

Chapter

Enhancing reliability and validity in a study exploring the indicators of a sustainability assessment framework for neighbourhood development in Nigeria

ByAyomikun Solomon Adewumi, Dumiso Moyo, Vincent Onyango Book<u>Validity and Reliability in Built Environment Research</u>

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ABSTRACT

There has been a continued interest in built environment research due to its crucial roles in providing practical solutions to such challenges like climate change, biodiversity and environmental degradation amongst others. One of such studies is the conceptualization of sustainability assessment frameworks in various contexts as a tool for decision-making. However, evidence of studies that addresses the validity and reliability of the research design adopted in built environment research is currently lacking. The aim of this chapter is to examine the validity and reliability of a research formulated to explore the indicators of a sustainability assessment framework for neighbourhood developments in Nigeria. The research aligns with the critical realism philosophical stance which advocates that knowledge can be sourced through the perception of people with respect to an underlying structure based on a present reality. The case study research strategy was adopted using metropolitan Lagos. A mixed method research approach was used to address the study objectives. The study ensured internal validity as the distilled indicator set was validated in terms of its comprehensiveness, usability and adoptability in metropolitan Lagos by engaging with relevant stakeholders. More also, the co-efficient of variation and the content validity ratio served as the instrument to confirm and strengthen the robustness of the quantitative data. The external validity was ensured by a large sample size of 309 residents indicating its representativeness for larger population. The repeatability of the study in the same context and obtaining similar result known as the internal reliability was enhanced through transparency of the research design and process. The study takes the knowledge of the validity and reliability of built environment research beyond the theory by operationalizing it using a case study to further help in the understanding and application to future research.