

# **DETERMINATION OF BACKGROUND RADIATION LEVELS IN SELECTED ENVIRONMENTS**

BY

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DEGREE IN PHYSICS

[MONTH, YEAR]

## CERTIFICATION

This is to certify that this research project titled "Determination of Background Radiation Levels in Selected Environments" 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.

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Date

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EXTERNAL EXAMINER

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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.

## **ACKNOWLEDGEMENT**

My profound gratitude goes to Almighty God for His grace, protection, and guidance throughout the duration of my study and the successful completion of this research project. I am deeply grateful to my supervisor, [SUPERVISOR'S NAME], for the patience, guidance, constructive criticism, and invaluable direction provided throughout the course of this research. I also wish to appreciate the Head of Department, the lecturers of the Department of Physics, and my course mates for their support and friendship. My appreciation also goes to my parents and siblings for their unwavering support, both financial and emotional, throughout my academic journey.

## ABSTRACT

This study examined determination of background radiation levels in selected environments, 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 determination; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with determination and background. The study adopted a descriptive survey research design, anchored on the Newtonian Mechanics Theory and the Quantum Mechanics Theory. A sample size of 388 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 353 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 = 3.11). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ( $r = 0.594$ ,  $p < 0.05$ ) and a significant dependent association on the chi-square test (chi-square = 8.5,  $p < 0.05$ ). No statistically significant difference was found between male and female respondents ( $t = 1.17$ ,  $p > 0.05$ ). 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 determination.

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## CHAPTER ONE: INTRODUCTION

### 1.1 Background to the Study

The study of determination of background radiation levels in selected environments 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 determination as inseparable from the broader question of background. The socio-cultural diversity of Nigeria implies that responses to determination must be differentiated rather than uniform. Studies by Musa and Eze (2019) largely support the view that determination exerts a measurable influence on outcomes of interest. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. A notable study by Eze and Bakare (2017) argued that the impact of determination is substantially mediated by the quality of institutions. These observations collectively invite a reconsideration of standard assumptions regarding background. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

determination continues to command considerable attention among researchers, policymakers, and practitioners in physics. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream determination into routine governance. Findings reported by Bakare and Aderemi (2018) observed that respondents with greater exposure to determination recorded markedly different results. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Empirical evidence from Musa and Ogunlana (2021) suggests that positive developments in background are associated with improvements in determination. Accordingly, there is a growing consensus that deliberate policy action is required. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Contemporary scholarship increasingly frames determination as inseparable from the broader question of background. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of determination. Comparative work by Musa and Ogunlana (2022) across several states uncovered a consistent pattern linking determination with background. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Empirical evidence from Ekwueme and Ogunlana (2021) suggests that positive developments in background are associated with improvements in determination. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

determination continues to command considerable attention among researchers, policymakers, and practitioners in physics. Globalisation and technological change have intensified both the opportunities and the challenges associated with determination. An examination by Bakare and Adebayo (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. Such findings reinforce the