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Research Article

Factors Influencing the Adoption of Green Practices: A Case of Five Selected Shopping Malls in Lusaka District

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Abstract

There is growing recognition for the need for eco-friendly commercial buildings. However, there exists a significant gap between the potential for developing them and the actual implementation. Zambia faces the tangible impacts of climate change, such as droughts and floods, while the uptake of green initiatives remains sluggish. Environmental degradation, worsened by the absence of green initiatives, threatens ecosystems, biodiversity, and the overall health of the planet. Recognizing the urgent need for change, there is a growing consensus that economic growth should no longer be pursued at the expense of environmental degradation. Yet, despite the abundance of opportunities to develop and implement green practices, various stakeholders have not fully embraced these options. This study delved into the factors influencing green practice adoption, focusing on five prominent shopping malls in Lusaka district, Zambia. A mixed methods approach was adopted, and involved 25 purposively selected respondents that attended a questionnaire uploaded via google forms and semi-structured in-depth interviews. Quantitative data was analyzed using SPSS while content analysis was adopted for qualitative data. The study found a positive correlation between perceived benefits of green practices and willingness to adopt green practices. However, the study showed a disconnect between knowledge of climate change effects and adoption of green practices, which meant that the choice to implement green practices was not influenced by the knowledge of the consequential effects of climate change. This study findings underscore the importance of the educational knowledge on the benefits green implementation and government incentives had in fostering green practice adoption within commercial establishments. While the study provides valuable insights into the dynamics of green practice adoption in the context of Lusaka district, limitations and potential biases underscore the need for further research in this area.

Keywords

Green Practices, Adoption, Shopping Malls, Lusaka District, Stakeholders, Government Interventions

1. Introduction

In contemporary society, the adoption of green practices remains disproportionately low within public domains [2]. Despite growing awareness of environmental issues, the failure to integrate these practices into everyday activities poses significant risks to the environment, society, and economy. The adverse effects of this neglect are far-reaching.

Environmental degradation, worsened by the absence of green initiatives, threatens ecosystems, biodiversity, and the overall health of the planet. Socially, communities face challenges such as increased health risks, displacement due to

climate-related events, and social inequality. Economically, the pursuit of relentless growth at the expense of the environment is unsustainable in the long term, leading to potential economic downturns, resource depletion, and increased vulnerability to climate-related disasters.

Recognizing the urgent need for change, there is a growing consensus that economic growth should no longer be pursued at the expense of environmental degradation. Yet, despite the abundance of opportunities to develop and implement green practices, various stakeholders have not fully embraced these options. Furthermore while scientific reports paint an alarming picture of climate change, the international community has been regarded as slow to take action to reduce greenhouse gas (GHG) emissions [10] As we navigate the complexities of the 21st century, the above write up suggests that it is imperative that we prioritize and maximize green practices.

The term "going green" in general means to incorporate environmentally friendly practices into a business function or to improve the sustainability of the environment through practices that have a reduced negative effect on the climate and environment as a whole [5].
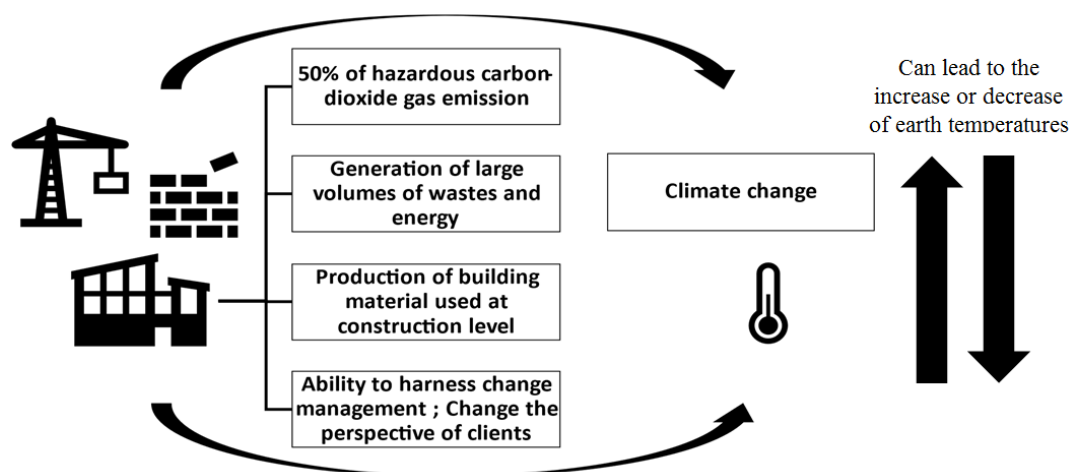
This includes but is not limited to;

