Second Writing Assignment

Write a short paper (1-2 pages, double-spaced, typed) on the question assigned for your section. These are to be turned in by Noon on Saturday, November 26. Papers should be submitted electronically to your TA in .doc or .rtf format. If this is not possible, you may deliver them to your TA’s mailbox by Noon. The goal of this paper is to explain clearly the central concepts employed in the question you are to address. Assume that your audience is a fellow student not in this class. To explain the material to that person you cannot just use the concepts we have developed in class but explain them. Present your answers totally in your own words—do not quote material either from the website, the lecture powerpoints, or anyone else.

A01 Your friend claims that frequently doing brain-puzzles (e.g., Sudoku, crosswords) has improved her cognitive functioning. Design a study to test whether frequently doing brain-puzzles is a cause of (or a causal factor in) increased cognitive functioning. Discuss all of the critical factors involved (operational definitions, values of independent and dependent variables, possible extraneous variables, possible confounding variables, etc.). How might you control confounds in this study? What errors in reasoning should researchers be particularly concerned about in evaluating the results of your study?

A02. Design an EXPERIMENTAL study to determine whether texting (sending or reading text messages) while driving is a cause of traffic collisions. What are the main theoretical constructs being studied, and what are the operational definitions of these constructs you will use in the study? Briefly state what the research hypothesis is, as well as what the primary dependent and independent variables are. Discuss ONE critical factor that should be considered in designing such an experiment, and defend the choices you make in designing the study. Discuss which, if any, features of the study design or the specific operational definitions chosen might limit the external validity of the study. If you don’t think there are any such features, explain why not.