Research learning journal. research paper

Technology, Development

Introduction.

Module 2 has been a bridge in learning research methodologies and components of research. The lessons have enabled understanding of research methodologies, design, experiments and testing. The module has created an understanding in differentiating research methods. It has created awareness in categorizing and differentiating different populations and sampling techniques applicable in every population. Overall, module 2 has increased my knowledge in understanding research and its components that enhance development of theories that apply to behavioral trends in different societies.

In regard to the subject, I learnt the different research instruments applicable in different scenarios in coming up with conclusions. What stood out in the subject was the fact that a sample can represent a populations' generalization. The different sampling techniques and their application in providing similar findings was an inspiring concept in this subject. I scored 26 points out of 30, which was a better performance compared with previous tests. The four points that I missed were on differentiating between experimental and case studies, qualitative checklists and field notes, dependent and independent variables and on hypothesis testing.

A dependent variable is that variable that is tested in an experiment (Goddard and Melville, 2001). The variable is manipulated by the independent variable. Its results are influenced by changes in the independent variable. On this issue, I am still uncertain on cases with more than one dependent variable. For example, involving more than one dependent variable, how does the researcher come up with a causal effect

relationship without biasness? In this regard, I still have some questions; firstly, is it possible to have experimental studies with more than one dependent variable/ secondly, how does a researcher test the hypothesis in such a case and finally is it possible to develop relationships and theories on such an experiment?

An independent variable is that variable that effects on other variables if it is changed. The independent variable initiates variations to the dependent variable. The effects of a change in the independent variable are observable in the dependent variable (Goddard and Melville, 2001). One concept that I still do not understand, is the option of having more than one independent variable manipulating a common dependent variable. The queries that I still have on this issue are; in an experimental study, is it possible to have more than one independent variable? In addition, how can one develop a relationship in such a study?

A theoretical framework is a guide that indicates things expected to be measured and the relationships between variables that a researcher should investigate (Kothari, 2005). It consists of existing theories, concepts and their definitions that are applicable in a study. Development of theoretical frameworks involves review of existing literature, concepts and theories related to the study. What I still don’t understand in the formulation of a theoretical framework is how theories describe behavior from randomized sampling and how the theories predict future behavior in societies. The questions, in regard to this, are do theoretical frameworks derived from testing hypothesis have significant credibility in forecasting future behavior considering increased societal dynamics?

Conclusion.

Development of research studies involves understanding of the key basic components of research. In developing a study, a researcher should focus on an observation on behavior or a relationship between concepts in a society (Goddard and Melville, 2001). Instrumentation and measurement concepts follow after identification of an element of the study. Instrumentation and measurement procedures defined are dependent on the research design that is developed form the relationship between the studied variables. In overall, module 2, has increased my knowledge and developed my skills in research methodology. The awareness of data reliability and validity have impacted on my knowledge on data collection, measurement and analysis that I intend to apply in my next learning level and practice.

Reference.

Goddard, W., & Melville, S. (2001). Research methodology: An introduction. Lansdowne: Juta.

Kothari, C. R. (2005). Research methodology: Methods & techniques. New Delhi: New Age International (P) Ltd.