1) Energy Efficiency: Implementing measures to reduce energy consumption
2) Water Conservation: Adopting practices to reduce water usage eg recycling rain water

3) Waste Reduction: Minimizing waste generation and promoting recycling and composting to divert materials from landfills
4) Renewable Energy: Investing in and utilizing energy sources such as solar power

The OECD [9] defines green growth as aligning economic growth and environmental objectives. Specifically, it involves transitioning to a resource-efficient, low-carbon economy and preserving environmental resources while seizing the economic opportunities that this transition generates [6].

Ignoring green practices can result in significant economic costs in the long run, for instance, environmental cleanup efforts, healthcare expenses related to pollution-induced illnesses, resource depletion and damages from natural disasters such as more frequent and severe weather events, rising sea levels, and disruptions to agriculture and ecosystems, all imposing financial burdens on societies and governments [1] The negative environmental impact of buildings on the environment has led to a demand for improved practice. Malls Building play a crucial role in sustainable development by shaping the environmental, social, and economic dimensions of communities given it's environmental footprint (ibid). Collectively buildings consume 40% of the total energy and 30-40% material resource consumption, 30 − 40% waste production worldwide [2, 12].

Figure 1. Graphically summarizes the impact of shopping malls on environmental degradation.

It can then be said that if greener buildings are developed, there would be a drastic reduction in the amount of carbon dioxide released leading to a net zero or close to a net zero economy. This is because more than 40% of all the hazardous carbon dioxide emissions from the commercial buildings [3] will be significantly managed.

Therefore aligning buildings with low-emission, implementing measures to reduce energy consumption, water conservation, minimizing waste generation and promoting recycling, investing in renewable energy and developing

resilient pathways is now more critical than ever.

In conclusion, green buildings are perceived as effective substitutes for traditional buildings. In order to make the application of green adoption in the building industry be implemented and popularized effectively, it is especially important for us to gain thorough comprehension of the key problems that affect the adoption of green practices in these malls. The study included a target population that comprised thirty stakeholders; five mall center managers, ten mall tenants and twenty regular customers with observable charac-

teristics, to draw insights for the study.

Aim of Study

To investigate factors influencing green practice adoption; A case of five selected shopping malls in Lusaka district.

Specific Objectives

1. To determine stakeholder's knowledge (managers, tenants and customers) levels on the effects of climate change.
2. To establish stakeholder's knowledge (managers, tenants and customers) about the expected benefits of green adoption.
3. To establish if government interventions influence the willingness to adopt green activities.

2. Literature Review

General Knowledge Levels on Climate Change and the Adoption of Green Practices

Most often than not, people think that climate change related issues are to be solved by the government or scientists only. However, education is a critical agent in addressing the issue of climate change [11]. We need to be aware that each of us is involved as part of the problem and part of the solution. Climate literacy is understanding one's influence on climate and the influence of climate on oneself and broader society [8].

Climate education and literacy can encourage people to change their attitudes and behavior; it also helps them to make informed decisions [11]. Education empowers all people, but especially motivates the young to take action. Instilling climate change awareness and understanding at a young age is ultimately the best way to change behaviors and attitudes. In the classroom, young people can be taught the impact of global warming and learn how to adapt to climate change.

In addition to encouraging behavioral change through climate literacy, education can help build the necessary skills, knowledge and mindsets needed for a just and effective transition to a green economy, which is critical if there is any hope of shifting $130 trillion of financial assets under management to net zero, as was pledged at COP26.. Education is strongly connected to a person's ability to adapt to changing circumstances – something that will be crucial for society as the effects of climate change intensify.

