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LINGKOD BAYANG MAKAKALIKASAN: EXAMINING THE DETERMINANTS OF EMPLOYEES' INTENTION TO ENGAGE IN GREEN BEHAVIOR IN A PUBLIC ORGANIZATION

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This paper prepared by **JONATHAN Q. ABINAL** with the title: **"LINGKOD BAYANG MAKAKALIKASAN: EXAMINING THE DETERMINANTS OF EMPLOYEES' INTENTION TO ENGAGE IN GREEN BEHAVIOR IN A PUBLIC ORGANIZATION"** is hereby accepted by the Faculty of Information and Communication Studies, U.P. Open University, in partial fulfillment of the requirements for the degree Program.

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Biographical Sketch

Jonathan Abinal, or *“Jon”* at *work*, and *“Chutz”* at home, is a Bicolano, raised in Metro Manila. He was born on 27 June 1995 in Naga City, Camarines Sur. He is the third child of the loving parents, Mr. Rogie L. Abinal and Mrs. Cecelia Q. Abinal

He completed his primary education at Rodriguez Heights Elementary School and his secondary education at Montalban Heights National High School. Driven by his interest in communication, he pursued and earned his bachelor’s degree in communication research from the Polytechnic University of the Philippines - Sta. Mesa, Manila. In 2022, he started pursuing his master’s degree in development communication at the University of the Philippines Open University.

Currently, he works as a Team Lead in a government institution. His work experiences involve employee communications, labor relations, gender and development, and talent management.

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Dedication

This research is dedicated to the discipline of development communication, and to everyone who champions and advocates environmental sustainability in their personal and professional lives.

To the public organizations and employees, I hope that you will get something meaningful and transformative from the insights/findings of this study. That you will be able to craft programs/policies and adopt practices that will push forward the call for climate action and ultimately shape the culture of sustainability in your organizations.

And to myself, for being persistent and finding courage to complete this thesis despite busy work schedules. Nailaban natin, self!

To God be all the glory!

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Abstract

How do employees in a public organization intend to practice the principle of *Lingkod Bayang Makakalikasan*? Guided by the Theory of Planned Behavior developed by Icek Ajzen, this study examines the determinants of employees' intention to engage in Employee Green Behavior (EGB) in a public organization in the Philippines. It explores how attitude, subjective norms, and perceived behavioral control influence intention, and how socio-demographic characteristics and environmental knowledge shape these constructs. EGB includes workplace practices such as energy conservation, waste reduction, and participation in sustainability initiatives.

Using a quantitative survey design, data were collected from 285 employee-respondents and analyzed using statistical techniques. Results show that attitude, subjective norms, and perceived behavioral control significantly influence intentions to engage in green behavior. Environmental knowledge indirectly strengthens intention by influencing attitudes and perceived control, while socio-demographic factors show limited direct effects.

The findings highlight the importance of fostering supportive norms, positive attitudes, and a strong sense of behavioral control to institutionalize sustainable practices in the public sector.

Keywords: Employee Green Behavior, environmental sustainability, public organization, Theory of Planned Behavior, attitude, subjective norm, perceived behavior control, intention.

Chapter I

INTRODUCTION

Rationale and Background of the Study

In recent decades, there has been a growing urgency for climate action. Many individuals, societies, countries and unions have started to take considerations about the risks and impacts of climate change, both in personal and business aspects. Not just any other trend, climate change and its impacts have become critical concerns for most businesses. The adoption of green practices, promotion of sustainability and climate action are becoming the norm. (Intergovernmental Panel on Climate Change, 2023).

Based on Deloitte's research in 2023 on CxO Sustainability, most business executives indicated that the impact of climate change in their businesses is ineluctable and must be put into their strategic priorities to get immediate action. Its adverse effects directly affect businesses and their employees by impeding economic progress, damaging infrastructure, and causing social disruptions. According to the Philippines Country Climate and Development Report, climate change can lead to social and economic consequences, when no action or intervention are in place (World Bank Group, 2022).

In a positive view, private and government organizations have started the fight against the effects of climate change by advancing sustainability and embracing green initiatives to eliminate, or at least minimize, its impact. For the public sector, the Philippine Civil Service Commission (CSC) had issued an advisory calling for an active participation in environmental stewardship by

translating patriotism into actions such as championing sustainability as a practice, supporting locally produced and sourced sustainable products, and conserving and preserving resources (Reganit, 2023).

To achieve this, one essential aspect that needs to be looked at by organizations is understanding and promoting green behavior among employees (Mi et al., 2020). Employee green behavior (EGB), as defined by Jackson (2012), encompasses actions and behaviors that prioritize and support environmental sustainability in the workplace. This behavior helps minimize the negative impact on the environment and supports long-term sustainability (Peng et al., 2019). Therefore, understanding EGB and the factors influencing it, whether voluntary or role-required, is crucial for achieving an organization's environmental goals (McConnaughy, 2014).

According to a study by Zhang et al. (2021), voluntary, unrewarded environmental actions by employees, that go beyond their job functions, can significantly reduce an organization's environmental footprint. These actions, including sustainable consumption and behavior changes (Klaniecki & Wuropulos, 2018), are crucial in the workplace. As organizations face increasing pressure to be environmentally responsible, employees are expected to adopt sustainable behaviors to support corporate sustainability goals. The same goes to government organizations and their employees, who should be role models to private industries and corporations, must exhibit and observe EGB in their workplaces. Most especially since they are committed to being *“maka-kalikasan”* or environmentally conscious as public servants.

In the subject public organization, there is no structured sustainability policy or program in placed yet. Most of the green efforts are driven by voluntary or personal actions by employees. The Management is yet to adopt a formalized sustainability policy for their employees to understand, advocate and practice. Hence, this study has explored employees' intentions to act sustainably by examining the determinants or the constructs of the Theory of Planned Behavior (TPB), particularly the attitudes, subjective norms, and perceived behavioral control, as well as their environmental knowledge and socio-demographic characteristics, and to assess their influence on the intention to adopt EGB.

According to the TPB, an individual's intention to engage in a behavior (e.g. pro-environmental behavior such as water and energy conservation) is strongly linked to their likelihood of taking action (Bouarar and Mouloudj, 2021). Additionally, TPB and its variables provide a framework for comprehending the messages and communication that prompt changes in behavior. Examining individuals' attitudes, subjective norms, and behavioral intentions is crucial for creating predictive models that empower communicators to design impactful messages and interventions that would inspire EGB performance.

Statement of the Problem

Research studies by Wang (2016), Safari et al. (2018), Ojo and Raman (2019), and K (2023) have examined employee green behavior (EGB) in private organizations. However, a significant gap remained in research on employee green behavior that focuses on the public sector, particularly in the Philippines. This study aimed to fill that gap by determining how socio-demographic

characteristics, environmental knowledge, attitude, subjective norm, perceived behavioral control influence intentions to act EGB in the workplace.

Exploring EGB added a significant value to the existing pool of knowledge in research for several reasons. First and foremost, it contributed to a deeper understanding of human behavior and decision-making processes in the context of environmental sustainability, specifically the factors that drive the enactment of EGB. It also enriched the knowledge about individual behavior to develop effective interventions and strategies for promoting environmental sustainability through raising awareness, shaping behavior, and motivating climate action. This study generated empirical evidence on EGB that can influence policymaking, organizational practices, and sustainability initiatives, leading to more informed decision-making and resource allocation.

Employing the constructs of the TPB, this study, in general, aimed to answer the question: How do attitude, subjective norms, perceived behavioral control influence public organization employees' intention to engage in EGB?

Specifically, the study sought to answer the following research questions:

1. What is the socio-demographic characteristics of the respondents?
2. What are the respondents' levels of environmental knowledge, attitude, subjective norm, perceived behavioral control, and behavioral intention to engage in EGB?
3. Do socio-demographic characteristics and environmental knowledge significantly affect the attitudes, subjective norms, and perceived behavioral control of the respondents?

4. Do attitudes, subjective norms, and perceived behavioral control significantly and positively affect the respondents' intention to adopt EGB?

Objectives of the Study

In general, the study aimed to examine the determinants of employee intentions to engage in green behavior in a public organization.

1. To determine the socio-demographic characteristics of the respondents.
2. To determine respondents' level of knowledge, attitude, subjective norm, perceived behavioral control, and behavioral intentions to engage in EGB.
3. To examine whether respondents' socio-demographic characteristics and environmental knowledge significantly affect their attitudes, subjective norms, and perceived behavioral controls.
4. To determine whether respondents' attitudes, subjective norms, and perceived behavioral controls significantly and positively affect their intention to engage in EGB.

Significance of the Study

Private industries and organizations, including Google, Starbucks, Ford Motors, Nike, Disney, and Johnson & Johnson, are placing a greater emphasis on eco-friendly and sustainable practices as they recognize their responsibility to reduce their carbon footprint in response to the climate crisis (Compactor Management Company, n.d.). Embracing environmental sustainability positively

impacts an organization's environmental performance, market orientation, cost reduction, and resource conservation (Del Brio et al., 2007; Paillé et al., 2014; Chen et al., 2015). A key component of this shift is the promotion and cultivation of employee green behavior (EGB), which has been shown to significantly benefit both the internal and external aspects of organizations (Unsworth et al., 2021). However, this may differ for public organizations, as their employees' motivations differ from those in the private sector. Public service motivation reflects a desire to contribute to the public interest (Kim, 2016), which can be a significant driver of EGB.

