**Supplementary Materials**

**Study 1**

To better account for variability related to individual participants, PASCs, and traits, we ran a mixed-effects regression model. First, for each trait-PASC pair, we calculated the average conceptual association across the two reversed orders to generate their conceptual similarity values. This resulted in a total of 66 conceptual similarity values between all trait-PASC pairs for each participant. We then predicted participants’ PASC-trait conceptual associations from the corresponding point-biserial Pearson correlation between each pair of PASC and trait face judgments. Random effects included intercepts for participants, PASCs, and traits. This analysis assesses whether the extent to which PASCs are conceptually associated with traits corresponds to the correlation between PASCs and traits in face judgments. Results of the mixed-effects model revealed a strong positive relationship, *b=*1.372, *SE*=0.041, *t*(4964.000)=33.758, *p<*.0001, 95%CI=[1.291, 1.452], marginal *R*2=0.18, conditional *R*2=0.42. Therefore, even when accounting for possible variance in ratings between participants, PASCs, and traits, the more people generally stereotype different PASCs to be related to traits, the more these PASC-trait pairs are correlated in face appearances.

Results of an analogous mixed-effects model allowing for random intercepts for participants and trait-PASC pairs and random slopes for participants, converged on a similar result, *b*=1.118, *SE*=0.143, *t*(123.633)=7.795, *p*<.0001, 95%CI=[0.836, 1.399], marginal *R*2=0.13, conditional *R*2=0.50. Thus, even when accounting for variance due to participants and trait-PASC pairs, the extent to which participants in general believed a PASC and a trait are stereotypically associated corresponded to how these traits and PASCs are correlated in face judgments.

**Study 2**

Results of an analogous mixed-effects model as that reported in the main text, but here allowing for random intercepts and slopes for participants and specific trait-PASC combinations, converged on a similar result as that reported in the main text, *b*=0.024, *SE*=0.003, *t*(200.066)=7.900, *p<*.0001, 95%CI=[0.018, 0.029], marginal *R*2=0.02, conditional *R*2=0.59. This shows that even when accounting for variability related to specific participants and trait-PASC combinations, individual variation in trait-PASC conceptual associations corresponded to individual variation in PASC judgments of faces. A mixed-effects model allowing for random intercepts and slopes for participants and separately for traits and PASCs (rather than trait-PASC combinations) failed to converge.

**Study 3**

**Manipulation check.** To test whether the positive vs. negative association manipulation successfully affected participants’ trait-PASC associations in a positive vs. negative direction, respectively, we ran two independent sample t-tests. Results showed that participants in the positive-association condition reported associations more positive than neutral (scale midpoint: 4), one-sample *t*(187)=17.167, *p*<.0001, *d*=1.25, 95%CI=[1.245, 1.569]; and those in the negative-association condition reported associations more negative than neutral, one-sample *t*(181)=-2.838, *p*=.005, *d*=0.21, 95%CI=[-0.605, -0.109].

In addition, to better account for potential variability in the success of our manipulation by the different combinations of PASCs or traits tested, we conducted a 3 (PASC: ‘having been arrested’, ‘being a lawyer’, ‘being in a long-term relationship’) × 2 (Trait: ‘extroverted’ vs. ‘neurotic’) × 2 (Association Condition: positive vs. negative) between-subjects ANOVA on participants’ trait-PASC associations (Supplementary Table 1). As expected, there was a main effect of association condition such that participants in the positive association condition reported a significantly more positive association between their assigned trait and PASC (*M*= 5.38, *SE*= 0.11) in comparison to the negative association condition (*M*=3.63, *SE*=0.11), *F*(1, 358)=135.411, *p<*.0001, 95%CI=[0.727, 1.023], =0.28. Interestingly, there was a significant PASCs × trait interaction. Tukey’s post-hoc comparisons revealed that for participants assigned to read about people in a long-term relationship, they were less likely to stereotype people in a long-term relationship as being neurotic (*M*=4.18, *SE*=0.18) in comparison to being extroverted (*M*=4.75, *SE*=0.17), *b*=-0.561, *SE*=0.248, *t*(358)=-2.261, *p*=0.024, 95%CI=[-1.048, -0.073]. Most critically, however, there were no significant interactions with association condition, indicating that our manipulation was successful equally across all trait and PASC combinations. See Supplementary Table 1 for full results.

**Supplementary Table 1. *Between-subjects ANOVA showing stereotype associations as a function of association condition, PASCs, and traits (n= 370).***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Sum of Squares | df | F | *p* |
| Association Condition (AC) | 278.272 | 1 | 135.411 | <.0001 |
| PASC | 1.893 | 2 | 0.461 | 0.631 |
| Trait | 1.661 | 1 | 0.808 | 0.369 |
| AC × PASC | 3.591 | 2 | 0.874 | 0.418 |
| AC × Trait | 0.004 | 1 | 0.002 | 0.966 |
| PASC × Trait | 13.559 | 2 | 3.299 | 0.038 |
| AC × PASC × Trait | 1.176 | 2 | 0.286 | 0.751 |

**Additional Analyses.** Building on the generalized linear mixed-effects model reported in Study 3, we ran two additional separate models to account for potential moderation due to the traits (Supplementary Table 2) or PASCs (Supplementary Table 3)used in the study. To assist with model convergence issues, we used an iterative optimizer (bound optimization by quadratic approximation; *bobyqa*) with the maximum number if iterations set to 200,000 in both models. Random intercepts were included for participants. As discussed in Study 3, of interest here is the relative change in participants’ trait-PASC associations due to shifting their beliefs between the association conditions. This is because the absolute level of the relationship in large part reflects participants’ prior trait-PASC associations. Thus, of importance is the relative difference in trait-PASC slopes for positive association vs. negative association conditions, rather than the two conditions’ absolute simple slopes.

