

## Chapter 18

# Using Mixed Methods Research to Explore User Loyalty in Selected Academic Libraries in Ghana With an Emphasis on Rigorousness

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### ABSTRACT

*In recent times, there has been a progressive increase in the use of mixed methods research design among library and information science (LIS) researchers. While this observation is encouraging, the challenge that needs to be resolved by stakeholders is the quality of the findings of these studies. Just as studies that use qualitative or quantitative research designs have quality indicators, studies that are guided by mixed methods research designs should also be measured with appropriate quality indicators. Methodological rigor (how rigorous a study is conducted) has thus become a keen focus in mixed methods research. This chapter is a report on the experience of how rigor was achieved in a Ph.D. thesis that used an exploratory sequential mixed methods research design to explore strategies for building user loyalty in selected academic libraries in Ghana. This chapter contributes to the debate on mixed methods research in LIS by highlighting basic rigor indicators.*

### INTRODUCTION

The growth in research has been recognized as a critical feature of developed nations (Patra & Mahesh, 2018). Thus, the slow pace of development on the African continent is linked to the slow growth of research output on the continent, as Africa, for instance, contributes less than 3% of world research (Simpkin et al., 2019). In recent years, however, researchers, particularly those in Library and Informa-

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tion Science, are motivated by intrinsic and extrinsic factors that have helped increase research outputs (Stvilia et al., 2018). These factors may include researchers' urge to get promoted quickly or become famous in their area of specialty. Additionally, others are motivated by the "publish or perish" mantra (Banda, 2016). Such factors have the impact of reducing the quality of research outputs produced. The impact could mean researchers focusing more on the 'quantity' instead of the 'quality' of publications.

To help eradicate or mitigate this challenge, most assessors and reviewers expect researchers to set out the methods they used to arrive at their respective findings. To this end, three main methods (quantitative, qualitative and mixed methods) have been keenly featured in most scientific reports (Creswell & Creswell, 2018). Primarily, the quantitative research method involves quantifying and assessing variables to get results (Apuke, 2017; Creswell & Creswell, 2018). The quantification and assessment usually include collecting and analyzing statistical figures by following the required statistical procedures. Typically, this entails gathering quantifiable data that can be exposed to statistical protocols with the sole aim of supporting or denying existing knowledge (Johnson & Christensen, 2014; Maarouf, 2019). As agreed by Johnson and Christensen (2014) and Maarouf (2019), quantitative research methods are characterized by testing hypotheses, studying specific variables, and discovering statistical associations. The quantitative approach of doing research has been criticized for some reasons. Firstly, Rahman (2017) has argued that the quantitative research method fails to ascertain deeper underlying meanings and explanations between social phenomena. Also, Blaikie (2007) has stated that the quantitative research method hardly accounts for how social reality is shaped and maintained or how people interpret their actions and others.

Contrary to quantitative research methods, the qualitative method involves assessing opinions to comprehend societal and human interactions. Qualitative research has been described as a research process that utilizes inductive data analysis to learn about the meaning participants hold about a problem or issue through theme identification (Lewis, 2015). In other words, the qualitative research method seeks to comprehend and explain societal connections, while the quantitative method involves testing hypotheses, looking at causalities, and forecasting (Apuke, 2017). Again, like the quantitative research method, the qualitative research method has its unique attributes. Researchers like Creswell and Creswell (2018) and Johnson and Christensen (2014) believe that qualitative research methods involve understanding and interpreting social interactions, studying behavior in a natural environment, and presenting reports in a narrative form with a contextual description and direct description quotations from research participants. Regardless of the strengths of the qualitative research approach, it has come under criticism for apparent limitations. For instance, Silverman (2010) has argued that this research approach sometimes leaves out contextual sensitivities. For Harry and Lipsky (2014), qualitative studies with smaller sample sizes raise the issue of generalizability to the whole population of the research.

In order to overcome the limitations of the two research approaches stated above, researchers are progressively using a third movement, called the mixed methods research design, to conduct research (Alavi et al., 2018; Khoo-Lattimore et al., 2019; Ngulube, 2015; Wilkinson & Staley, 2019). Mixed Methods Research (MMR) involves collecting and analyzing data, integrating the results, and drawing inferences by utilizing qualitative and quantitative approaches in a particular study (Molina-Azorin, 2018). According to Creswell and Creswell (2018), there is a basic idea of incorporating quantitative and qualitative approaches on a common theme in mixed method research. According to Dawadi et al. (2021), mixed methods research involves interweaving qualitative and quantitative data in such a way that research issues are meaningfully explained. Maxwell (2016) further posits that mixed methods research offers a logical ground, methodological flexibility, and an in-depth understanding of cases. Thus, the quantitative component of mixed methods research can help researchers glean evidence from several

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