Knowledge on Climate Change and its Effects

Many people perceive climate change as an issue to be addressed solely by the government or scientists. However, education is crucial in fostering climate literacy, defined as understanding one's impact on the climate and vice versa [8]. Educating people, particularly the youth, can lead to behavioral changes and help individuals make informed decisions [11]. Climate literacy empowers societies to embrace green practices and transition to a green economy, while also equipping them to adapt to climate change.

By contrast, we find that individuals are more likely to prioritize the environment over the economy when they have more extensive experience with natural-hazard induced disasters and when these disasters have significant humanitarian consequences [7, 9] Awareness of environmental risks such as global warming, floods, and unpredictable weather fosters a shift in societal attitudes, encouraging the conservation of resources and minimizing environmental risks. This suggests a positive correlation between climate change knowledge and the adoption of green practices.

Awareness of Benefits

Many people remain unaware of the long-term benefits of green buildings and practices. Green practices contribute to sustainable development through the "triple bottom line" model, which measures success in terms of social, environmental, and economic benefits. However, green buildings are often perceived as financially unachievable due to a lack of clear cost-benefit documentation. Increasing awareness of the benefits can lead to broader adoption of green practices.

Government Policies or Interventions

Governments play a significant role in promoting green activities [4] through subsidies, tax incentives, and favorable regulations. By encouraging climate-focused investments and requiring transparency in environmental impacts, governments can shift investments toward green projects. Green finance policies can further influence institutional investors, increasing investments in environmentally friendly companies and enhancing corporate performance [4]. The reviewed literature offers valuable insights into the concept of green activities and services, as well as the factors influencing the adoption of green practices. It highlights the connection between knowledge gaps and the limited adoption of such practices and underscores the potential role of government in shaping environmentally sustainable building designs. Studies have shown that individuals are more likely to prioritize environmental concerns over economic considerations, particularly when they have direct experience with natural hazards or when these disasters result in significant humanitarian consequences.

Moreover, the literature reveals that heightened concern and awareness about environmental risks—such as global warming, floods, earthquakes, and unpredictable weather—driven by the over-exploitation of natural resources and unsustainable practices, have prompted shifts in societal attitudes and perceptions. Another key finding points to the role of green finance policies in influencing institutional investors. These policies not only affect stock prices but also enhance the innovation capabilities of green companies, ultimately improving corporate performance.

However, the literature also presents certain limitations. A notable gap exists in the methodology used to measure the impact of educational awareness on green practice adoption. Additionally, the literature lacks consideration of counterarguments regarding the reliance on education alone to address climate change. The absence of context-specific information, particularly related to sample size and demographics, raises concerns about the generalizability of the findings. Further-

more, broad claims about the influence of government actions on green investments might overlook important variations across regions, political contexts, and economic conditions. Therefore, a more comprehensive understanding of the factors influencing the adoption of green practices is needed, with a specific focus on Zambia and, more narrowly, Lusaka District.

3. Research Methods

3.1. Research Design

The research applied a mixed method approach. The purpose of this selected model was to end up with valid and well-substantiated conclusions about the phenomenon that can't be done by one approach. The qualitative approach facilitated by semi structured interviews and open-ended questions, was concerned with subjective assessment of attitudes, opinions and behavior. Therefore, the open ended structured questions provided a platform to carry out the study as it obtained information concerning the current status of the phenomena with respect to variables in a situation. It enabled subjects to give more information on the issues of interest to the researcher. The quantitative approach facilitated by closed ended questions, involved the generation of data in quantitative forms which were subjected to rigorous quantitative analysis in a formal and a rigid fashion, it was also based on theories.

3.2. Target Population

The population targeted thirty-five stakeholders which included; Five mall center managements, ten tenants and twenty regular customers with observable characteristics. The common and observable characteristics of the target population in this study comprised Malls that that had; Geographic Diversity: By selecting malls from different directions (east, west, south, and north of Lusaka district), the research ensured geographic diversity within their sample. This approach allowed the capturing of variations in consumer behavior, preferences, and market dynamics that may be influenced by factors such as population density, and economic development. By including malls from various directions, the research obtained a more representative sample of the overall retail market and better understand regional variations in consumer behavior and preferences Size and Scale: Shopping malls vary widely in terms of size, scale, and layout. By including malls of scale and traffic, the study was able to examine rich information from stakeholders of various perspectives and influence the consumer behavior to adopt green practices and perceptions in large numbers. Tenant Mix: The mix of tenants within a shopping mall can significantly impact consumer behavior and preferences. By selecting malls with different tenant mixes, the research explored influence of retail and office offerings on consumer decision-making