This study aimed to explore the factors that influence public sector employees' motivation or intention to engage in, perform and adopt EGB by examining their socio-demographic characteristics, environmental knowledge, attitudes, subjective norms, and perceived behavioral control. Through this study, public sector leaders, communicators, and human resource managers may gain insights into the factors that influence employee green behavior which they can use for designing targeted interventions to promote environmental sustainability within their organizations. The findings can also be used in developing supportive environments that encourage green practices among employees.

Moreover, this study highlighted the importance of public organizations' efforts toward sustainable development by empowering their employees to practice sustainable practices and providing opportunities for environmental conservation. Understanding EGB could help promote Sustainable Development Goal 13 on Climate Action, enabling a global response to climate change, and ultimately achieving a carbon-neutral planet by 2050.

Scope and Limitations of the Study

The primary aim of this research was to examine how employees from a public organization intend to engage in EGB by assessing their environmental knowledge, attitude, subjective norm, and perceived behavioral control, as well as the relationships among variables. This research was conducted exclusively on employees of a public organization in the Philippines and employed quantitative research methodology using TPB constructs to explore intention to engage in EGB among respondents. The study did not address barriers and challenges to promoting environmental sustainability or the organization's environmental management practices. It also did not examine role-required or task-related EGB, but instead focused on the respondents' voluntary attitudes, norms, and control over green behaviors, based on the TPB variables. Communication interventions were not measured to investigate their efficacy in promoting EGB.

Chapter II

REVIEW OF RELATED LITERATURE

The natural environment has always been the primary source of essential resources for human survival. Logically, their responsibility is to protect and preserve it for future generations. However, due to harmful activities, natural resources started to deplete, and the Earth's temperature began to increase, consequently. The problem is centered on the activities being done collectively by individuals, governments, and business organizations that negatively affect the environment (World Wildlife Fund, 2018). The challenge of the current generation is how to be environmentally sustainable in their activities and adapt to the effects of climate change. Research must consider understanding green behaviors and the factors influencing their enactment to support climate action and environmental sustainability efforts. The following related literature presented the history of environmental sustainability, an analysis of the climate change situation, the call for climate action, and the initiatives and efforts being done by public and private partners, including the advocacy to foster employee green behavior in the workplace.

Environmental Sustainability and Climate Change

The term *"environmental sustainability,"* originally termed *"environmentally responsible development"*, and later employed as *"environmentally sustainable development"* (Serageldin and Streeter, 1994), is defined as the capacity to maintain things and qualities that hold value in the natural environment (Sutton,

2004). Close to the definition of *"sustainable development"* by the World Commission on Environment and Development (WCED) in 1987, which means to satisfy the current needs without jeopardizing the capability of future generations to fulfill their own needs (WCED, 1987). This concept aimed to enhance human well-being by safeguarding the Earth's resources necessary for human needs and ensuring that the capacity to absorb human waste is not surpassed, thus averting harm to humans (Goodland, 1995). It entails upholding or enhancing the Earth's functionality for life-support to empower the present and future generations in attaining economic and social progress within a context of cultural variety while preserving biodiversity and the biogeochemical stability of the biosphere through conservation and responsible utilization of air, water, and land resources (Holdren et al., 1995).

Environmental sustainability is not entirely new. Several studies indicated that this ideology started more than 2000 years ago as part of the traditional agricultural practices of ancient Sri Lankan and Eastern African tribes which viewed environmental concerns as an integral part of economic activity (Marong, 2003). However, the notion of environmental sustainability only emerged as a major global concern during the third Industrial Revolution, when countries like Great Britain, Germany, and the United States started using fossil fuels for their technological and economic advancements, resulting in the rapid increase of global warming (World Trade Organization, 2014; Dhanani, 2022). This prompted the United Nations to include sustainable development in its agenda for the first time in their Scientific Conference on the Conservation and Utilization of Resources in 1949. Other organizations followed decades later, including the

International Union for Conservation of Nature and Natural Resources, the Worldwide Fund for Nature, and Greenpeace, as part of efforts to protect the environment from damages caused by industrialization (Asian Development Bank, 2012).

Since the Industrial Revolution, human activities have emitted substantial amounts of carbon dioxide into the atmosphere, significantly influencing climate change (National Academy of Sciences, 2020). These technology-enabled activities have contributed to more than half of the observed increase in global temperatures, accounting for a warming of 0.67 ± 0.12°C, while natural factors have had no impact on global temperatures (-0.01 ± 0.02°C) (Ribes et al., 2017; IPCC, 2013).

According to the 2024 Copernicus Climate Change Service (C3S) Report, the global mean temperature in the last 12 months (February 2023 - January 2024) stands as the highest recorded, surpassing the 1991-2020 average by 0.64°C and exceeding the pre-industrial average of 1850-1900 by 1.52°C (C3S, 2024). This figure possessed particular importance in the global efforts to mitigate severe climate change, particularly under the 2015 Paris Agreement, when nations committed to limiting global warming to 1.5 degrees Celsius above pre-industrial levels (climate neutrality) or, at the very least, to ensure it remains well below 2 degrees Celsius (IPCC, 2018; United Nations, 2015). Even though the threshold was maintained, the effects and impacts of climate change on the environment and different sectors of society were yet to be mitigated.

One observable change was the increase in temperature, which affected weather patterns, resulting in more floods, droughts, or intense rains. This brought

more frequent and severe heat waves, melting ice caps, and rising sea levels (IPPC, 2023; Vose et.al, 2017; Fann et.al, 2016; Fleming et al, 2018; Ebi et.al, 2018). These environmental changes also posed a significant danger to human health and safety. Natural disasters and heat-related emergencies have increased in scale, frequency, and intensity due to climate change. Due to this, about 250,000 more deaths per year can be expected between 2030 and 2050. As it is, there are 2 billion people who have no access to safe drinking water, and 600 million people suffer from diseases due to food contamination every year. With climate change, these numbers can be expected to go up as environmental stressors increase risks (World Health Organization, 2023).

Aside from health, climate change also impacts the economy and human welfare, especially in poorer, hotter, and lower-lying countries. According to a study by Leichenko and Silva (2014), poverty significantly increases the susceptibility of households to the harmful effects of climate change, making welfare development a crucial strategy alongside greenhouse gas emissions reduction. Evidence shows that developing countries, especially those in tropical areas, are experiencing more adverse effects of climate change (Islam and Winkel, 2017). They are particularly vulnerable due to several factors. First, they face greater exposure to weather-related risks due to the significant role of agriculture and water resources in their economies. Second, they tend to be in hotter regions, pushing ecosystems closer to their limits and requiring unprecedented adaptation efforts. Finally, developing countries often have limited adaptive capacity, and lack access to technology, financial resources, and infrastructure to mitigate and respond to climate change effectively (Tol, 2018).

One developing country with a long history of devastating typhoons is the Philippines. Records show that the country usually experiences around 20 typhoons yearly, 5 of which are destructive. In the past, however, super typhoons only occurred once every 20 years, which means that their frequency has drastically increased over the years due to climate change (Novio, 2022). One significant typhoon was Haiyan, locally known as "Yolanda," which struck the Philippines in November 2013. Haiyan was the most destructive tropical cyclone that ever crossed the Philippines. It caused catastrophic damage in the Visayas region, particularly in Leyte and Samar, resulting in thousands of deaths, widespread displacement, and extensive destruction of homes, infrastructure, and agriculture. The archipelago's geographical location makes it particularly vulnerable to these natural disasters (National Disaster Risk Reduction and Management Council, 2013).

Call for Climate Action

To address the impacts of climate change, the United Nations outlined *“Climate Action”* as one of the 17 Sustainable Development Goals (SDGs) in the 2030 Agenda, which aims to *"ensure access to affordable, reliable, sustainable and modern energy for all."* This goal includes strengthening the resiliency and adaptive capacity of people to climate-related hazards and natural disasters worldwide, integrating climate change measures into national policies and planning, and enhancing education, awareness, and capacity on climate change mitigation and adaptation (United Nations, 2022). The National Economic and Development Authority (NEDA) published the Philippine Development Plan (PDP)

2023-2028, wherein SDG 13 - Climate Action is integrated into its development plan. Accelerating climate action and strengthening disaster resilience are some of its enabling environments, focusing on the resilience of communities and institutions, enhancement of the ecosystem, and transition to a low-carbon economy (NEDA, 2023).

In the last 20 years, the Philippines has struggled with significant environmental challenges stemming from a complex interplay of factors, including rapid urbanization, industrialization, population growth, and natural disasters (United States Agency for International Development, 2023; Collymore, 2003; Beltran, 2022). Between 2006 and 2014, it witnessed a notable decline in its Environmental Performance Index (EPI) ranking, dropping from 55th to 114th. This downward trend signaled significant environmental governance and resource management challenges during that period. In 2016, the Philippines' EPI ranking had improved, reaching 66th out of 180 countries. This improvement suggests that efforts to address environmental issues to enhance sustainability were gaining traction. Despite this progress, the Philippines still falls behind countries like Singapore and Malaysia in environmental performance but remains ahead of nations like Indonesia and Vietnam (NEDA, 2017).

