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MSc Applied Social & Health Psychology

M7X01449 Applied Research, Ethics & Analysis

Assessment Guidance Notes

AREA Assessment Component 3: Assignment Guidance ANOVA Results Write-up

1. Background

The dataset you are working with is from a hypothetical study to explore the impact of a self-help leaflet developed to reduce distress in individuals waiting to learn whether they are at increased risk of developing an inherited cancer. The intervention is based upon psychological coping theory and encourages individuals to restrict consideration of the issues related to their risk for a set time (e.g., 10-15 minutes) each day, and to actively distract from intrusive thoughts at all other times. The data has come from 260 participants who were approached in the screening waiting area of the Cancer Genetics Service for Wales (CGSW), during May 2016.

This protocol relates to the data collection for this study.

2. Research Questions

The main aim of the trial is to compare levels of distress in individuals who receive the intervention with those who receive standard information (Control group). The specific objective of the study was to:

- Evaluate the short- and longer-term impact of the intervention on levels of distress at key stages of the assessment process i.e., at Baseline (Time 1), whilst waiting for genetic risk information (Time 2), and one-month post-risk information (Time 3).

3. Design

A fully-powered MRC Phase III randomised controlled trial aimed to assess the effectiveness of the intervention in reducing distress in individuals undergoing cancer genetic risk assessment across Wales.

Study Groups

Control Group: Upon referral, participants randomised into the control group received the study information pack and the standard information sent out by the Cancer Genetics Service for Wales (CGSW) to new referrals, i.e., a letter from the genetic counsellor, Family History Questionnaire (FHQ) and information leaflet.

Intervention Group: Upon referral, in addition to the standard information, individuals randomised into the intervention group received the study information pack and the intervention (the coping leaflet). The coping leaflet was placed into a separate envelope within the study information pack.

Data collection: Measures

Demographics (Time 1 only): gender/age/marital status/education level/children

Cancer-specific distress*:*

The Impact of Event Scale (IES; Horowitz et al., 1979) adapted for familial cancer consists of 15 items capturing the frequency of participants' intrusive thoughts about their risk of developing cancer, and attempts to avoid these thoughts. The IES allows the calculation of a total score and separate intrusion and avoidance subscales scores. Horowitz identified thresholds for low, medium, and high symptom levels corresponding to levels of clinical concern using the IES total score: low < 8.5; medium = 8.6 to 19.0; and high > 19. The IES has been used as a measure of cancer-specific distress in a number of studies and has demonstrated good internal consistency and test re-test reliability amongst women at increased risk of breast cancer.

The scale consists of 15 items (7 intrusion items and 8 avoidance items). Participants rate the frequency of intrusive and avoidant cognitions and behaviours using a four-point frequency scale.

The IES allows the calculation of a total score (with a possible range of 0 – 75) and separate intrusion and avoidance subscales scores (with a possible range of 0 –35 and 0 –40, respectively).

The dataset: Only relevant demographic and appropriate total scale scores for the IES at each of the three time-points is presented in the dataset. The dataset has already been screened and cleaned.

1. Familarise yourself with the data variables and scoring using SPSS and the information contained within the questionnaire.

2. Run the descriptives for the demographics and scale scores and report these appropriately (Do **not** put SPSS tables in your results write-up, you must create your own).

3. Highlight any Outliers in IES at the three time-points and remove them from the dataset.

4. Re-run the descriptives for the demographics and scale scores with the outliers removed and report these appropriately. (Do **not** put SPSS tables in your write-up, create your own).

5. Run an appropriate t-test on the Baseline IES scores between the two groups to ensure there are no prior differences in distress levels.

6. Identify the appropriate type of ANOVA to conduct based on the research question: i.e., to examine distress levels between the control and intervention group over three time-points.

7. Carry out the appropriate analysis and correctly report this, including a statement about whether the data has met the assumptions for the analysis.

8. Conduct and correctly report any necessary post-hoc pairwise comparisons.

9. Interpret the findings as you would in the results section of an APA journal and provide a brief concluding statement about the potential value of the intervention leaflet on distress.

Word count – approximately 1,000 words

You must include all outputs and a screenshot of your final input dataset as an appendix to your written report.