3.3. Sample Size and Sampling Techniques

A purposive sampling technique was used to select the studies specific malls and stakeholders. This was aided by the identification of communities with common characteristics best suited to help in addressing the study. Justification for purposive sampling approach include; Research Focus: The study utilized a targeted inclusion of individuals who possess the desired attributes including mall managers, tenants and regular customers. This ensured that the sample aligns closely with the research aims and objectives. Expertise and Knowledge: In this context the mall managers had specialized knowledge and expertise relevant to the topic under investigation. This ensured that the data collected was rich. Time Efficiency: Compared to other sampling techniques such as random sampling, purposive sampling was more efficient in terms of time and resources. By directly targeting individuals who met the criteria, the research spent less time on recruiting and screening participants who may not be relevant to the study.

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3.4. Data Collection Methods

The data was collected in two forms namely primary and secondary data. Secondary data was obtained from websites, industry reports, academic reports and journal articles. Primary data was collected through the use of questionnaires and semi structured interviews designed to obtain data directly from the stakeholders.

3.5. Data Analysis

Quantitative data was collected through self-administered questionnaires distributed electronically. A total of 25 responses with a response rate of 83% (25 out of 30) were received, representing various selected malls across different regions of the Lusaka district, including those considered prestigious, large in size or foot traffic, and operational for over 5 years. Descriptive statistical analysis was then employed to answer the questions posed in the questionnaires. This quantitative approach provided numerical insights into the prevalence and distribution of factors influencing green practice adoption among the surveyed malls. The use of SPSS for data analysis added rigor and efficiency to the process, leveraging its versatility and popularity in both academic and business contexts. SPSS is a versatile package that allows many different types of analysis, data transformations, and forms of output. Secondly, qualitative data was gathered and analyzed using content analysis techniques. Specifically, summative content analysis was employed, involving the counting and comparison of keywords or content within the qualitative data. This method enabled the interpretation of

underlying contextual factors influencing green practice adoption. By incorporating qualitative insights alongside quantitative findings, the study achieved a holistic understanding of the factors shaping the adoption of green practices in the selected malls.

4. Results and Discussion

4.1. Influence of Stakeholder Knowledge on Climate Change and Green Practice Adoption

1. The data analysis showed that stakeholder knowledge about climate change did not significantly influence the adoption of green practices. While half of the respondents experienced climate change impacts like floods, they attributed these to other causes, such as poor drainage.
2. However, literature suggests that individuals with extensive disaster experiences, especially those with significant humanitarian consequences, tend to prioritize environmental action over economic concerns. This finding suggests further exploration is needed to understand if disaster experiences could influence green practice adoption.

4.2. Stakeholder Knowledge of Green Practices' Benefits

1. There is a strong correlation between participants' awareness of climate change solutions and their adoption of green practices.
2. Respondents acknowledged that green practices helped reduce climate change effects and boosted sales in malls. These results suggest that increasing awareness of the benefits of green practices can drive more adoption, especially among property owners.

4.3. Government Interventions and Green Practice Adoption

1. The data showed a positive relationship between participants who believed action could be taken on climate change and those who thought government interventions could influence green adoption.
2. The Chi-square test confirmed that government policies and incentives play a crucial role in driving the adoption of green practices. Literature supports this, showing that government efforts are key in mitigating climate change impacts.

5. Conclusion

Findings revealed that while knowledge of climate change

effects did not significantly influence green adoption, perceived benefits of green practices and government interventions, including policies and incentives, positively impacted the willingness to adopt these practices. The study also highlighted limitations like a small sample size, potential biases, and restricted insights due to the reliance on self-administered, closed-ended questionnaires.

Abbreviations

SPSS   Statistical Package for the Social Sciences

Author Contributions

Chirwa Natasha is the sole author. The author read and approved the final manuscript.

Conflicts of Interest

The author declares no conflicts of interest.

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