Supplementary Materials

Planned contrast

We conducted an additional planned contrast to determine whether self-immersed participants' MPFC amplitude during negative evaluations was greater than MPFC amplitude during: positive evaluations for these same participants, negative evaluations for self-distanced participants, and positive evaluations for self-distanced participants. Specifically, we restructured the data so that evaluation valence was nested within participant. We then conducted a linear mixed model, in which MPFC amplitude was regressed on a contrast code that coded negative evaluations for self-immersed participants as zero, and the following conditions as one: positive evaluations for self-immersed participants, negative evaluations for self-distanced participants, and positive evaluations for self-distanced participants. A significant effect emerged, b = -6.38, SE = 2.24, t = -2.85, p = .0053, indicating that MPFC activity was significantly greater when self-immersed participants conveyed negative evaluations, as compared to when these same participants conveyed positive evaluations, and when self-distanced participants conveyed negative or positive evaluations.

Effects in non-frontal cortex sources

As discussed in the main text, perspective and evaluation valence had effects on early amplitude in the MPFC and left LPFC sources. To assess whether these effects were specific to the frontal cortex, we conducted several additional analyses. First, to determine whether effects emerged in non-frontal sources, we conducted a 2(perspective: self-immersed vs. self-distanced) x 2(evaluation: negative vs. positive) x 6(source: left motor cortex vs. right motor cortex vs. left occipital cortex vs. right occipital cortex vs.

left eye vs. right eye) mixed-model ANOVA on early amplitude. The only significant effect was a main effect for source, $F(2.3, 124.0) = 4.48$, $p = .010$, $\eta^2 = .08$, such that amplitude was greater in the motor cortices ($M = 3.78$, $SD = 7.48$) than the occipital cortices ($M = -3.51$, $SD = 15.23$) and eye sources ($M = -4.00$, $SD = 34.80$). However, no effects for perspective, evaluation valence, or interactions were significant, ps > .055.

Second, we examined whether the 3-way interaction on early frontal amplitude (reported in the main text) would remain significant when controlling for amplitude in the non-frontal-cortex sources. Specifically, we conducted a 2(perspective: self-immersed vs. self-distanced) x 2(evaluation: negative vs. positive) x 3(source: MPFC vs. left LPFC vs. right LPFC) mixed-model ANCOVA on early neural activity, and included the following as covariates: early amplitude from the left motor cortex, right motor cortex, left occipital cortex, right occipital cortex, left eye, and right eye during positive and negative evaluations. Above and beyond activity in these covariate sources, the 3-way interaction predicting amplitude in the frontal cortex remained significant, $F(1.9, 320.7) = 5.46$, $p = .007$, $\eta^2 = .12$.

Finally, we examined whether the serial path model shown in Figure 4C was specific to the MPFC source, or would emerge when we modeled amplitude in any other source as the neural mediator. Results revealed that the indirect effect was non-significant when we modeled early amplitude during negative or positive evaluations from any other source as the mediator (all 95% CIs include zero). Together, these results suggest that the neural effect of self-distancing during the provision of negative evaluations was specific to the MPFC.

Predicting behavior

As described in the main text, greater MPFC activity during the provision of negative evaluations predicted verbal feedback that was more negative, and in turn perceived as less warm and helpful. When we test the path model in Figure 4A, but replace MPFC amplitude during negative evaluations with MPFC amplitude during positive evaluations (or the average of MPFC amplitude during negative and positive evaluations), no indirect effects were significant. Furthermore, if we conduct the same indirect path models shown in Figures 4B and 4C, but additionally control for MPFC amplitude during positive evaluations, the indirect effects (though MPFC amplitude during negative evaluations) remains significant. The findings suggest that MPFC activity during criticism, as compared to MPFC amplitude during praise, was a more powerful predictor of downstream behavior.

Additional Measures

For exploratory purposes, participants also completed measures of authenticity, affect, rumination, trait judgments of the mentee, motivations to respond without prejudice, and racial contact.