In Yale's 2022 EPI rankings, the Philippines dropped to 158th out of 180 countries, which is the 5th lowest among its East and Southeast Asian neighbors (Environmental Performance Index, n.d.). This is despite numerous efforts by the government through various initiatives and policies, such as the following:

- ***Ecological Solid Waste Management Act (2000)****:* This law aims to promote proper solid waste management practices such as waste

segregation, recycling, composting, and the establishment of materials recovery facilities. It also encourages the reduction of single-use plastics and the implementation of extended producer responsibility (EPR) mechanisms.

- ***Clean Air Act (1999) and Clean Water Act (2004)****:* These two laws, created in 1999 and 2004, respectively, are primarily targeted at pollution control by regulating air and water quality standards to protect both the environment and the public from the adverse effects of pollution.
- ***Renewable Energy Act (2008):*** This law promotes the development and utilization of renewable energy sources such as solar, wind, hydro, biomass, and geothermal energy to reduce dependence on fossil fuels, mitigate climate change, and enhance energy security.
- ***Climate Change Act (2009):*** This law was created based on the Philippine Agenda 21 framework, which promotes sustainable development by maintaining the quality of the natural environment while fulfilling the needs of people. Through this act, the Climate Change Commission (CCC) was created to oversee the country's sustainability goals, programs, and action plans related to climate change.
- ***Green Jobs Act (2016)****:* This law was created to promote green jobs and foster sustainable development within the country. Enacted to address the challenges of environmental degradation and climate change, this law underscores the importance of integrating environmental sustainability principles into national development planning and employment practices.
- ***National Greening Program (2018)****:* Through this program, the government aims to reforest 1.5 million hectares of degraded land from

2011 to 2028, by planting native and endemic tree species to restore forest cover, mitigate climate change, and enhance biodiversity.

Moreover, in 2020, a comprehensive framework called the Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP) was created to promote sustainable practices and behaviors in various sectors and levels of government. One of the things it focuses on is reducing waste by encouraging consumers to reject unsustainable products and packaging materials, particularly single-use plastics, through choice-editing strategies. Additionally, proper waste segregation and recycling are encouraged to establish more materials recovery facilities (MRFs) in the short term. The goal is to achieve zero waste by developing and adopting innovative technologies that align with the principles of circular economy in the medium to long term (SDS Admin, 2020). These initiatives and policies reflect the Philippines' commitment to achieving environmental sustainability, conserving natural resources, mitigating climate change impacts, and promoting sustainable development for present and future generations. However, such laws are insufficient if environmental sustainability is not part of the public's consciousness. All members of society, including individuals, private corporations, and public institutions need to adopt green behavior and foster a culture of environmental responsibility.

Based on a study by the British Council and the Philippine Social Enterprise Network (PhilSEN), there are over 164,000 social enterprises in the Philippines, triple that of the last decade, which focus on poverty alleviation, community support, and empowering marginalized groups (British Council & Philippine Social

Enterprise Network, n.d.). International environmental groups like Greenpeace and the Worldwide Fund for Nature (WWF) have also been found to be actively engaging in these initiatives by supporting not only government initiatives but also these social enterprises. This demonstrates the initiative's importance and potential impact (Wong, 2009). On top of this, climate activism is increasing among Filipino youth who advocate for climate justice and solutions to the climate crisis. Young environmental activists participate in global movements like Fridays for Future (Torvik, 2022). These highlight the increasing awareness and commitment to address climate change, advocate for climate justice within the country, and suggest a promising outlook for social and environmental progress in the Philippines.

The Philippines ranked 98th out of almost 200 countries in the 2023 United Nations Sustainable Development Report (Sustainable Development Report 2023, n.d.), with a score of 67.14/100 based on criteria measuring performance in all 17 Sustainable Development Goals (SDGs). Records show that the Philippines has experienced both progress and setbacks. While efforts have been made to foster sustainable development, socio-economic inequalities, lax enforcement of environmental laws, and conflicting development agenda proved to be quite the challenge. Addressing these significant gaps requires sustained political will, strengthened institutional capacities, innovative approaches to conservation and sustainable development, and meaningful engagement with diverse stakeholders at local, national, and global levels. Only through concerted and collaborative efforts can the Philippines hope to secure a more sustainable and resilient environmental future for its people and the planet.

Public-Private Sustainability

Net-zero or environmentally sustainable lifestyle requires public-private collaboration. Private enterprises invest in renewable energy and sustainability measures to achieve this goal, while government agencies offer incentives, grants, and support for eco-friendly initiatives. By working together, these sectors can foster innovation, generate sustainable employment opportunities, and expedite the shift towards a low-carbon economy (De Guia, 2023).

Given that more than half of the greenhouse gas emissions and environmental degradation that drive global climate change were found to be sourced by private corporations (Barraclough and Webster, 2017), part of the responsibility for mitigating these effects fall to this sector. Also, many environmental issues stem from human behavior that has caused significant harm to the planet. As a result, companies are increasingly expected to adopt eco-friendly practices within their human resource management (HRM) operations to minimize their impact on the environment (Yong et al., 2020). Remarkably, in the recent study of Boston Consulting Group (BCG) in 850 companies, 60 percent were found to prioritize Environmental, Social, and Governance (ESG) factors in selecting and prioritizing digital initiatives, and 80 percent have expressed their intention to boost their investments in sustainability in the coming years (Boston Consulting Group, 2022). These findings are a clear indication that corporate sustainability initiatives are gaining momentum and becoming a top priority for businesses around the world.

On one hand, in the Philippines' public sector setting, the Civil Service Commission (CSC) has urged its 1.8 million public servants to promote

environmental conservation and sustainability, emphasizing the translation of patriotism into supporting ecological balance, locally produced sustainable products, and preserving resources for future generations (Reganit, 2023). Government agencies such as the Securities and Exchange Commission (SEC) and the Land Bank of the Philippines (LBP), are some of the public organizations that have already integrated environmental sustainability into their internal policies, leadership and management, supply chain management, human resource management and other corporate programs and activities (Securities and Exchange Commission, n.d.; Land Bank of the Philippines, n.d.).

Looking at those organizations, the subject public organization, being a mandated institution that promotes social justice and protects the welfare of working Filipinos against various contingencies may find it necessary to consider transitioning towards a green organization. This is not only imperative to address the projected increase in poverty exacerbated by climate change but also highlights the crucial need for social security protection now more than ever (IPCC, 2019). It is essential to maintain sources of income in environments that are clean, safe, healthy, and sustainable for the realization of everyone's fundamental right to social security (UNHCHR, 2023). The International Social Security Association (2023) also affirmed that climate change and environmental protection are becoming increasingly prominent in the global conversation around social security. This is due to the vital role that social security benefits and services play in lessening the detrimental socio-economic effects of climate change on individuals and families, as well as the mounting pressure on social security systems resulting from the changing nature of climate-related hazards.

While continuously improving the provision of social security benefits and services, the subject public organization, can help tackle climate change and its adverse socio-economic effects, and be an environmentally sustainable organization through innovative administrative actions (ISSA, 2023). One way is to cultivate conscious green behavior among employees through human resource management (HRM) or Green HRM. This approach can take various forms, such as promoting environmental awareness and supporting carbon-reducing initiatives in daily activities, implementing policies that encourage environmental responsibility, and integrating eco-friendly metrics into performance evaluations. By doing these actions, social security members, beneficiaries, and stakeholders can be motivated by the environmental responsibility demonstrated by social security institutions and employees (ISSA, 2023).

Fostering Employee Green Behavior

Studies have shown that the active involvement of human resources in environmental sustainability is crucial in promoting a greener environment on the premise of corporate green efforts. Green Human Resource Management (GHRM) plays a pivotal role in fostering sustainable habits and behaviors (Shafaei et al., 2020). It encompasses a set of HRM practices that strive to achieve green objectives, which are integral to corporate social responsibility initiatives (Jackson and Seo, 2010). As part of a key business strategy, it has produced positive results toward environmental sustainability for organizations (Ahmad, 2014; Bangwal and Tiwari, 2015).

Empirical data revealed that GHRM has an indirect effect on organizational citizenship behavior for the environment (OCBE) through green employee

empowerment, and the positive relationship between green employee empowerment and OCBE is moderated by individual green values (Hameed et.al., 2020). It has a direct and indirect impact on employee green behavior (EGB) composed of in-role/task-related green behavior (TGB) and extra-role/voluntary green behavior (VGB). The indirect influence of GHRM on VGB is mediated by a psychological green climate (PGC) which was found to have an impact on VGB and is moderated by individual green values. However, green HRM and psychological green climate do not affect the moderation of TGB by individual green values (IGV). Thus, green HRM plays a crucial role in promoting EGB, but through distinct social and psychological mechanisms (Jiang et al., 2012; Dumont et al., 2016).

Accordingly, EGB plays a crucial role in promoting sustainable development which is revealed to have a direct impact on the environmental protection efforts of their organizations. EGB refers to the actions that the employees take to minimize the negative impact on the environment and support its long-term sustainability (Peng et.al., 2019). Thus, it is crucial to explore the drivers and intentions to perform EGB, especially since employees who are engaged in environmental actions that are voluntary and unrewarded and go beyond their job functions, can significantly aid in reducing the environmental footprint of companies (Zhang et.al, 2021).