We first expanded the generalized linear mixed-effects model used in Study 3 by including Trait (and its interactions) as additional predictors. Continuous predictors were grand mean-centered. Association condition was coded as -0.5 = Negative Association and 0.5 = Positive Association; Trait was coded as -0.5 = Neurotic and 0.5 = Extroverted. The three-way interaction between Association Condition × Assigned Trait Rating × Trait was not significant (*OR*=0.970, *SE*=0.110, z=-0.272, *p*=0.786, 95%CI=[0.776, 1.211]). This indicates that the critical Association Condition × Assigned Trait Rating interaction did not differ by Trait. More importantly, all other results did not meaningfully change from those reported in the main text, including the Association Condition x Assigned Trait Rating interaction (*OR*=1.259, *SE*=0.073, z=3.959, *p*<0.001, 95%CI=[1.123, 1.411]). As the trait appearance of the face increased, participants who were led to believe a trait and a PASC are positively associated were 25.9% more likely to categorize faces as the PASC in comparison to participants in the negative association condition. Full results are reported in Supplementary Table 2.

**Supplementary Table 2. *Study 3 Odds ratio estimates for face-based PASC judgments as a function of association conditions, the face appearance of the assigned trait rating, and the face appearance of the non-assigned trait rating (N=290)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Predictors* | *Odds Ratios* | *SE* | *CI* | *Z* | *p* |
| Association Condition (AC) | 1.117 | 0.109 | 0.922, 1.352 | 1.132 | 0.258 |
| Assigned Trait Rating (ATR) | 1.010 | 0.029 | 0.954, 1.069 | 0.326 | 0.745 |
| Trait | 0.949 | 0.093 | 0.784, 1.149 | -0.537 | 0.591 |
| Non-assigned Trait Rating (NATR) | 0.986 | 0.028 | 0.932, 1.043 | -0.497 | 0.619 |
| AC × ATR | 1.259 | 0.073 | 1.123, 1.411 | 3.959 | <0.001 |
| AC × Trait | 0.590 | 0.115 | 0.403, 0.865 | -2.701 | 0.007 |
| ATR × Trait | 1.393 | 0.079 | 1.246, 1.557 | 5.841 | <0.001 |
| AC × NATR | 0.826 | 0.047 | 0.739, 0.924 | -3.349 | <0.001 |
| AC × ATR × Trait | 0.970 | 0.110 | 0.776, 1.211 | -0.272 | 0.786 |

In the second model (Supplementary Table 3), we expanded the generalized linear mixed-effects model used in Study 3 by including PASC (and its interactions) as additional predictors. Because PASC is a categorical variable with 3 categories, omnibus Wald chi-square tests were used to test overall variability related to the different PASC categories. The three-way Association Condition x Assigned Trait Rating x PASC interaction was significant, *X*2(2)=10.881, *p*=0.004. Therefore, we examined the relative slope differences of the effect of assigned trait rating on PASC categorizations between the positive vs. negative association conditions, separately for the three PASC categories. For participants who learned a positive association between people who “have been arrested” and their assigned trait, the probability of categorizing faces as “have been arrested” increased by 21.9% in the positive relative to the negative association condition as the trait appearance of faces increased, although only at marginal significance (*OR*=1.219, *SE*=0.126, z=1.914, *p*=0.056, 95%CI=[0.995, 1.493]). As for participants who read about people “in a long-term relationship”, the probability of categorizing faces with high trait appearance strongly increased by 46.7% in the positive relative to the negative association condition (*OR*=1.467, *SE*=0.136, z=4.145, *p*<.0001, 95%CI=[1.224, 1.758]). However, this probability did not increase significantly for participants who read about “lawyers” (*OR*=0.938, *SE*=0.095, z=-0.635, *p*=0.526, 95%CI=[0.769, 1.143]). Overall, these results show that the trait-PASC association manipulations were strongest for the “long-term relationship” PASC and weakest for the “lawyer” PASC. All other results did not meaningfully change from those reported in the main text. Most critically, the Association Condition x Assigned Trait Rating interaction was still significant, *X*2 (1)= 17.178, *p*<0.001, indicating that on average across PASCs there was a statistically reliable effect of the positive vs. negative association condition strengthening the relationship between the assigned trait and PASC categorizations. See Supplementary Table 3 for full results.

**Supplementary Table 3. *Study 3 Omnibus Fixed Effects results for face-based PASC judgments as a function of association conditions, the trait appearance of the assigned trait rating, the trait appearance of the non-assigned trait rating, and PASCs (N=290)***

|  |  |  |  |
| --- | --- | --- | --- |
| *Predictors* | *X2* | *df* | *p* |
| Association Conditions (AC) | 0.384 | 1 | 0.536 |
| Assigned Trait Rating (ATR) | 13.340 | 1 | <0.001 |
| PASC | 15.907 | 2 | <0.001 |
| Non-assigned Trait Rating (NATR) | 2.922 | 1 | 0.087 |
| AC × ATR | 17.178 | 1 | <0.001 |
| AC × PASC | 1.117 | 2 | 0.572 |
| ATR × PASC | 11.184 | 2 | 0.004 |
| AC × NATR | 10.563 | 1 | 0.001 |
| AC × ATR × PASC | 10.881 | 2 | 0.004 |