**Group Activity: Developing and Presenting the Problem**

**HK 396 Quantitative Research Methods**

**Abstract**

Four groups of high school boys (n = 12 per group) were tested on strength (1RM) and muscular endurance (time to exhaustion using 50% of 1RM) before and after a 15-week training program of 50 minutes per day for 3 days per week. All groups used an isotonic device for training and testing. The strength-training group (ST) used a workout involving three arm and three leg exercises (10 sets of 3 repetitions) with resistance levels set at 80% of 1RM. The endurance-training group (ET) used the same exercises; except resistance was set at 50% of 1RM and 3 sets of 10 repetitions were used. A combination group (CT) used the same exercises but did 1 set of 3 repetitions at 80% of 1RM and 2 sets of 10 repetitions at 50% of 1RM. A control group (CG) was tested before and after 15 weeks. Significant differences in strength gains were found favoring the ST group when compared with the ET and the CG groups. The ET group had greater gains in muscular endurance than the ST and the CG groups. The CT group had greater gains in strength and endurance than the CG group, but gains in strength or endurance were not different from the ST and ET groups.

**All** students read the abstract and complete the following tasks: **All** students should have a written copy of the group’s eight responses.

1. Generate an outline of a literature review for the study described above
   1. Provide topic headings for 4 ideas
   2. In a few lines, explain what will be described in each paragraph
   3. Order your paragraphs logically. The reader should see your purpose statement coming before they read it.
2. Develop a title for the study
3. Develop a statement of the problem.
4. Indicate the types of variables: independent, dependent, and control.
5. Develop two research hypotheses.
6. Develop two operational definitions.
7. What are two assumptions?
8. What are two limitations?
9. What are two delimitations?