Transformation of human consumption is necessary to further contribute to sustainable development (Klaniecki and Wuropulos, 2018). The same is required in the workplace where employees need behavioral change to be an environmentally sustainable organization. As a communication strategy, the Social

and Behavioral Change Communication or SBCC framework can be used to facilitate positive changes in knowledge, attitudes, norms, beliefs, intentions, and behaviors of employees concerning environmental sustainability (Center for Social and Behavior Change Communication, n.d.).

There were several studies conducted to understand EGB in the context of the private sector, particularly in the hospitality management, information technology, and manufacturing industries (Wang, 2016; Ojo, 2019; Safari et.al, 2020; K, 2023). However, there were only limited studies conducted in the public sector (Stritch and Christensen, 2016; Yuriev et.al, 2021). Therefore, it is also important to study EGB in public organizations, the influences, and motivations to adopt EGB, and its contributions to the body of knowledge and overall sustainable development.

Theoretical Framework

This research was guided by the Theory of Planned Behavior (TPB), one of the most widely applied theories in social and behavioral sciences, including the research area on environmental sciences (Kan & Fabrigar, 2017). As an extension of the Theory of Reasoned Action by Martin Fishbein and Icek Ajzen, TPB was developed by Icek Ajzen in 1985 to incorporate perceived control behavior as the key determinant of behavior. In Azjen's TPB model, an individual's intentions to engage in a specific behavior serve as proximal antecedents to behavioral enactment, with attitudes, subjective norms, and perceived behavioral control as influential determinants shaping these intentions (Ajzen, 1985).

According to Ajzen (1985), the TPB has three constructs, namely: attitude, subjective norms, and perceived behavioral control. First, **attitude** which reflects an individual's positive or negative evaluation of performing a specific behavior. These attitudes are influenced by beliefs about the consequences of the behavior and the individual's overall value system. Secondly, **subjective norms** refer to the perceived social pressure or expectations regarding the behavior in question. This includes beliefs about what significant others think one should do and motivation to comply with those beliefs. Lastly, **perceived behavioral control** reflects an individual's perception of the ease or difficulty of performing the behavior. It encompasses beliefs about the presence of facilitating or hindering factors and the individual's confidence in their ability to overcome obstacles.

The TPB also suggests that intentions are the immediate antecedent to behavior. Intentions are influenced by attitudes, subjective norms, and perceived behavioral control. It provides the “motivation” to act in a specific behavior. The stronger an individual's intentions to perform a behavior, the more likely they are to engage in it (Ajzen, 1991).

Furthermore, TPB proposes that behavior itself is influenced by both intentions and perceived behavioral control. Thus, this framework provides an understanding of human behavior by considering the interaction between factors such as attitudes, subjective norms, perceived control, behavioral intentions, and actual actions.

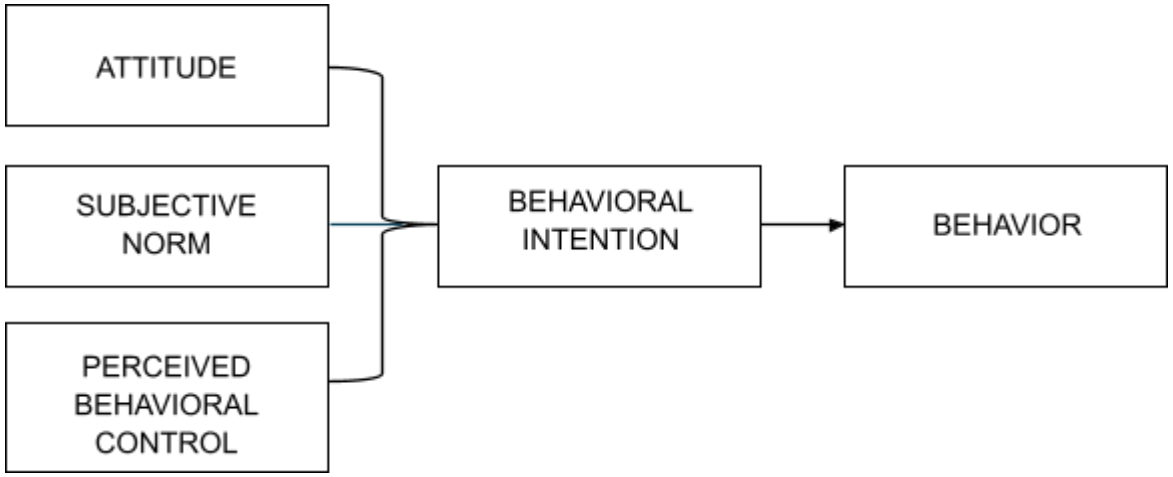

Figure 1: Theory of Planned Behavior by Ajzen (1985)

Conceptual Framework

Using the constructs of the Theory of Planned Behavior, the study assumed that employees' behavior towards EGB within an organization can be examined by looking at the employees' intentions to engage in green practices which are influenced by three factors: (1) attitude toward the behavior, (2) subjective norms, and (3) perceived behavioral control. Other factors like demographic characteristics and environmental knowledge may also influence or affect attitudes, subjective norms, perceived behavioral control, and the intention to engage in green behavior.

It can be surmised then that demographic characteristics and environmental knowledge affect an individual's attitude, subjective norms, and perceived behavioral control. Also, attitudes, subjective norms, and perceived behavioral control influence an individual's intention to engage in green behavior.

Examining these constructs helped predict what factors or variables would influence the adoption of EGB in the workplace, and how communication strategies will contribute to behavioral change. The intention to adopt Employee Green Behavior (iaEGB) can be modeled as a function of socio-demographic characteristics (SDC), environmental knowledge (EK), attitude (A), subjective norm (SN), and perceived behavioral control (PBC):

iaEGB = f (SDC, EK, A, SN, PBC)

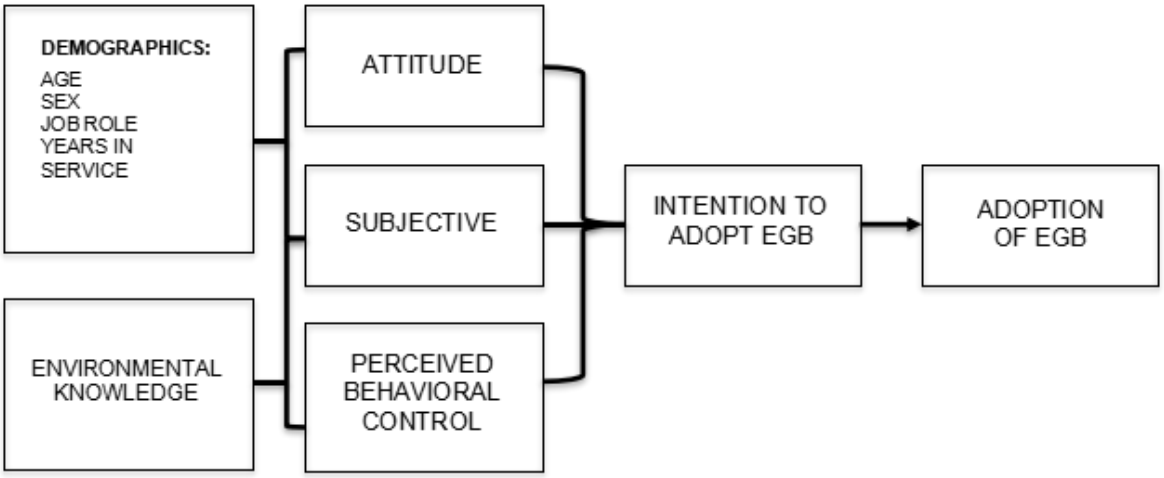

Figure 2: Determinants of Employees' Intentions to engage in EGB

Operational Definition of Terms

As defined by Fred Kerlinger, an operational definition provides or assigns meaning to variables by specifying how these variables were operationalized or used to measure in the study (Phillips, 1968).

Employee Green Behavior refers to the actions, decisions, and practices adopted by individuals within an organization that promote environmental

	sustainability. The adoption of this behavior can be predicted by an individual's intentions to perform the behavior. The higher behavioral intention scores indicate a greater likelihood of adopting it.
Environmental Knowledge	pertains to an individual's perceived knowledge or awareness of environmental issues and problems. This will be measured using a 5-point scale (1 = Not at all; 5 = To a great extent).
Attitude	refers to an individual's evaluation or feeling towards the importance and performance of environmental promotion and protection in the organization which will be measured using a 5-point scale (1 = Strongly Disagree; 5 = Strongly Agree).
Subjective Norm	refers to an individual's perspective on social pressures or expectations and the influence of colleagues regarding environmental protection. This will be measured using a 5-point scale (1 = Strongly Disagree; 5 = Strongly Agree).

Perceived Behavioral Control	refers to an individual's perception of the ease or difficulty of performing environmental protection and preservation. This will be measured using a 5-point scale (1= Not at all True; 5 = Exactly True)
Behavioral Intention	refers to an individual's intention to show and act in green behaviors. This will be measured using direct Yes/No questions.
Socio-demographic characteristics	refer to the social traits and statistical characteristics of the research participants, such as age, sex, job role, years in government service, and work location.

Chapter III

METHODOLOGY

This chapter outlines the research methods utilized in the study, covering the research strategy, participants and location, as well as the sampling and data collection techniques, and data analysis approaches.

