

## Supplementary Material

### Reaction Time

Reaction time (RT) was not a primary dependent variable of interest; however, mean RTs for each condition are presented in Table S1.

Table S1.

*Mean Reaction Times in Each task as a Function of Participant Race, Target Race, and Target Gender.*

| Gender-categorization task |                    |             |                    |             |
|----------------------------|--------------------|-------------|--------------------|-------------|
|                            | Black Participants |             | White Participants |             |
|                            | Black faces        | White faces | Black faces        | White faces |
| Male faces                 | 442 (89)           | 464 (103)   | 455 (92)           | 462 (94)    |
| Female faces               | 459 (96)           | 448 (91)    | 464 (91)           | 457 (96)    |
| Race-categorization task   |                    |             |                    |             |
|                            | Black Participants |             | White Participants |             |
|                            | Black faces        | White faces | Black faces        | White faces |
| Male faces                 | 407 (84)           | 434 (97)    | 434 (83)           | 454 (93)    |
| Female faces               | 435 (88)           | 426 (96)    | 454 (89)           | 451 (94)    |

*Note.* Numbers in parentheses are standard deviations.

**Gender-categorization task.** To examine the effects of target race (Black = -1, White = 1), target gender (female = -1, male = 1), fixation (eyes = -1, forehead = 1), and participant race (Black = -1, White = 1) on RT, each was included as an effect-coded predictor in a multilevel

model. The random effects structure allowed the intercept and slope of target race and target gender to vary by subject. As evident in Figure S1, Target race and Target gender interacted significantly,  $b = 6.23$ ,  $z = 27.7$ ,  $p < .001$ , such that participants responded more quickly to Black *male* faces than Black *female* faces, but more quickly to White *female* faces than White *male* faces. This was qualified by a significant Target race x Target gender x Participant race interaction,  $b = -2.40$ ,  $z = -10.7$ ,  $p < .001$ , such that Target race and Target gender interacted to a larger extent among Black participants compared to White participants. Additionally, there was a main effect of fixation,  $b = -.78$ ,  $z = 3.47$ ,  $p < .001$ , such that participants responded faster when fixating between the eyes of a faces compared to the forehead.

**Race-categorization task.** A similar model was used to examine RTs in the Race Task. As in the Gender Task, Target race and Target gender interacted significantly,  $b = 7.11$ ,  $z = 35.6$ ,  $p < .001$ , such that participants responded quickest to Black *male* faces compared to all other faces. This was qualified by a significant Target race x Target gender x Participant race interaction,  $b = -1.51$ ,  $z = -7.56$ ,  $p < .001$ , such that Target race and Target gender interacted to a larger extent among Black participants compared to White participants. Additionally, there was a main effect of fixation,  $b = -.39$ ,  $z = 1.99$ ,  $p = .047$ , such that participants responded faster when fixating between the eyes of a faces compared to the forehead.

