# Chapter 8 Mixed Methods and Quality of Postgraduate Research: A Kenyan Perspective

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### **ABSTRACT**

This chapter analysed the extent, nature, and suitability of use of mixed methods research by postgraduate students in Kenya as well as its influence on the quality of their research output. Data anchoring the chapter was collected through qualitative content analysis of 229 theses and dissertations of library and information science postgraduate students in Kenya retrieved from the respective institutional repositories. Of these, 193 were Master's dissertations while 36 were doctoral theses. One hundred twenty-two (53.3%) of the theses and dissertations were developed using mixed methods research while 74 (32.3%) were based on qualitative studies. Most of the students collected both qualitative and quantitative data concurrently and merged the same during analysis and interpretation. It also emerged that the bulk of data collected by the students was qualitative; quantitative data was largely used to supplement or validate qualitative data. Using citations, it emerged that theses and dissertations developed through mixed methods research attracted more citations thereby indicating a superior quality.

### INTRODUCTION

Mixed methods research is perceived as a new research approach which is still evolving compared with the more established quantitative and qualitative methods (Tashakkori & Creswell, 2007). Consequently, what it is and its application are still the subject of myriad studies and conversations. Indeed, a critical subject of debate in this regard is the uncertainty of the paradigm in which it fits (Migiro & Magangi, 2011). Some researchers have argued that it is challenging to mix quantitative and qualitative approaches because they are perceived as being incompatible (Doyle, Brady & Byrne, 2016). Despite a lack of consensus about the aforementioned aspects of mixed methods research, Hashemi and Babaii (2013) asserted that it has been accepted as the third research approach which is distinct from the quali-

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tative and quantitative methods. Johnson, Onwuegbuzie and Turner (2007) argued that mixed methods of research is the third research approach anchored on the pragmatic paradigm. Thus, mixed methods research considers "multiple viewpoints, perspectives, positions, and standpoints" (Johnson, Onwuegbuzie & Turner, 2007, p. 113).

In the attempt to develop an acceptable characterisation of the concept, Johnson, Onwuegbuzie and Turner (2007) examined nineteen definitions of mixed methods research. They concluded that there is a consensus that mixed methods research mixes both qualitative and quantitative approaches to scientific research. They also averred that the mixing of the approaches can occur at any stage of the research process depending on the context and purpose of the study. On the orientation of mixed methods research, two viewpoints are evident in literature; the first is the bottom-up approach which argues that mixed methods research should be driven by the research questions under investigation (Newman et al., 2003). By contrast, the second viewpoint argues that a top-down orientation in mixed methods research is not driven by research questions but by the determination of the researcher to conduct a study which is participatory and less marginalising (Mertens, 2003; Tashakkori, 2006). Although views on the orientation of mixed methods research are divided, Johnson, Onwuegbuzie and Turner (2007) propose a middle ground by explaining that the orientation can either be bottom-up or top-down depending on the purpose and context of the specific research project. While some scholars (Morse, 2003) posit that mixed methods research should demonstrate either a qualitative or quantitative dominance, others (Johnson et al., 2004; Onwuegbuzie & Johnson, 2006) hold the view that it involves a blending of the approaches leading to mixed ideas, assumptions, and worldviews.

It is also evident from literature that different scholars use diverse terms to describe mixed methods research. Some of these include blended research (Thomas, 2003), integrative research (Johnson & Onwuegbuzie, 2004), negotiated study (Bryman, 2007), triangulated research (Campbell & Fiske, 1959), multimethod research (Morse, 2003; Bazeley, 2006; Hunter & Brewer, 2003), multiple methods (Smith, 2006), triangulated studies (Sandelowski, 2003), ethnographic residual analysis (Fry, Chantavanich, & Chantavanich, 1981), and mixed research (Johnson, 2006; Johnson & Christensen, 2019).

Opinion about the origin of mixed methods research is divided. In fact, Small (2011) opined that it is not easy to identify the origins of mixed methods research and argued that the approach is evident throughout the history of research, particularly in the social sciences. Nonetheless, Hesse-Biber (2010) identified an 1800s study by Le Play (1855) which utilised both qualitative and quantitative approaches to investigate poverty levels in families in Europe. Similarly, a study by DuBois (1899) argued for the combination of statistical (quantitative) and observational (qualitative) data to unravel complex issues in society. Many scholars (Creswell & Clark, 2011; Maxwell et al., 2015; Maxwell, 2016; Mertens, 2017; Timans et al., 2019), however, pointed to the work of Campbell and Fiske (1959) which advocated triangulation of research methods as the origins of mixed methods research. Creswell and Clark (2011) explained that despite evidence of earlier use of mixed methods research, it gained a wider acceptance and application in the 1980s and 1990s. Potokri (2016) also asserted that despite the differences of views about its origins, the popularity of mixed methods research has increased in recent years.

In the context of this chapter, and recognising the fact that postgraduate students may not delve into complex issues about the method, the author assumes that mixed methods research is a blended approach to scientific inquiry which does not demonstrate a mutually-exclusive dichotomy between quantitative and qualitative methods. Conversely, it facilitates the mixing of assumptions, techniques and tools in proportions and sequences suitable for the purpose and context of specific research projects. Using information sciences postgraduate students in Kenya as a case study, the aim of this chapter is to analyse

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