



**MSc Applied Social & Health Psychology**  
*M7X01449 - Applied Research, Ethics & Analysis*

**MOCK Assessment component 5: Practical in-class skills assessment 2: Data input and analysis (10%)**

**Student Number:**

You must save a copy of your SPSS input datasheet to the memory stick provided and must also save evidence of each step through the use of one SPSS output file.

You must also save a word-version of this worksheet (available on Moodle) with your answers to each question (please include your student number on this word document).

At the end of the assessment you MUST email the following to [kate.williams@uwtsd.ac.uk](mailto:kate.williams@uwtsd.ac.uk):

- One final screened and cleaned SPSS input dataset
- One final SPSS output sheet
- A word document of this sheet with your answers to each question completed (please include your student number on this word document).

In this 90 minute in-class practical skills assessment you will be required to do the following two tasks:

**Task One: Estimating required sample size. (5 marks)**

**Read the study information below and then answer the questions.**

Objective: to compare the effectiveness of a tailored smoking cessation intervention in improving self-reported intention to quit smoking in young people aged 16-18.

Design: a randomised controlled trial in which young people aged 16-18 are randomly allocated to either a daily motivational text-messaging intervention over a six week period or to attend a weekly “stop smoking” support group.

Main outcome measure for determining sample size: self-reported intention to quit smoking (rated on mean scores to a validated intentions to quit smoking questionnaire, scale range 0-30).

Sample size question: How many participants are needed in order to have an 80% power of detecting a clinically significant difference in intentions to quit smoking?

The clinicians involved in this research project consider a difference in intentions score of 5 scale points between the two groups at the 5% level of significance as being a clinically significant difference.

Based on previous literature, the researchers are expecting the standard deviation of intention to quit smoking in those attending the “stop smoking” support group to be 17.88.

1. In the space below, state the formula that should be used to calculate sample size in Altman's nomogram for the above study (1 mark).
2. Using the correct formula for Altman's Nomogram, calculate the standardised difference for the above study and use Altman's nomogram to estimate the required sample size – show your workings below (2 marks).
3. Write out your Power Statement below (2 marks).

1. Using the SPSS datasheet titled “Screening datasheet” from the above (hypothetical) study, screen the data for errors and outliers and provide details on all of the errors and outliers below (1 mark).
  
  
  
  
  
  
  
  
  
  
2. Using the SPSS datasheet titled “Analysis datasheet” (which has already been screened and cleaned), identify and carry out the appropriate analysis.
  - a. In the space below state the appropriate analysis that should be conducted and state whether there is a statistically significant difference between the two groups on the main outcome measure. Report the inferentials appropriately and interpret the results as you would for a report (2 marks).
  
  
  
  
  
  
  
  
  
  
  - b. Is the difference in scores considered clinically significant? Justify your answer and include and interpret the appropriate effect size statistic below (2 marks).

Please keep in mind the Learning Outcomes for this module when you are planning your work. The Learning Outcomes of specific relevance to this assignment are in bold.

**Learning Outcomes:**

1. Demonstrate a critical appreciation of ethical issues associated with qualitative and quantitative applied research designs.
2. **Demonstrate strong data inputting and data screening skills using appropriate software.**
3. **Recognise and identify appropriate analysis techniques and interpret and report data appropriately.**
4. Understand the distinction between quantitative and qualitative approaches and be familiar with a range of data collection and analytical techniques.
5. **Present their work appropriately, within ethical and research frameworks, and with an understanding of requirements of critical thinking.**