense of belonging to people from my racial/ ethnic group.                     | Included                             |
|                | • My race/ethnicity is not a major factor in my social relationships. (R)                        | Excluded                             |
|                | • I have a strong attachment to other people from my racial/ ethnic group.                       | Included                             |
|                | • My race/ethnicity is unimportant to my sense of what kind of person I am. (R)                  | Excluded                             |
|                | • My destiny is tied to the destiny of other people of my race/ethnicity.                        | Excluded                             |
|                | • My race/ethnicity is an important reflection of who I am.                                      | Included                             |
|                | • Overall, my race/ethnicity has very little to do with how I feel about myself. (R)             | Excluded                             |

*Note.* (R) indicates reverse-coded items.

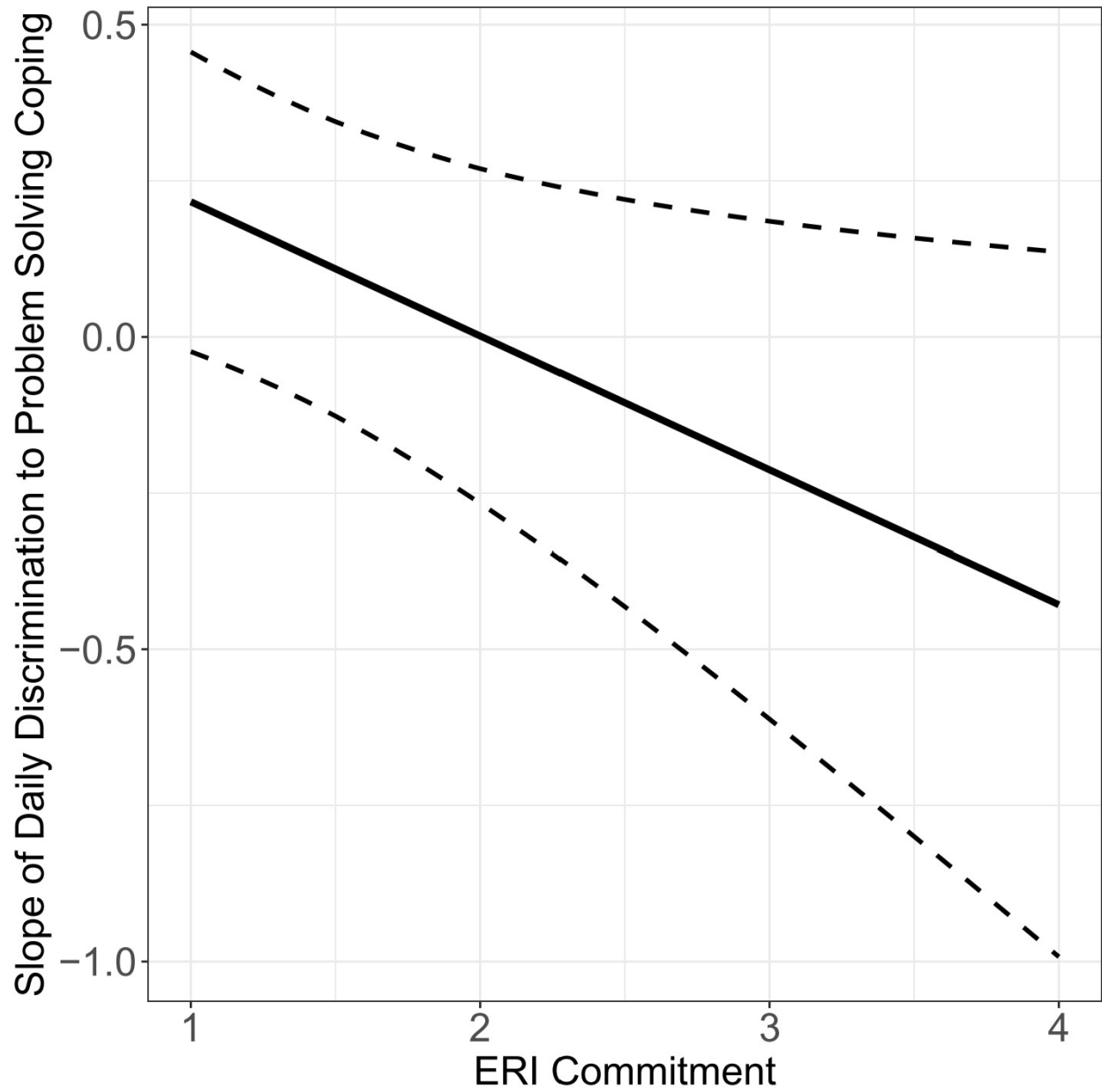


*Supplemental Figure S1.* A Johnson-Neyman plot for differential reactivity by ERI exploration for the association between discrimination and rumination. The Wald test indicated significant ethnic/racial differences ( $\chi^2(2, N = 350) = 6.17, p = .05$ ; Figure 5). Long dash line: African Americans ( $b = .26, S.E. = .22, p = .25$ ); Solid line: Asian Americans ( $b = .06, S.E. = .16, p = .70$ ); Dotted line: Latinx; Gray lines ( $b = -.30, S.E. = .13, p = .02$ ): 95% confidence band.