Research Design

This study employed a descriptive-correlational research design to capture the participants' socio-demographic characteristics, environmental knowledge, attitudes, subjective norms, perceived behavioral control, and intentions to adopt employee green behavior (EGB), including the relationships of these variables. This design allowed the systematic description, explanation, and validation of existing situations or phenomena using data collection instruments (Atmowardoyo, 2018).

Participants of the Study

As this study focused on public sector workers' green behavior, the research participants were employees from the selected government-owned and controlled corporation (GOCC), assigned within NCR branches of the Operations. These individuals have direct interactions with the public given the nature and scope of their work, that characteristics make them "influencers" or "champions" for environmentally sustainable practices.

Locale of the Study

This study was conducted in the selected GOCC in the Philippines, specifically in one of its Operation Groups with the largest scope and highest number of personnel. Given the organization's extensive work and mandate, gaining access to their facilities and securing employee participation was crucial for collecting comprehensive data. Adherence to official protocols and procedures was observed when access to information and employee participation were requested.

Sampling Scheme

Participants for this study were selected using a simple random sampling technique. This method ensured that every member of the population has an equal and fair chance of being chosen. As noted by Horton (2024), simple random sampling reduces selection bias by providing individuals with a probability-based opportunity to be selected. Additionally, it is straightforward to implement compared to other random sampling methods and requires minimal specialized skills.

Research Instrument

For the instrumentation, this study used an online survey questionnaire written in English as the primary data gathering tool. The survey questionnaire was divided into six parts, including (1) Socio-Demographic Characteristics, (2) Environmental Knowledge, (3) Attitude, (4) Subjective Norms, (5) Perceived

Behavioral Controls, and (6) Intentions to Employee Green Behavior. Each part was adapted from validated instruments in the relevant literature and organized in a way that aligned with the research objectives.

Specifically, the online questionnaire, developed using the adapted instruments, has undergone confirmation and permission from the authors to be used for data collection. The Likert Scale was used to measure participants' levels of knowledge, attitude, subjective norms, perceived behavioral control, and intention to adopt EGB. This allowed the participants to express their thoughts within the given categories.

Moreover, pilot testing was conducted to assess the questionnaire's validity, comprehensiveness, logic, acceptability, length, and adherence to study objectives. Feedback collected from the pilot testing was subjected to Cronbach's Alpha, which guided the enhancement of the instrument to ensure its effectiveness in capturing relevant data.

Data Gathering Procedure

Data collection commenced with a formal permission request from the organization's HR management head about the study's conduct. The request outlined the study's background, scope, relevance, and objectives. Data-gathering procedures were also coordinated with them.

The questionnaire was administered electronically, prioritizing participant convenience while upholding strict confidentiality measures. All participants were given informed consent in line with the Data Privacy Act and the choice to decline

to answer or withdraw from the survey at any time. Participation in this study was both voluntary and anonymous. The research objectives were thoroughly explained, and participants were assured of the confidentiality and anonymity measures in place.

Data Analysis

Grounded in the Theory of Planned Behavior and using its variables, a quantitative approach was used to assess and validate hypotheses through statistical techniques and standard measures. Quantitative research involves collecting numerical data, both inherent and imposed, through diverse methodologies to consolidate, show relationships within the data, and make comparisons across aggregated datasets (Coghlan and Brydon-Miller, 2014).

The data collected was analyzed using statistical techniques. A combination of descriptive and inferential statistics was used to tabulate and summarize the data. In analyzing the data, mean scores and frequency distributions were obtained to measure the respondents' demographic profile, environmental knowledge, attitude, norms, behavioral controls, intentions, and engagement with EGB. Cross tabulations were utilized to determine if certain factors would validate possible relationships among other variables. Pearson or Spearman Correlation coefficients and Multiple Regression Analysis were applied to examine and establish the relationship between variables. The findings were interpreted to draw conclusions and implications for the study.

Chapter IV

RESULTS AND DISCUSSION

This chapter presents the data collected from the research participants, organized in statistical tables, with narrative analysis and interpretation.

I. SOCIO-DEMOGRAPHIC CHARACTERISTICS

This section provides the socio-demographic profile of the research participants, including variables such as sex, generation, job role, years in government service, and branch office.

Table 1
Distribution of Respondents by Sex

Gender	Frequency	Percentage
Male	89	31.2
Female	196	68.8
Total	**285**	**100.0**

Table 1 presents the frequency and percentage distribution of respondents by sex. Of the 285 respondents, 89 or 31.2% are male, while 196 or 68.8% are female. This indicates that the representation of women is higher than men, which is consistent with the overall demographics of government human resources. According to the 2024 Inventory of Government Human Resources (IGHR) System, female government personnel comprised 1,204,589 (59.12%), while male personnel accounted for 832,867 (40.88%). A similar trend is observed in the NCR Region under the Government-Owned and Controlled Corporations (GOCCs)

category, where the number of female employees exceeds male employees by more than 1% (Civil Service Commission, 2024).

Table 2

Distribution of Respondents by Generation

Generation	Frequency	Percentage
Baby Boomers (1946-1964)	15	5.3
Generation X (1965-1980)	108	37.9
Millenials (1981-1996)	158	55.4
Gen Z (1997-2012)	4	1.4
Total	**285**	**100.0**

Table 2 presents the frequency and percentage distribution of respondents by generation. Based on the results, 15 or 5.3% of the respondents belong to the Baby Boomer generation (1946–1964), 108 or 37.9% are from Generation X (1965–1980), 158 or 55.4% are from Generation Y or Millennial (1981–1996), and 4 or 1.4% are from Generation Z (1997–2012).

The results indicate that Millennials are the dominant generational group in the study, comprising more than half of the respondents. This means that most of the employees in the public organizations are young adults from Generation Y or the Millennials. Based on the 2024 IGHR Report by the Civil Service Commission, individuals born between 1989 and 1998, or Millennials aged 26–35 (29.63%), are the largest age group in government service.

Generation Y's strong representation in the government workforce could potentially lead to a greater promotion of green behaviors in the workplace, given that this generation, along with Gen Zs, was found to be highly engaged in addressing climate change based on the study conducted by Pew Research Center in 2021. Simon-Kutcher & Partners (2021) also found that Millennials and

Gen Zs are more committed to environmental sustainability than the older generations, which is reflected in their attitudes toward sustainability, and willingness to pay for sustainable products.

Table 3

Distribution of Respondents by Job Role

Job Role	Frequency	Percentage
Member Services	98	34.4
Accounts Management	59	20.7
Tellering	29	10.2
Administrative	36	12.6
Supervisory/Managerial	63	22.1
Total	**285**	**100.0**

Table 3 presents the frequency and percentage distribution of respondents by Job Role. Among the 285 respondents, 98 or 34.4% are assigned in the Member Services, 59 or 20.7% are in Accounts Management services, 29 or 10.2% are in Tellering services, 36 or 12.6% are in Administrative support services, while 63 or 22.1% are in Supervisory/Managerial functions. The results indicate that most of the respondents are frontline employees who provide services to the members or customers of the organization.

Table 4

Distribution of Respondents by Years in Government Service

Years in Government Service	Frequency	Percentage
Less than a year	2	0.7
1-10 years	144	50.5
11-20 years	74	26.0
21-30 years	55	19.3
31-40 years	7	2.5
More than 40 years	3	1.1
Total	**285**	**100.0**

Table 4 presents the frequency and percentage distribution of respondents by Years in Government Service. Among the 285 respondents, 2 or 0.7% are with less than a year in government service, 144 or 50.5% are with 1-10 years, 74 or 26% are with 11-20 years, 55 or 19.3% are with 21-30 years, 7 or 2.5% are with 31-40 years, while 3 or 1.1% are with more than 40 years in government service. The results indicate that the majority of the respondents are new to the organization, with 1-10 years of experience working in the government.

Table 5

Distribution of Respondents by Branch Office

Branch Office	Frequency	Percentage
NCR North	91	31.9
NCR East	73	25.6
NCR West	47	16.5
NCR South	74	26.0
Total	**285**	**100.0**

Table 5 presents the frequency and percentage distribution of respondents by Branch Office. Among the 285 respondents, 91 or 31.9% are assigned in the

NCR North branches, 73 or 25.6% are in NCR East branches, 47 or 16.5% are in NCR West branches, while 74 or 26% are in NCR South branches.

II. ENVIRONMENTAL KNOWLEDGE

Table 6
Level of Environmental Knowledge

Statements	Mean	SD	Interpretation
1. I know about the problem of environmental pollution caused by human activities.	3.81	0.728	To a large extent
2. I have good knowledge of environmental issues.	3.54	0.743	To a large extent
3. I can see with my own eyes that the environment is deteriorating.	4.07	0.718	To a large extent
4. I am aware of how to protect the environment from pollution on office premises.	3.65	0.744	To a large extent
Overall	**3.77**	**0.614**	**To a large extent**

Legend: 1.00-1.79 (Not at all), 1.80-2.59 (Little), 2.60-3.39 (Somewhat), 3.40-4.19 (To a large extent), 4.20-5.00 (To a great extent)

Table 6 shows the level of environmental knowledge among respondents. The overall mean score of 3.77 (SD = 0.614) indicates that respondents perceived themselves as possessing environmental knowledge *"to a large extent".* The respondents highly recognized that the environment is deteriorating (M = 4.07, SD = 0.718). Likewise, the respondents are knowledgeable about the problem of environmental pollution caused by human activities (M = 3.81, SD = 0.728), the environmental issues (M = 3.54, SD = 0.743), and ways to protect the environment from pollution within the workplace (M = 3.65, SD = 0.744).

