expressions. This study investigated how differentially valenced musical contexts would bias amygdala responses to surpised facial expressions. During fMRI scans, subjects listened to 16 minutes of valenced (i.e., either positive or negative) music followed by alternating blocks of surprised faces and fixation. Because amygdala signal changes tend to habituate with repeated presentations, blocks of surprised faces were divided into early and late trials within each run. A significant music by time interaction was observed in the right amygdala. Subjects primed with negative music showed a heightened right amygdala signal to surprised faces during early trials that quickly habituated. Conversely, subjects primed with positive music showed moderate right amygdala signal that was sustained through both the early and late trials. This amygdala response pattern to surprised faces preceded by negative music strongly resembles amygdala responses to fearful faces devoid of any musical context (see Whalen et al., 2009). This suggests that negative music biased perceivers to interpret surprised faces as more negative. However, amygdala responses to surprised faces preceded by positive music were typical of those seen to surprise faces devoid of a musical context, suggesting that the positive music did not necessarily bias the interpretation of surprise.

F35

NEUROIMAGING STUDIES OF HUNGER AND IMPULSIVITY Vlad B. Papa[1], Erica M. Orenstein[1], Kevin E. Ruprecht[1], Tyler E. Owens[2], Laura E. Martin[1]; [1]University of Kansas Medical Center, [2]University of Kansas — Impulsive decision-making is associated with enhanced sensitivity to immediate over delayed rewards. The medial prefrontal cortex (MPFC), the anterior cingulate cortex (ACC), and the insula are involved in evaluating rewards and making decisions. The current study used functional magnetic resonance imaging (fMRI) to examine impulsive decision-making when participants reported increasing levels of hunger and no change in hunger over the 2 hours prior to the scan. Scans were performed using a 3 Tesla Siemens Skyra scanner. A mixed group of healthy weight to obese subjects was separated into an increasing hunger group, and a no change in hunger group. Participants performed a delay discounting task during which they chose between a smaller immediately available reward and a larger delayed reward. fMRI data were analyzed using AFNI and focused on brain responses when participants selected the immediately available reward, delayed reward and the difference in brain responses between choosing the immediately available vs. the delayed reward. Preliminary results show differences in brain activations between subjects who reported increases in hunger compared to those who did not report changes in hunger levels, in the insula and MPFC when choosing the delayed reward, but no differential brain activations were found when choosing the immediately available reward. Overall, the MPFC and insula may be activating more to suppress the urge to select an immediate choice when participants are hungry. These results indicate that changes in hunger impact impulsive decision-making and have implications for the development of health interventions.

F36

INDIVIDUAL DIFFERENCES AND NEURAL CORRELATES OF LEARNING FACES WITH CARICATURED INNER OR OUTER FEATURES Stefan R. Schweinberger[1], Jan Plötner[1], Claudia Schulz[1,2], Franz J. Neyer[1], Jürgen M. Kaufmann[1]; [1]Friedrich Schiller University, Jena, Germany, [2]University Hospital, Münster, Germany — Previous findings demonstrated that increasing distinctiveness via spatial caricaturing improves face learning, and causes modulations of event-related-potential (ERP) components associated with processing of typical shape information (P200) and with face learning and recognition (N250). We investigated the extent to which this caricature learning advantage is driven by exaggerated shape of inner or outer facial features. In addition, we tested whether individual differences in face recognition skills are associated with differences in the role of caricatured inner and outer features. In a face learning paradigm, previously unfamiliar faces were presented either 1) as veridical portraits, 2) with only inner features caricatured, 3) with only outer features caricatured, or 4) with both inner and outer features caricatured in shape. In a subsequent recognition test, participants performed a face familiarity task on learned and novel faces. Different image exemplars were used at learning at test. Both accuracy and ERPs suggested that the caricature learning advantage was mainly driven by exaggerated shape of inner features, with little contribution of external features. We also found that while individual differences in face recognition skills were not associated with differential efficiency of inner and outer feature caricatures, individuals with poorer face recognition profited more from caricatured shape information overall. The results suggest that shape caricaturing facilitates the acquisition of new face representations by exaggerating critical idiosyncratic information of inner facial features. Moreover, at least within the normal range of face recognition skills, individual differences in face learning appear unrelated to differences between inner and outer facial features.

F37

EVIDENCE THAT THE EVOKED RESPONSE OF DORSOMEDIAL PREFRONTAL CORTEX TO FIXATION BASELINE PERIODS FACILITATES FUTURE SOCIAL (BUT NOT NONSOCIAL) INFERENTIAL (BUT NOT NON-INFERENTIAL) JUDGMENTS Robert Spunt[1,2], Meghan Meyer[2], Matthew Lieberman[2]; [1]California Institute of Technology, [2]University of California, Los Angeles — People draw inferences about each other with great efficiency. Such inferences are typically executed in order to refer transient observed behaviors (e.g.,"smiling") to relatively more permanent unobservable states (e.g.,"friendly"). A large body of evidence has delineated a set of brain regions that are reliably correlated with the performance of such mental state inferences: the mentalizing system. Intriguingly, this system shows considerable anatomical overlap with the default mode network, so-called because it is exhibits strong, integrated activity when people are at rest, for instance, duration fixation baseline periods. Here, we used fMRI to test the hypothesis that activity of the mentalizing system during these fixation periods prior to social inferential judgments would increase the efficiency of such judgments. 21 healthy adults underwent event-related fMRI while executing three types of judgments: social inferential (evaluating a mental description of a photographed behavior); social non-inferential (evaluating a motor description of a photographed behavior); or non-social (evaluating an arithmetical expression). Social inferential judgments robustly activated the mentalizing system, and many of the same areas were robustly de-activated by the non-social task when compared to the fixation baseline periods in between each trial. A parametric analysis of response time revealed that increased activity during these pre-trial periods in one of these regions, dorsomedial prefrontal cortex, was associated with faster response times to accurate social (but not non-social) inferential (but not non-inferential) judgments. This provides the best support yet for a functional link between default activity of the mentalizing system and the execution of social inferences.

F38

SOMETHING ALWAYS STICKS? - EMOTIONAL MODULATION OF NEUTRAL FACE PERCEPTION IN AN IMPLICIT MEMORY DESIGN Janine Strehlow[1], Johanna M. Kissler[2]; [1]University of Konstanz, Germany, [2]University of Bielefeld, Germany — Emotional stimuli modulate EEG event-related potentials (ERPs) at distinct processing stages. In a previous study we demonstrated that neutral faces associated with negative context elicit larger LPPs during recognition testing than neutral faces associated with neutral context in an explicit memory design. The present study investigates the effect of emotional context on perception and processing of neutral faces in an implicit design. We collected event-related potentials from 24 healthy students (12 male / 12 female). At first participants viewed briefly presented neutral faces. During a second run each face was preceded by a descriptive phrase about the person's occupation or criminal activities that participants were instructed to read attentively. Faces finally were re-presented randomly mixed with new ones. In addition to a surprise old-new recognition test participants performed a nine-step sympathy rating. Recognition performance was similar for faces presented in negative and neutral context. However, sympathy ratings differed significantly: Faces that had been presented in negative context were evaluated more negatively than faces presented in neutral context. Still, follow-up analyses revealed that evaluative changes were driven by the explicitly recognized faces. On a neural level old faces associated with negative information elicited larger left-parietal negativity around 300 ms after stimulus presentation than old faces with neutral context or new stimuli. No context-related modulations were found for N1, EPN and LPP components. Results indicate that evaluative changes due to an affective context rely on explicit mnemonic processes even in implicit designs and specify a neural correlate for this effect.