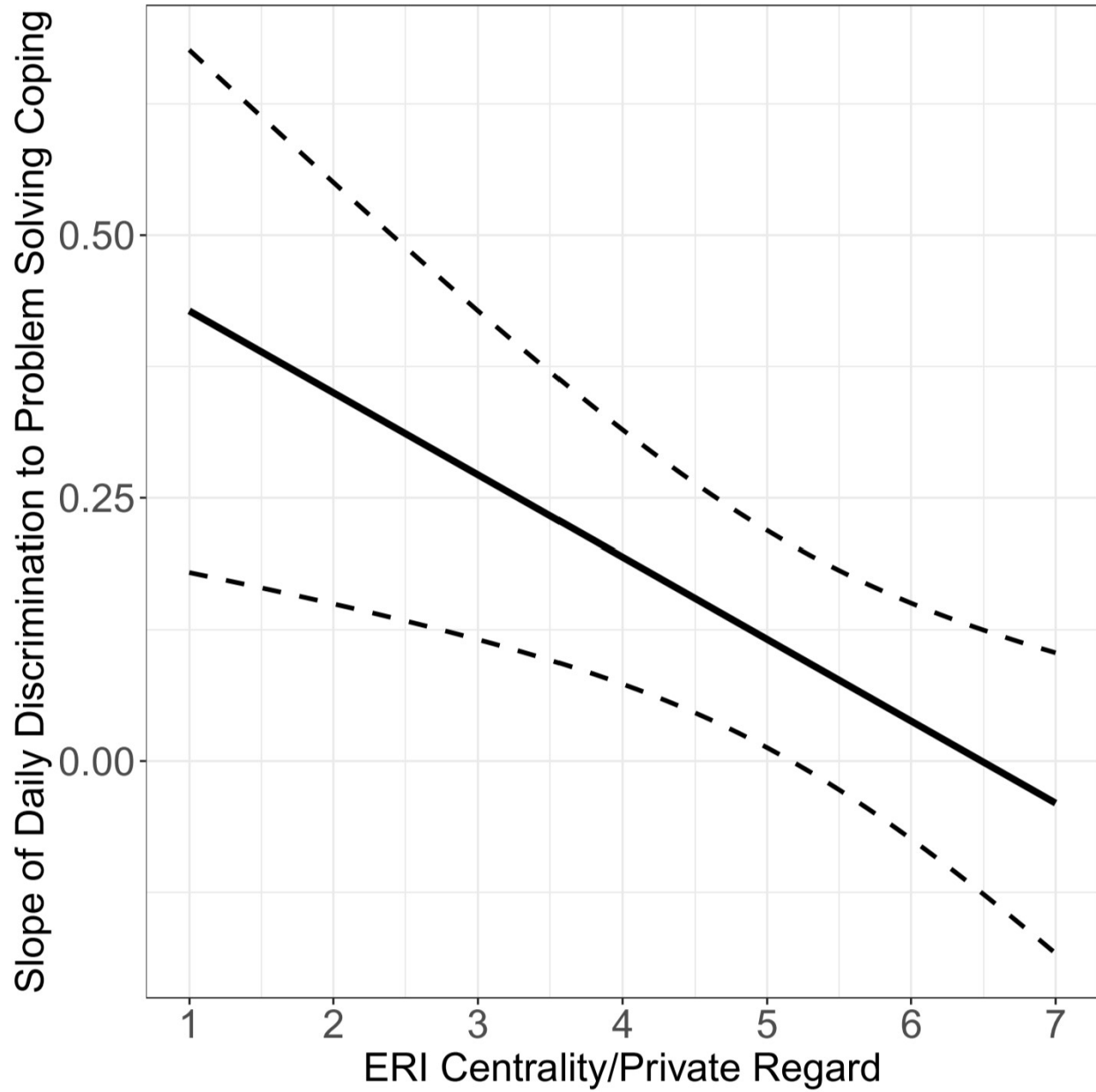


Supplemental Figure S2. A Johnson-Neyman plot for differential reactivity to discrimination on positive coping strategies by centrality/private regard. The Wald test indicated significant ethnic/racial differences in this association ( $\chi^2(2, N = 350) = 6.26, p = .04$ ). Long dash line: African Americans ( $b = -.16, S.E. = .04, p = .04$ ); Solid line: Asian Americans ( $b = -.05, S.E. = .04, p = .16$ ); Dotted line: Latinx ( $b = -.03, S.E. = 0.05, p = .55$ ); Gray lines: 95% confidence band.





*Supplemental Figure S3.* A plot for differential recovery by ERI commitment for the association between discrimination and problem-solving coping strategies.  $b = -.22$ ,  $S.E. = .10$ ,  $p = .03$ . Gray lines: 95% confidence band.



*Supplemental Figure S4.* A plot for differential recovery by ERI centrality/private regard for the association between discrimination and problem-solving coping strategies.  $b = -.08$ ,  $S.E. = .03$ ,  $p = .01$ . Gray lines: 95% confidence band.