These findings suggest that while respondents have substantial knowledge about the issues and realities concerning the environment, similar to the findings

of Fawehinmi et.al (2022), there is still a need to increase environmental knowledge to a greater extent, through interventions such as education, communication, training, and awareness campaign programs.

III. ATTITUDE

Table 7
Level of Attitude towards EGB

Statements	Mean	SD	Interpretation
1. It is essential to promote green living on the part of my organization.	4.51	0.680	Strongly Agree
2. More environmental protection works are needed from my organization.	4.26	0.727	Strongly Agree
3. It is very important to raise environmental awareness among employees.	4.60	0.600	Strongly Agree
4. Environmental protection works are not simply a waste of money and resources.	4.34	0.835	Strongly Agree
5. Environmental protection issues are our business.	4.24	0.791	Strongly Agree
6. The organization thinks environmental protection is meaningful.	4.13	0.753	Agree
7. It is wise for the organization to spend a vast amount of money on promoting environmental protection.	3.77	0.908	Agree
Overall	**4.26**	**0.578**	**Strongly Agree**

Legend: 1.00-1.79 (Strongly Disagree), 1.80-2.59 (Disagree), 2.60-3.39 (Neutral), 3.40-4.19 (Agree), 4.20-5.00 (Strongly Agree)

Table 7 shows the respondents' attitudes toward EGB. The overall mean score of 4.26 (SD = 0.578) indicates a strong agreement with the importance of EGB in the workplace, with raising environmental awareness among employees as the highest-rated aspect (M = 4.60, SD = 0.600). This highlights the importance of education in promoting sustainable practices. The respondents also strongly agreed that promoting green living (M = 4.51, SD = 0.680) and increasing

environmental protection efforts (M = 4.26, SD = 0.727) within workplaces are essential organizational priorities. Likewise, the respondents strongly agreed that environmental protection is not a waste of resources (M = 4.34, SD = 0.835) and that it is everyone's business to protect the environment (M = 4.24, SD = 0.791).

While respondents agreed that the organization finds environmental protection meaningful (M = 4.13, SD = 0.753), they are slightly less convinced about the necessity of allocating substantial financial resources to these initiatives (M = 3.77, SD = 0.908). These findings suggest that employees recognize the significance of environmental protection and expect the organization to play an active role in sustainability efforts, but not to spend a great amount of financial resources to do it.

This suggests that the organization may focus on diligently committing financial resources to environmental programs, and strengthen employees' engagement in sustainability efforts by integrating EGB into corporate values, to further align their personal beliefs with the organization's commitment to environmental responsibility (Kanwal et.al, 2024).

IV. SUBJECTIVE NORMS

Table 8
Level of Subjective Norms in EGB performance

Statements	Mean	SD	Interpretation
1. Most people who are important to me think I should protect the environment.	3.80	0.745	Agree
2. Most people who are important to me want me to be environmentally friendly.	3.81	0.756	Agree
3. Most people whose opinion I value think that it is important to reduce waste.	3.99	0.682	Agree
4. Most people who I respect and admire engage in environmentally friendly behaviors.	3.72	0.721	Agree
5. Most people who are important to me protect the environment.	3.76	0.708	Agree
6. It is expected of me to be environmentally friendly.	4.08	0.667	Agree
7. I feel under social pressure to preserve the environment.	3.30	0.838	Neutral
8. Most people who I admire engage in the protection of the environment	3.59	0.689	Agree
Overall	**3.76**	**0.553**	**Agree**

Legend: 1.00-1.79 (Strongly Disagree), 1.80-2.59 (Disagree), 2.60-3.39 (Neutral), 3.40-4.19 (Agree), 4.20-5.00 (Strongly Agree)

Table 8 presents the respondents' subjective norms regarding the performance of EGB. The overall mean score of 3.76 (SD = 0.553) indicates that respondents generally agreed that their social circles expected them to perform EGB. The respondents agreed that people they value expect them to be environmentally friendly (M = 4.08, SD = 0.667). to reduce waste (M = 3.99, SD = 0.682), and to protect the environment (M = 3.80, SD = 0.745). However, the statement regarding feeling under social pressure to preserve the environment gained the lowest rating (M = 3.30, SD = 0.838), indicating a neutral stance on external pressure in preserving the environment.

These findings suggest that social pressures, specifically from friends and colleagues, may influence the enactment of EGB in the workplace. Hasebrook et.al (2022) also supported that social pressure has a positive influence on employees' green behavior. Thus, organizations aiming to promote EGB engagement may benefit from fostering stronger normative influences, such as leadership-driven green initiatives and peer recognition programs. These initiatives shall reinforce sustainable behaviors as a collective expectation rather than an individual choice.

V. PERCEIVED BEHAVIORAL CONTROL

Table 9

Level of Perceived Behavioral Control in EGB performance

Statements	Mean	SD	Interpretation
1. I find it easy to be friendly with the environment.	3.74	0.797	Very True
2. I find it difficult to preserve resources and recycle.	2.71	1.026	Moderately True
3. I am confident that I can protect the environment.	3.59	0.833	Very True
4. I can control my involvement in environmental preservation initiatives.	3.43	0.822	Very True
5. I am fully capable of protecting the environment.	3.60	0.888	Very True
6. Thanks to my resourcefulness, I always find a way to be friendly with the environment.	3.52	0.850	Very True
7. I am in full control of my actions to protect the environment.	3.66	0.872	Very True
8. I am good at leading a green lifestyle.	3.20	0.892	Moderately True
9. It is not easy for me to stick to my sustainability goals and preserve the environment.	2.87	0.956	Moderately True
10. Being friendly with the environment is out of my hands.	2.11	1.178	Slightly True
Overall	**3.24**	**0.589**	**Moderately True**

Legend: 1.00-1.79(Not at all True),1.80-2.59(Slightly True), 2.60-3.39(Moderately True), 3.40-4.19(Very True), 4.20-5.00(Exactly True)

Table 9 presents the respondents' level of perceived behavioral control in green behaviors. The overall mean score of 3.24 (SD = 0.589) falls within the "Moderately True" range, indicating that while respondents generally believe they have control over their environmental actions, some challenges remain. Most respondents find it easy to be environmentally friendly (M = 3.74, SD = 0.797) and

feel confident in their ability to protect the environment (M = 3.59, SD = 0.833). Additionally, they perceive themselves as capable of engaging in environmental preservation (M = 3.60, SD = 0.888) and maintaining control over their eco-friendly actions (M = 3.66, SD = 0.872).

However, there is some indication of difficulty in consistently preserving resources and recycling (M = 2.71, SD = 1.026), as well as adhering to sustainability goals (M = 2.87, SD = 0.956). The lowest-rated statement suggests that respondents largely reject the notion that being environmentally friendly is beyond their control (M = 2.11, SD = 1.178). These findings imply that while employees generally perceive themselves as capable of engaging in green behaviors, certain barriers, such as resource availability or structural limitations, may hinder their full commitment. By addressing these external factors, the organizations may improve the performance of sustainable practices and further drive the adoption of green behaviors among employees (Tantawi et.al, 2024).

VI. BEHAVIORAL INTENTIONS

Table 10

Level of Behavioral Intention in Adopting EGB

Statements	Mean	SD	Interpretation
1. I will minimize my environmental footprint at work by using resources efficiently and responsibly.	4.27	0.699	Very Likely
2. I will conserve energy and resources by turning off lights, computers, and other devices when not in use at work and reduce waste by reusing or recycling materials whenever possible in the workplace.	4.52	0.614	Very Likely
3. I will work sustainably by choosing environmentally responsible alternatives and supporting innovative practices for sustainability.	4.29	0.689	Very Likely
4. I will influence my colleagues by encouraging them to adopt green behaviors.	4.22	0.726	Very Likely
5. I will actively support my organization's efforts to adopt and promote green practices.	4.43	0.671	Very Likely
Overall	**4.35**	**0.592**	**Very Likely**

Table 10 shows the respondents' behavioral intentions in EGB. The overall mean score of 4.35 (SD = 0.592) falls within the "Very Likely" category, indicating a strong commitment to engaging in sustainable practices at work. The highest-rated intention is conserving energy and resources, such as turning off lights and reducing waste (M = 4.52, SD = 0.614), suggesting that respondents prioritize simple, actionable sustainability efforts. Similarly, a high level of commitment is observed in supporting organizational green initiatives (M = 4.43, SD = 0.671) and choosing environmentally responsible alternatives (M = 4.29, SD = 0.689). Respondents also express a strong likelihood of minimizing their environmental footprint (M = 4.27, SD = 0.699) and influencing colleagues to

adopt green behaviors (M = 4.22, SD = 0.726). These findings imply that employees are not only willing to engage in personal sustainability practices but also actively support and promote green initiatives within their organization. To maximize this commitment, the organization can reinforce behavioral intentions by implementing structured sustainability programs, recognizing and rewarding eco-friendly actions, and fostering a workplace culture that encourages collective responsibility for environmental stewardship.

