

Research Class

Assignment 1: Bibliography

By the end of the term, you will write a research proposal that will be used to collect data in your internship or for your thesis. The purpose of this assignment is for you to begin to become familiar with research literature Health Education and Exercise Science. Complete a search of literature related to the area of Health Education or Exercise Science in which you are most interested. You should use narrow terms such as childhood obesity or power napping among college students. Create a eight to ten item bibliography based on your findings. Your research question should be on the top line(s) of your paper. The term Bibliography should be centered underneath your research question. References should be according to APA style.

15/15 students made 80% or above

Assignment 2: Quantitative Data Collection

Print 10 copies of the Drunkorexia instrument. Collect data on 10 adult subjects. Present the Results.

Present the results by writing a three section paper – Participants, Instrument, and Results – using the following guidelines.

Place a title in the center of the top line of your paper. After the title, double-space to the next line and begin the Participants section according to the guidelines below. There are no extra double-spaces between sections. Nothing in the body of the paper is bold or underlined and, with the exception of presenting the data, nothing is italicized.

Participants

- the term “Participants” should be typed and left justified
- write 3-5 sentences that describe the subjects for your study (how you selected the subjects, what are the criteria or common characteristics you used to select the subjects, etc.)
- present the mean and range of scores or frequency for each of the questions on the first page of the instrument

Instrument

- the term “Instrument” should be typed and left justified
- write 5 or more sentences that describe what you used to collected the data (name of the instrument and reference, what does the survey measure, number of questions, how do subjects respond, how is it scored, what is the range of scores, and how is it interpreted)

References

- start on a new page and reference your resource
- the term “References” should be typed and centered at the top of the page
- references must be according to APA format

14/15 students made 80% or above

Assignment 3: Research Proposal

Research Proposal Guidelines

Your proposal should be typed, double-spaced, and written in future tense and third person according to the following format. No quoting is allowed anywhere in your paper. All materials should be summarized or paraphrased.

Abstract

- 100-150 words that describes what you will do in your study
- the term “Abstract” should be typed and centered on the top of the first page
- the abstract should be one paragraph in length and the paragraph should not be indented (all other paragraphs in the proposal should be indented)

Introduction

- the term “Introduction” should be typed and centered (Introduction is your first heading after the abstract)
- this should start on a new page and the remainder of the text should run continuously until you start the references
- 5-7 paragraphs that give some background information (i.e. from the literature) to the reader
- why did you choose this project? what question(s) / problem(s) will your research solve?

Quantitative Methodology

- the term “Quantitative Methodology” should be typed and centered

Participants

- the term “Participants” should be typed and left justified
- 3-5 sentences that describe the subjects for your study (how will you get the subjects, how many will you have, what are the criteria you used to select the subjects, etc.)

Instrument

- the term “Instrument” should be typed and left justified
- 5 or more sentences that describes how you will collect data (name of the instrument, author, number of questions, what does it measure, how is it scored and interpreted)

Procedure

- the term “Procedure” should be typed and left justified
- write this section so that someone could read it and replicate your study
- 3 or more sentences that tells what your subjects do in the study
- if you have a treatment, what is it, how long is it, how is it applied

Qualitative Methodology

- the term “Qualitative Methodology” should be typed and centered

- you must use two of the three qualitative methods

Observation

- who, what, when, where, why, and how much

Interview

- who, what, when, where, why, and how much
- include 8-10 questions that will be asked if using structured interviews

Document Analysis

- what, when, where, why, and how much

References

- start on a new page and reference your resources
- the term "References" should be typed and centered at the top of the page
- remember, you need 5 – 7 references for your proposal
- references must be according to APA format

15/15 students made 80% or above

Statistics Class

Assignment 1: Graded Homework 3

1. Draw a scatterplot to represent Exercise Level and BP. Calculate the sum of the crossproducts conceptually. Calculate Pearson r using the computational formula.
2. Interpret r . More specifically, write a sentence indicating the directionality and strength of association between Exercise Level and BP. Calculate r^2 and $1 - r^2$. Draw and label a Venn diagram to illustrate the coefficient of determination and the coefficient of non-determination. Write a sentence which interprets each coefficient.

Student	Exercise Level	BP
1	12	10
2	14	8
3	18	9
4	17	10
5	10	19
6	11	12
7	18	11
8	16	9
9	15	8

8/8 students made 80% or above

Assignment 2: Math Test 2 Data

Given the following, answer questions 1 – 6.

Person	Time	Score
1	18	2
2	19	5
3	16.5	6
4	17	1
5	18	4

Given the following, answer questions 7 – 12.

Person	Experience	Attitude
1	8	9
2	2	5
3	5	8
4	3	5
5	4	6

Given the following, answer questions 13 – 18.

$$\begin{array}{lll} \sum X = 32 & \sum Y = 32 & \sum XY = 1467 \\ \sum X^2 = 152 & \sum Y^2 = 21,021 & n = 8 \end{array}$$

Given the following, answer questions 19 - 25.

$$r = .68 \quad \begin{array}{ll} \sum X = 112 & \sum Y = 531 \\ \sum X^2 = 1592 & \sum Y^2 = 35721 \end{array} \quad \begin{array}{ll} \sum XY = 7507 & SD_x = 1.85 \\ n = 8 & SD_y = 8.25 \end{array} \quad \begin{array}{l} X = \text{Yrs. In School} \\ Y = \text{Aptitude} \end{array}$$

7/8 students made 80% or above

Assignment 3: Graded Homework 6

Independent t-test

A researcher is interested in the affects of a new method of helping Alzheimer's patients remember the order of daily tasks. Group 1 was taught using visuals and Group 2 was taught using visuals and verbal rehearsal. Presented below is a summary of data reflecting the number of words remembered following each program.

Using the eight steps in hypothesis testing, determine if there is a significant difference between Group 1 scores and Group 2 scores given:

$$\begin{array}{ll} M_1 = 5.2 & M_2 = 6.3 \\ SS_1 = 51.58 & SS_2 = 32.21 \\ n_1 = 10 & n_2 = 10 \end{array}$$

Dependent t-test

A researcher is interested in the affects of a new method of teaching reading to 2nd graders. A reading test was given before and after the new method of teaching. Presented below is a summary of data reflecting scores on the tests. .

Using the eight steps in hypothesis testing, determine if there is a significant difference between the Pre-test scores and Post-test scores given:

$$\Sigma d = 30$$

$$\Sigma d^2 = 180$$

$$n = 25$$

8/8 students made 80% or above