


Chapter 4

The Selection of Data Collection Methods: A Learning Curve for Students in Higher Education

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ABSTRACT

The aim of this chapter is to discuss how selection of data collection method is a learning curve for students in higher institutions of education when compiling their dissertations and theses. It looks at various types of data collection methods and what each instrument entails, challenges that students are faced with when deciding on data collection methods; an explanation is provided why these methods are important in academic research; the design and validity of data collection methods. Data collection methods include primary and secondary methods. Primary data methods involve first-hand data collected by the researcher himself or field workers. Primary data collection methods include questionnaires, interviews, focus groups, observations, and surveys. Secondary data collection involves data obtained from various sources such as library books, academic publications, government documents. While the focus is primary and secondary types of data collection, this chapter extends the focus to quantitative and qualitative methods.

There is no need blaming data collection methods. while we failed to make a good selection of methods we need. What is at fault is not the methods but the works of a poor workman. Our mistakes should, therefore, serve as a learning curve.

~ Dr Mpinane Flory Senekane

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INTRODUCTION

The selection of data collection method is a challenge in research particularly for students in higher institutions of education. The selection process can be slow, and it depends on the decision to be made in terms of objective data in which scientific evidence becomes an important factor that determines how effectively results can be measured for the assessment of the impact. For example, where the performance of student researchers must be measured, data would be collected by assessing the students on the progress of their research projects, by surveying supervisors and by interviewing the students. The selection of data collection methods criteria considers the construction and implementation of the method where each method is written and reviewed to assess the link between the method and the identified study population. Data collection methods cannot be separated from the study design where student researcher (SR) should consider these methods to respond to the objectives of the study. The research methodology in dissertations and thesis provides information on various research methods and it is the role of the SR to employ appropriate data collection method to test validity and reliability of the study. An integral part of research project is formulation of research question; thus, it is important for SR in High Institutions of Education (HIE) to do this prior to commencement of the research project. Some students fail to answer the study research questions because of incorrect choice of data collection method/s. This error goes further to students being unable to test the validity of the study findings and have unreliable research findings.

The process of validating the research methods involves six phases of validating the questionnaire (The content validity is assessed by reviewing the literature, consulting experts, conducting focus groups and conducting interviews with the participants), piloting the questions (small sample of participants who will not form part of the main study are given questionnaires to respond, they are interviewed, this is done to test the feasibility of the study); revising the questions (Questions are revised depending on the feedback of the pilot study. Questions may be modified, deleted or even new items added to improve the content validity of the instrument); administering the questionnaire (This is administration of questionnaires to a large sample of potential participants, ethical considerations are applied when administering the questionnaire); analysing the questions (The final data set is analysed to check validity of the method, if there are any changes from the pilot study, such should be reported, results should be interpreted in relation to the research questions) and reporting the questionnaire (This is reporting of the method and how it was developed, its validation and the process that was followed for developing the entire thesis or dissertation. All references used in the study should be reflected and relevant documents such as letter of permission, consent forms, ethical clear-

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