VII. RELATIONSHIP OF SOCIO-DEMOGRAPHIC CHARACTERISTICS TO ATTITUDES, SUBJECTIVE NORMS AND PERCEIVED BEHAVIORAL CONTROLS

Table 11

Significant correlation between respondents' socio-demographic characteristics and their attitudes, subjective norms, and perceived behavioral controls

Variables	Profiles	Chi-Square	df	p-value	Decision	Conclusion
Attitudes	Sex	2.066	3	0.559	Retain Ho	Not Significant
	Year of Birth	5.319	9	0.806	Retain Ho	Not Significant
	Job Role	8.759	12	0.723	Retain Ho	Not Significant
	Years in Government Service	14.464	15	0.491	Retain Ho	Not Significant
	Branch Office	9.002	9	0.437	Retain Ho	Not Significant
Subjective Norms	Sex	2.722	4	0.605	Retain Ho	Not Significant
	Year of Birth	7.375	12	0.832	Retain Ho	Not Significant
	Job Role	10.910	16	0.815	Retain Ho	Not Significant
	Years in Government Service	8.388	20	0.989	Retain Ho	Not Significant
	Branch Office	11.499	12	0.487	Retain Ho	Not Significant
Perceived Behavioral Controls	Sex	4.542	3	0.209	Retain Ho	Not Significant
	Year of Birth	8.316	9	0.503	Retain Ho	Not Significant
	Job Role	6.590	12	0.883	Retain Ho	Not Significant
	Years in Government Service	14.345	15	0.500	Retain Ho	Not Significant
	Branch Office	6.366	9	0.703	Retain Ho	Not Significant

*Note: The p-value is significant below 0.05**

Table 11 presents the correlation between respondents' socio-demographic characteristics and their attitudes, subjective norms, and perceived behavioral

control regarding EGB. The results indicate that none of the socio-demographic variables, such as sex, year of birth, job role, years in government service, or branch office, showed a statistically significant relationship with any of the three behavioral constructs, as all p-values exceeded the 0.05 significance threshold.

This suggests that attitudes ($p > 0.437$), subjective norms ($p > 0.487$), and perceived behavioral control ($p > 0.209$) toward EGB are not significantly influenced by demographic factors. The findings imply that environmental attitudes, social influences, and perceived ability to engage in green behaviors are relatively consistent across different demographic groups within the organization. Similar to the findings of Phang and Ilham (2023) and Botetzagias et al. (2015) which revealed that socio-demographic variables such as gender, background, and age have no direct significant relationship with the attitude, subjective norm and perceived behavioral control, including pro-environmental behavior and recycling intention. This uniformity suggests that sustainability initiatives can be implemented broadly without needing extensive customization for specific demographic segments.

VIII. RELATIONSHIP OF ENVIRONMENTAL KNOWLEDGE TO ATTITUDES, SUBJECTIVE NORMS AND PERCEIVED BEHAVIORAL CONTROLS

Table 12

Significant correlation between respondents' environmental knowledge and their attitudes, subjective norms, and perceived behavioral controls

Variables	Spearman's rho	p-value	Decision	Conclusion
Attitudes	0.438	0.000**	Reject Ho	Significant
Subjective norms	0.339	0.000**	Reject Ho	Significant
Perceived Behavioral Controls	0.403	0.000**	Reject Ho	Significant

***Correlation is significant at the 0.05 level.*

Table 12 depicts the results of a Spearman's rho correlation analysis examining the relationship between respondents' environmental knowledge and their attitudes, subjective norms, and perceived behavioral control in adopting EGB. The results indicate statistically significant positive correlations between environmental knowledge and all three variables, with attitudes (rho = 0.438, p = 0.000), subjective norms (rho = 0.339, p = 0.000), and perceived behavioral control (rho = 0.403, p = 0.000) all showing moderate associations.

These findings suggest that higher levels of environmental knowledge are associated with more positive attitudes toward EGB, stronger social influences encouraging sustainable behavior, and greater perceived ability to engage in green practices. The strongest correlation was found between environmental knowledge and attitudes, indicating that individuals with greater awareness of environmental issues tend to hold more favorable views toward sustainability. The significant relationship between knowledge and subjective norms implies that well-informed individuals may be more receptive to social expectations regarding environmental responsibility. Similarly, the correlation with perceived behavioral control suggests that knowledge enhances individuals' confidence in their ability to perform green behaviors.

IX. EFFECT OF ATTITUDES, SUBJECTIVE NORMS, AND PERCEIVED BEHAVIORAL CONTROLS ON BEHAVIORAL INTENTIONS

Table 13

Respondents' Attitudes, Subjective Norms, and Perceived Behavioral Controls effect on Their Intention to Adopt EGB

Predictor Variable	B	SE B	β	t	p	Decision	Conclusion
Attitudes	0.202	0.068	0.197	2.964	.003	Reject Ho	Significant
Subjective Norms	0.139	0.078	0.130	1.788	.075	Retain Ho	Not Significant
Perceived Behavioral Controls	0.184	0.066	0.183	2.792	.006	Reject Ho	Significant

R^2 = .175, p < .000
Dependent Variable: Behavioral Intentions to Engage in EGB
Note. B = unstandardized regression coefficient; SE B = standard error of the coefficient; β = standardized coefficient; t = t-value; p = p-value

Table 13 presents the Multiple Regression Analysis examining the effect of respondents' attitudes, subjective norms, and perceived behavioral control on their behavioral intentions to engage in employee green behavior (EGB). The overall model explains 17.5% of the variance in behavioral intentions (R^2 = 0.175, p < 0.000), indicating that these factors collectively contribute to shaping individuals' intentions to engage in EGB.

Among the predictor variables, attitudes (B = 0.202, SE B = 0.068, β = 0.197, t = 2.964, p = 0.003) and perceived behavioral control (B = 0.184, SE B = 0.066, β = 0.183, t = 2.792, p = 0.006) had significant positive effects on behavioral intentions, suggesting that individuals with more favorable attitudes and greater perceived control over green behaviors are more likely to intend to engage in EGB. However, subjective norms (B = 0.139, SE B = 0.078, β = 0.130, t = 1.788, p = 0.075) were not a significant predictor, indicating that social pressure or expectations from others do not strongly influence respondents' intentions.

These findings suggest that attitude and perceived behavioral control are strong predictors of the intention to perform EGB, whereas subjective norms exert a weaker or statistically non-significant influence. This aligns with the findings of

Selamat (2023) and Hasan & Suciarto (2020), who argued that subjective norms may have a limited impact on behavioral intention because they are externally driven, reflecting social pressure rather than personal conviction. In contrast, both attitude and perceived behavioral control stem from internal evaluation or self-assessed capabilities, making them more influential in shaping one's behavioral intention.

Chapter V

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary

This study explored the determinants of intention to engage in green behavior among public sector workers in the Philippines using descriptive-quantitative research approaches. Specifically, to determine the employees' socio-demographic characteristics, level of environmental knowledge, attitudes, subjective norms, perceived behavioral controls, and behavioral intentions, as well as to examine the relationships of demographics and environmental knowledge to their attitudes, subjective norms, and perceived behavioral, and their influence on behavioral intentions to perform EGB.

The study employed a simple random sampling technique in selecting the research participants. An online survey was used as the primary data collection and had six parts: (1) socio-demographic characteristics, (2) environmental knowledge, (3) attitudes, (4) subjective norms, (5) perceived behavioral control, and (6) behavioral intentions. Statistical approaches such as Spearman's rho correlation and multiple regression were utilized to examine the results and determine the relationships among variables. This allowed for a quantitative representation of the data findings and clear understanding of the correlations between the variables. Purposely, this research aimed to determine the respondents' environmental knowledge, attitudes, subjective norms, perceived behavioral control, and behavioral intentions, and investigate the relationships among the variables; demographics and environmental knowledge to the

respondents' attitude, subjective norms, and perceived behavioral control, as well as their influence on behavioral intentions.

Based on the survey, the sample was composed mostly of female respondents (68.8%), with males comprising 31.2%. A majority belonged to Generation Y or Millennials (55.4%). Most participants held roles in Member Services (34.4%), were assigned to the NCR North Division (31.9%), and had between 1 to 10 years of service (50.5%).

The respondents exhibited an adequate knowledge of ecological realities, issues, and concerns, specifically they know about the human causes of environmental pollution, the ongoing deterioration of the environment, and the environmental protection activities to mitigate pollution within their workplaces.

Regarding attitudes, the respondents strongly agreed that promoting green practices, raising environmental awareness, and implementing environmental protection initiatives within the organization are essential. Respondents also firmly believed that efforts toward environmental sustainability are not a waste of financial resources and that protecting the environment is a shared responsibility. In terms of organizational involvement, they agreed that the organization recognizes the importance of environmental protection and considers it worthwhile to allocate significant resources toward promoting sustainability initiatives.

The respondents expressed favorable perceptions regarding the influence of people they value and respect in performing green behaviors, such as their colleagues and friends. These individuals appear to positively shape the respondents' environmental actions, perceptions, and behaviors. They acknowledged that their support and expectations to be environmentally friendly

play a meaningful role in shaping their pro-environmental engagement, despite having no strong direct pressure from them to preserve the environment.

The respondents strongly believed that adopting environmentally friendly practices is easy and within their capacity. They expressed confidence in their ability to protect the environment, felt they had control over participating in environmental preservation efforts, and consistently finding ways to be eco-friendly. They also believed they had full control over their actions related to environmental protection. However, they held moderate beliefs about their ability to lead a fully green lifestyle, acknowledging some difficulty in conserving resources, recycling, and maintaining sustainability goals. Additionally, there was a slight perception among respondents that being environmentally friendly is, at times, beyond their control.

