



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2017/2018
FIRST SEMESTER EXAMINATION FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY

APS 924: MEASUREMENT AND EVALUATION OF COUNSELLING
INTERVENTION

DATE: Tuesday, 6th February 2018

TIME: 5.30 p.m. - 8.30 p.m.

INSTRUCTIONS:

1. Answer questions one and any other questions.
 2. Remember your responses should be critical detailed and illustrate to demonstrate your competence, proficiency and expertness in subject content as PhD candidate.
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1. a) Distinguish between the following pair of words as used in this course using two illustrations for each.
 - i) Measurement and evaluation. (2 Marks)
 - ii) Effectiveness and efficacy interventional study. (2 Marks)
 - iii) Exploratory sequential and explanatory sequential mixed designs. (2 Marks)
 - b) Using two illustrations, critically examine why evaluation should be an integral part of counseling. (4 Marks)
 - c) Use the following extract from PhD counseling student dissertation to answer the questions that follow:

A study conducted by a counseling psychologist to investigate the effectiveness of brief intervention (BI) conducted in the workplace for heavy alcohol drinkers. A randomized controlled trial was conducted at six companies in Nairobi. Participants were heavy drinkers who met the inclusion criteria and were randomized into three groups: the BI group, BI with diary group and a control group. The BI group received two 15-min BI sessions, the second of which took place 4 (± 2) weeks after the first. In each BI session, a one-on-one interview

INVOLVEMENT IN ANY EXAMINATION IRREGULARITY SHALL LEAD TO DISCONTINUATION

was conducted by one of the trained occupational health care providers based on workbooks completed by the subjects before the session. The workbooks were developed based on principles of cognitive behavioral therapy, and included evaluation using the Alcohol Use Disorders Identification Test (AUDIT), feedback of results, a balance sheet of merits and demerits of drinking, setting of goals about drinking, and coping methods to deal with risky situations associated with binge drinking. The BI with diary group received the same interventions as in the BI group, but after the first BI session they were asked to complete a 'drinking diary' every day for the next 3 months. This is because diaries are widely considered to be a good self monitoring tool for changes in lifestyle behaviours such as dieting, and they were also already being used at the study workplace sites. In their diaries subjects reported the type and, amount of alcohol consumed and the situation in which they consumed it, to encourage them to self-analyze their alcohol consumption in the context of varying situations. The control group did not receive any BI but at the baseline interview received a booklet described the association between binge drinking and lifestyle related diseases or depression and the importance of reducing alcohol consumption in general. The booklet was also distributed to in the BI and BI with diary groups. The outcome measures used were total drinks taken, binge drinking episode and alcohol free days.

- i) In one or two paragraphs, write the statement problem for this interventional study. (6 Marks)
 - ii) State one hypothesis in null and alternative forms of this study. (2 Marks)
 - iii) Explain and justify any one possible statistical method to be used to test hypotheses of the study. (2 Marks)
 - iv) Using this study, explain the six steps for conducting this interventional study. (6 Marks)
 - v) Explain any two possible inclusion criteria you will use to select participants. (4 Marks)
2. As a counseling psychologist you were requested by Tangaza physical gym to conduct a counseling interventional study how to increase uptake of physical activity exercises by a majority of adult in their Tangaza neighbourhood who may be sedentary but not willing to seek exercise interventions. Among the aspects you need to include in your study include the following: frequency, duration and intensity of physical activity; medical factors that would dictate the exercise type or regimen to prevent harms or complications; motives, barriers and supports for increasing activity levels; the patient's readiness to change; exercise preferences or past experiences. The population of the adults was 10,000.
- a) i) Using one method, explain how you determine the sample size. (6 Marks)
 - ii) Discuss any four factors you will consider to determine the sample size. (8 Marks)

- b) Using examples from these extracts, describe three types of variables. (6 Marks)
3. Using examples, critically examine the following three meaning usage of term validity.
- a) Internal validity. (8 Marks)
 - b) External validity (6 Marks)
 - c) Test validity (8 Marks)
4. a) Using examples, discuss any four circumstances you will use non-probability sampling methods in interventional studies. (12 Marks)
- b) Explain steps involved in using the following probability sampling methods.
- i) Stratified random sampling. (4 Marks)
 - ii) Systematic random sampling. (4 Marks)
5. a) Using four illustrations, topic of interest and specific theory, discuss the rationale of theoretical framework for an interventional study. (4 Marks)
- b) Using four illustrations, explain four characteristics of an experimental research. (8 Marks)