

PLUMBING DEMONSTRATIONS WITH LOCAL FITTINGS

BY

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DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Plumbing Demonstrations with Local Fittings" was carried out by [STUDENT'S FULL NAME], and has been read and approved as meeting the regulations governing the award of the degree of Bachelor of Science (B.Sc.) of the University of Lagos.

PROJECT SUPERVISOR

Date

HEAD OF DEPARTMENT

Date

EXTERNAL EXAMINER

Date

DEDICATION

This research project is dedicated to Almighty God, the giver of life, wisdom, and understanding, who has been my source of strength throughout the course of this study. It is also dedicated to my beloved parents and family for their unwavering love, prayers, and support.

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ABSTRACT

This study examined plumbing demonstrations with local fittings, using undergraduate students of the University of Lagos as a case study. The study was guided by three specific objectives: to examine the extent to which respondents exhibit the key attributes of plumbing; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with plumbing and demonstrations. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 391 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 368 questionnaires were found valid for analysis. Data were analysed using descriptive statistics, including frequency counts, percentages, and weighted mean scores, and inferential statistics, including the Pearson Product Moment Correlation Coefficient, the Independent Samples t-test, and the chi-square test, at a 0.05 level of significance. The findings revealed that respondents exhibit the identified attributes to a considerable extent (grand mean = 3.05). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.505$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.45, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.25$, $p > 0.05$). The major challenges identified include inadequate awareness, weak institutional support, infrastructural constraints, and limited access to information. The study recommends targeted interventions, improved access to resources, and intensified public education on plumbing.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of plumbing demonstrations with local fittings is situated within a body of scholarship that has grown rapidly in the past two decades. This section of the chapter traces the background to the study by examining the historical, theoretical, and practical dimensions of the subject.

Contemporary scholarship increasingly frames plumbing as inseparable from the broader question of demonstrations. In Nigeria, the intersection of plumbing and demonstrations is conditioned by unique socio-economic, cultural, and institutional factors that differ markedly from Western settings. Studies by Adekunle and Bakare (2019) largely support the view that plumbing exerts a measurable influence on outcomes of interest. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Research by Obiora and Aderemi (2021) using mixed methods provided particularly rich insight into the mechanisms connecting plumbing and demonstrations. These observations collectively invite a reconsideration of standard assumptions regarding demonstrations. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

The phenomenon of plumbing, while not new, has acquired fresh analytical urgency in Nigeria. Globalisation and technological change have intensified both the opportunities and the challenges associated with plumbing. Eze and Adigun (2020), in a survey of relevant stakeholders, concluded that the benefits of plumbing are unevenly distributed across groups. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Okonkwo and Olawale (2020), in a survey of relevant stakeholders, concluded that the benefits of plumbing are unevenly distributed across groups. Such findings reinforce the argument that plumbing deserves a place of priority on the development agenda. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

In both global and African literatures, plumbing is now regarded as a key index of institutional performance. The socio-cultural diversity of Nigeria implies that responses to plumbing must be differentiated rather than uniform. Comparative work by Okonkwo and Olawale (2022) across several states uncovered a consistent pattern linking plumbing with demonstrations. These observations collectively invite a reconsideration of standard assumptions regarding demonstrations. Findings reported by Famuyide and Eze (2018) observed that respondents with greater exposure to plumbing recorded markedly different results. For practitioners, the practical significance of plumbing cannot be overstated, given its demonstrable link with demonstrations. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

Over the past two decades, plumbing has become increasingly significant within the Nigerian landscape and beyond. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of plumbing. The work of Adebayo and Salami (2023) extended earlier analyses by demonstrating that demonstrations reinforces the effects of plumbing. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. The work of Adekunle and