



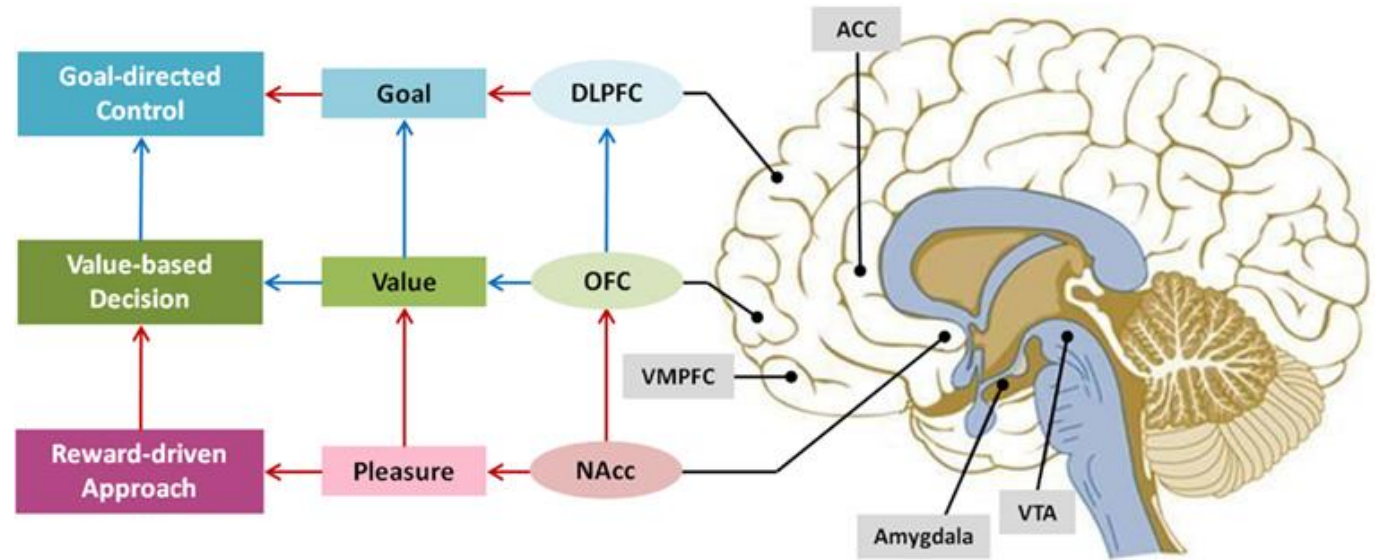
Neural Circuitry and sex differences in valence processing for decision making using the rodent Iowa Gambling Task



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Imbalance in valence processing and impaired decision making underlies a range of psychiatric disorders. Extant studies identify the neural circuitry underlying decision-making as, the ventral prefrontal cortex, anterior cingulate cortex, amygdala and hippocampus. These areas are predominantly involved in decision making in humans and in animal models, differing among the sexes. Using an animal model of the decision making task (rodent IGT) and lesioning protocol, we plan to carry out sequential exploration of PFC and the subcortical areas involved in valence processing [i.e., PFC, ACC, hippocampus, and amygdala]. The aim of the study is to examine region-specificity as a potential determinant of attribute and phase-specificity in cognition affect/valence dysregulation in decision-making and how it varies among sexes.



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