Study Set 4: Questions for Decision Making Section

Sutton et al. (1967); Donchin 1981; Kutas et al. (1977); Luck (1998)

- (1) What was the primary significance of the Sutton et al. study?
- (2) What are three factors that have been shown to be important for affecting P3 amplitude?
- (3) Provide support for the statement: "The P300 has more to with perception than with response execution."
- (4) Describe the kind of paradigm that might be employed in order to use the P300 to study issues relating to workload.
- (5) What is the psychological refractory period? Why is the ERP a useful measure for explaining PRP phenomena and more generally the loci of dual task interference? What observations about P3 latency and P3 amplitude did Luck use as the basis for his study of the PRP phenomenon? i.e., P3 latency indexes the timing of what processes, and P3 amplitude indexes what? What aspect of Pashler's model predicts no delay in P3 latency? Why did Luck modify the typical psychological refractory paradigm to include a probability manipulation on T2? Provide evidence for Luck's conclusion that the slowing of RT2 at short SOAs is primarily due to a delay in a process that occurs after the target has been perceived and categorized such as response selection.