### **Complex Interactions Predicting P2 Amplitude**

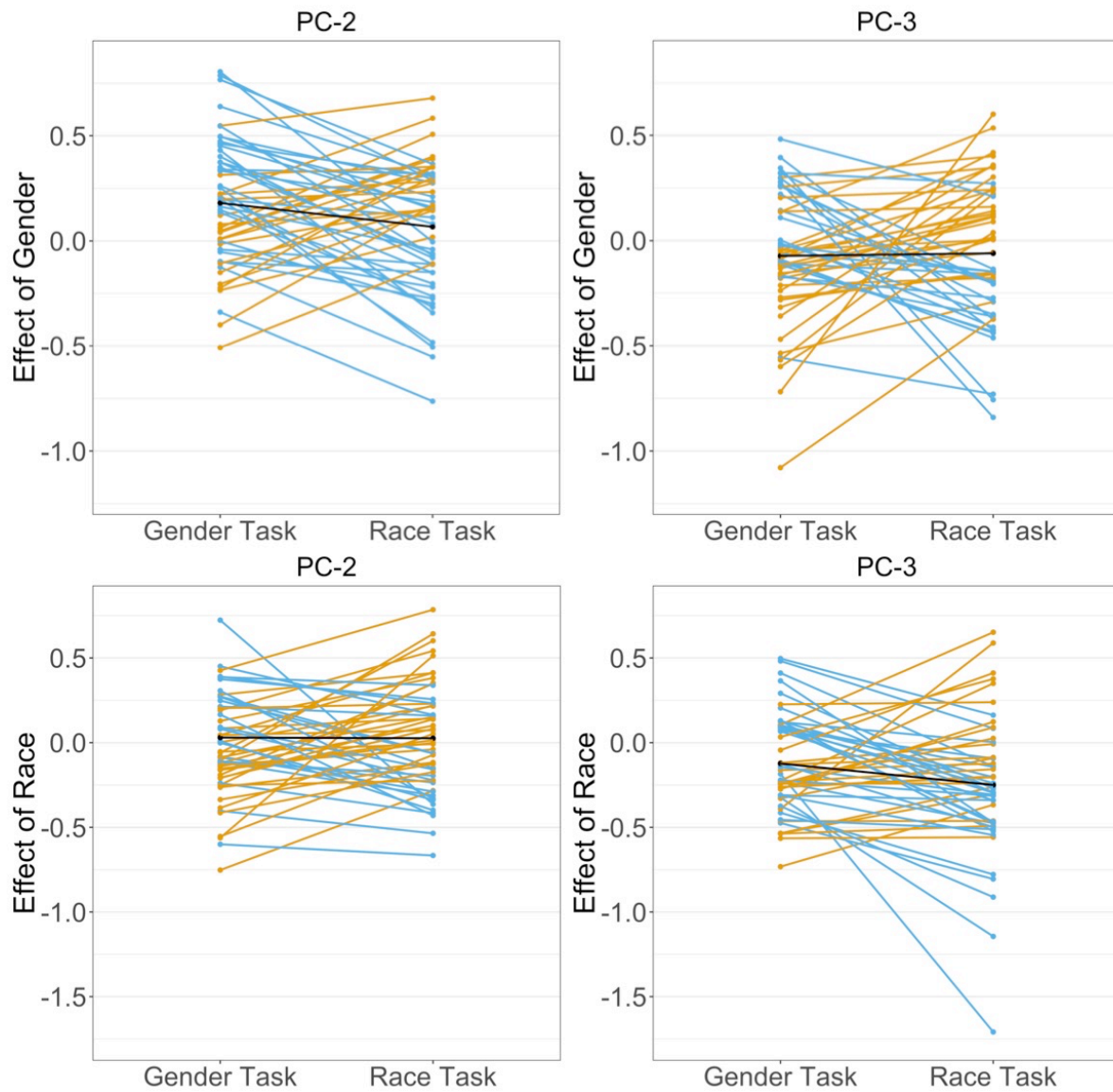
**Gender-categorization task.** A significant Target race x Participant race x Fixation interaction emerged,  $b = -.06$ ,  $z = -2.90$ ,  $p = .004$ . To understand this interaction, we modeled the Target race x Fixation interaction for White and Black participant separately. The Target race x Fixation interaction was significant for Black participants,  $b = .14$ ,  $z = 4.50$ ,  $p < .001$ , such that Black faces elicited larger P2s than White faces in the eyes-fixation trials but not the forehead-

fixation trials. However, the Target race x Fixation interaction was not significant for White participants,  $b = .00$ ,  $z = .08$ ,  $p = .935$ , such that Black faces elicited larger P2s than White faces regardless of fixation.

**Race-categorization task.** A significant Target race x Participant race x Fixation interaction emerged,  $b = .06$ ,  $z = 2.68$ ,  $p = .007$ . Decomposition of the three-way interaction revealed a larger Target race x Fixation interaction for White participants,  $b = .19$ ,  $z = 6.07$ ,  $p < .001$ , compared to Black participants,  $b = .07$ ,  $z = 2.53$ ,  $p = .012$ , although both were significant. Both interactions indicated a larger effect of race (larger P2s to Black faces than White faces) in the eyes-fixation trials compared to the forehead-fixation trials.

### **Within-Subject Plots**

The difference in the effect of target race and gender on PC-2 and PC-3 amplitude between tasks varied quite a bit across individuals. The following figure illustrates these individual differences by plotting the BLUPs predicted by each model for each participant. BLUPs were taken from four models with Target Race, Target Gender, and Fixation predicting PC amplitude in each task separately, for each PC separately.



Lines represent individual participants with blue and orange lines depicting negative and positive effects of Task, respectively. The black line represents the effect of Task for the “average” participant. As the figure depicts, most of the task-related action for the effect of gender is on PC-2 (Plot 1) and most of the task-related action for the effect of race is on PC-3 (Plot 4).