Early research on impression formation demonstrated that episodic memory performance differs qualitatively following social and nonsocial encoding tasks. Compared to explicit attempts to memorize information, forming an impression of another person produced (i) better overall memory; (ii) recall that clusters around spontaneously inferred traits; and (iii) better memory for expectancy-inconsistent information. The current experiment used fMRI to examine the neural basis of these differences. During scanning, participants were presented with a series of 18 faces, each paired with 10 different descriptive statements. For half the face-statement pairings, participants were cued to use the statement to form an impression of the target (impression formation task); for the remaining half, participants attempted to encode the order in which statements were paired with each face (sequencing task). Following a 10-minute retention interval, participants performed an associative memory task in which they matched each statement with the face with which it was originally paired. Event-related fMRI analyses yielded two main results. First, impression formation selectively activated a region of the medial prefrontal cortex (mPFC), shown previously to play a critical role in social cognitive tasks, such as understanding the mental states of others. Second, mPFC activity during impression formation was correlated with subsequent memory performance. Statements that were later matched to the correct face were associated with greater mPFC activity than mismatched statements, but only if originally encoded as part of the impression formation task. These results contribute to emerging theories regarding the unique neural basis of social cognition.