

fMRI Results when covarying for point-of-regard: Although there were no group differences in the percentage of time both groups looked at faces during the fMRI task, fMRI models were analyzed including average looking time at the face region of stimuli during the regulations conditions as additional regressors.

The left side of Figure 1 illustrates group differences for the contrast of Enhance Positive > Pre- Regulation with the inclusion of percentage of time looking at faces during the Enhance Positive condition as a regressor. The ASD group remains characterized by relatively less increase activation in right nucleus accumbens (NAc) and a left-lateralized cluster that included the putamen and NAc than the control group (compare to the left side of Figure 4 in the main manuscript).

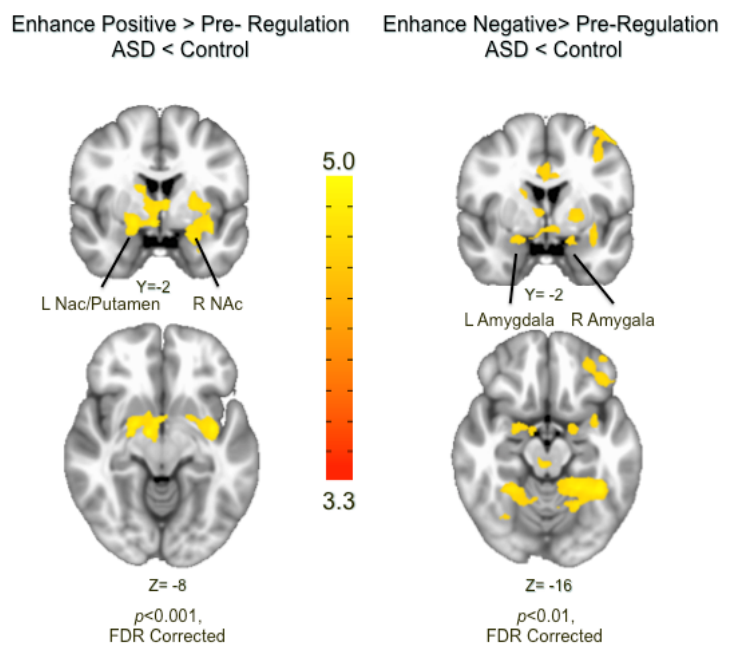


Figure 1. Left: Group differences for the contrast of Enhance Positive > Pre- Regulation with looking time as a regressor. **Right:** Group differences for the contrast of Enhance Negative > Pre- Regulation with looking time as a regressor.

The right side of Figure 1 illustrates group differences for the contrast of Enhance Negative > Pre- Regulation with the inclusion of percentage of time looking at faces during the Enhance Negative condition as a regressor. The ASD group remains characterized by relatively less increase in left and right amygdala activation than the control group (compare to the right side of

Figure 4 in the main manuscript), though these clusters are somewhat smaller with the inclusion of the looking time regressor.

Figure 2 illustrates group differences for the contrast of Either Regulation > Pre- Regulation with the inclusion of percentage of time looking at faces during the either regulation condition as a regressor. The ASD group remains characterized by relatively less increase in left and right dorsolateral prefrontal cortex (DLPFC) activation than the control group (compare to Figure 5 in the main manuscript).

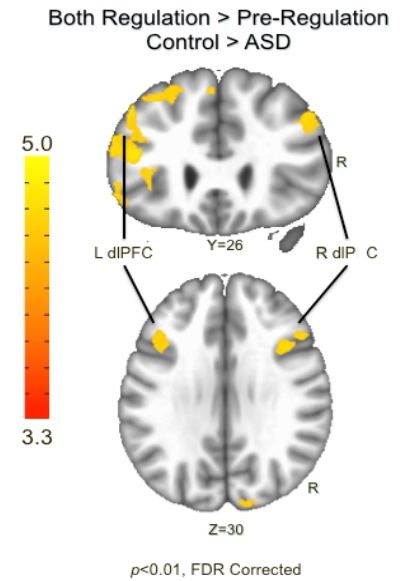


Figure 2. Group differences for the contrast of Either Regulation > Pre- Regulation with looking time as a regressor.