The respondents expressed a strong intention to adopt EGB in the workplace. They indicated a high likelihood of minimizing their environmental footprint by using resources efficiently and responsibly. They are very likely to conserve energy by turning off lights, computers, and other devices when not in use, and to reduce waste through reusing or recycling materials whenever possible. Additionally, respondents showed a strong commitment to working sustainably by opting for environmentally responsible alternatives and supporting innovative sustainability practices. They also expressed a willingness to influence colleagues by encouraging green behaviors and actively supporting their organization's efforts to promote and implement environmentally friendly initiatives.

Relationships between Variables

Demographic Characteristics and Attitude, Subjective Norm, and Perceived Behavioral Control. Demographic characteristics such as sex, year of birth, job role, branch office, and years in government service were found to have no significant relationships with attitudes, subjective norms, and perceived behavioral control in performing green behaviors in the workplace.

Environmental Knowledge and Attitude, Subjective Norm, and Perceived Behavioral Control. Based on the correlation analysis, environmental knowledge has significant relationships with attitude, subjective norm, and perceived behavioral control in performing or adopting green behaviors in the workplace.

Attitude, Subjective Norm, and Perceived Behavioral Control, and Behavioral Intention. Attitude and perceived behavioral control significantly influence the behavioral intention to perform EGB, whereas subjective norm does not exhibit a significant effect.

Conclusion

The study revealed significant insights into employees' intention to engage in EGB within the public organization in the Philippines, particularly, in understanding the factors that influence their behavioral intentions to perform EGB. It has uncovered the employees' knowledge of environmental concerns, attitude towards

green behaviors, and subjective norms, perceived behavioral control and behavioral intentions in performing EGB. It also highlighted how employees' environmental knowledge affects other factors, as well as how attitude and perceived behavioral control significantly influence their intentions to perform EGB.

Globally, business and government organizations have become more concerned about the environment and actively support and incorporate sustainability as part of their strategic business priorities. Including public organizations in the Philippines called for action to promote environmental stewardship in support of the global efforts to sustain the environment. These changes in the business outlook can be attributed to the trend of business leaders and employees having an increased level of knowledge, either on the personal or organizational level, on the effects of climate change and environmental degradation.

In the public organization, employee-respondents were found to be knowledgeable about current environmental challenges such as pollution, degradation, resource depletion, and climate change, as well as in the practical measures to reduce the impact of these environmental concerns. Likewise, they possessed positive attitudes towards performing EGB, especially in raising environmental awareness in the workplace. This suggests that they give much importance on information, education and communication about environmental sustainability, not only for themselves but also for the others, which further reflected on their stance about the influence of others in their engagement with green behaviors, their control and intention to conserve resources, reduce waste, and adopt other sustainable practices in their daily work routines.

As for subjective norms, employees viewed the perceptions of their peers, such as their colleagues or friends, as an important factor influencing their EGB response. Even though it is not strongly associated with their intentions, it still contributes to how EGB is shaped, especially in the Philippines where the predominant culture is hierarchical and collective. In this regard, creating an environment where green practices are exhibited and encouraged by both peers and leaders can promote a shared responsibility for environmental sustainability.

Additionally, participants of the study have expressed a strong sense of self-capacity in executing green practices in the workplace. This is a significant factor that influences their intention to adopt EGB. It implies that employees who believe that they are able, and have an opportunity, to perform green actions are more inclined to do so. However, there are still reported challenges in maintaining these behaviors. This includes the consistency to lead a green lifestyle, and also adhering to long-term environmental goals. This highlights the importance of enabling employees in demonstrating EGB. This can be done by not only giving individual encouragement, but also in providing adequate resources, institutional support, and clearly defined green policies. This can enhance the employees' perceived behavioral control, which also increases their likelihood in engaging in EGB. This emphasizes the idea that not only is personal motivation important, but equally significant is the structural and organizational support in sustaining meaningful behavioral change.

The relationship between environmental knowledge and other psychological factors also deserves attention. Awareness and understanding of environmental issues are essential in shaping how employees think and feel about green

behavior. However, knowledge needs to be paired with practical application for it to lead to action. A workplace environment that values and models sustainability also helps in this aspect. This suggests that communication efforts do not end at information sharing, but extend to demonstrating relevance, encouraging reflection, and highlighting personal and collective impact.

Given these findings, it is evident that the organization needs to go beyond awareness campaigns and one-time activities to promote EGB. Sustainability should be integrated into the organization's core. This can be through policymaking, culture building, and work activities. Having programs that recognize employee contributions, providing necessary training, and encouraging peer engagement, could more effectively support this shift.

Ultimately, this study asserted the relevance of the Theory of Planned Behavior, especially in understanding EGB in the context of public organizations. It highlighted the idea that behavior change should be approached as both a personal and institutional process, where knowledge, attitude, norms, and control factors must align to promote a meaningful, and long-term environmental participation among employees.

These insights can serve as a valuable increment for policymakers, development workers, and sustainability champions within public institutions. It can equip them in designing well-crafted communication strategies, green initiatives, and behavior-focused interventions. As environmental challenges continue to increase as the years pass, it is apparent that employees should have a more proactive role in an organization's sustainability efforts. Supporting and scaling EGB does not only constitute a positive contribution to organizational performance, but also to the larger goals of national and global stewardship.

Recommendations

In light of the study's findings and the conclusions, the following recommendations are hereby presented.

For Future Studies

1. ***Explore Additional Predictors of Behavioral Intention.*** The study employed the Theory of Planned Behavior in exploring public sector employees' behavioral intentions in adopting EGB. While this study found that attitude and perceived behavioral control significantly influence behavioral intentions, subjective norms did not show a significant effect. Future studies can explore other potential predictors of behavioral intention to gain a different perspective and understanding of what drives EGB among public sector employees.

2. ***Use of Qualitative or Mixed-Methods Approaches.*** Employing qualitative or mixed methods, such as interviews, focus group discussions, observations and document analysis, can provide a deeper understanding of the attitudes, subjective norms, perceived behavioral control, and intentions in performing EGB. These approaches may uncover context-specific insights that were not captured by structured surveys.

3. ***Comparative Studies Across Sectors and Regions.*** The present study focused solely on a single public organization in the Philippines, which means that there is still space for a much larger sample in the public sector. Studies in the private sector can also be conducted to provide insight

accordingly. Comparative research on green behavior across different sectors or geographic regions can also be explored to discover contextual or institutional differences in influencing EGB.

For Public Organizations

The findings of the study revealed that employees in the public organization validated the significance of attitudes and perceived behavioral control on public sector employees' intention to adopt EGB. Therefore, it is recommended for the organization to create policies providing support that would help employees stimulate green behavior in the workplace.

1. ***Reinforcing EGB in the Workplace.*** Based on the results of the study, environmental knowledge significantly influenced employee attitudes, subjective norms, and perceived behavioral control. Public institutions should bank on this and establish regular environmental training programs highlighting practical knowledge and sustainability practices in the workplace. These programs can be integrated into employee onboarding, regular training, and professional development.

   The study also shows that while employees are inclined to engage in green behavior, there are challenges to actual practice. Public organizations can help reinforce this by providing structural and logistical support to facilitate green behavior. This can be in the form of green equipment in the office, such as recycling bins and energy-efficient equipment appliances.

2. ***Promoting a Culture of Shared Responsibility.*** The participants of the study believed that protecting the environment is a shared responsibility. The organization can benefit from this by enacting policies that foster a collective environmental mindset. This can be done by including sustainability as part of the agency's mission, vision, and strategic plans. Employee engagement could also include multi-level consultation for policy development, feedback, and environmental awareness campaigns.

For Development Communication

- ***Environmental Communication Strategies.*** Based on the study, environmental knowledge is a core element of having positive attitudes towards EGB. In the field of Development Communication, this highlights the importance of effective environmental communication strategies. Proper messaging should be done using clear, regular, and engaging materials containing useful information about the environment. It should be informative, but not difficult to digest.

  One way to do this is to focus on the causes and effects of environmental degradation as a result of workplace activity. A simple example would be to compute energy consumption when a person leaves their computer plugged into electrical outlets even when not in use. Following this example, providing specific and actionable steps that employees can take in their daily jobs or in their workspaces can also help. In this case, a

simple instruction to encourage employees to unplug their computers immediately after work would suffice.

It is also very important to ensure that the communication materials used are appropriate for environmental messaging. The colors used should be relevant to the message, and there should be sufficient but simple infographics, or short video formats to enhance retention and engagement. A few numbered steps to take, or a short but engaging video of employees we see everyday performing this simple task, showcases the small but impactful outcome of this simple activity.

On Practical Application

1. ***Recognizing Green Efforts.*** Environmental programs can get more engaging by gamifying participation and rewarding them for their compliance through incorporating environmental programs into corporate recognition programs. Whenever employees not only comply but set a good example to others by showing how simple and also rewarding it is to perform green behaviors, others can be encouraged to do the same. Fun and creative ways to get employees to participate in green activities are an effective way to get them to engage.

   Setting up a corporate recognition program that rewards green activities can also encourage more employee participation. Instead of individuals performing the said activities as an obligation, sustaining them can be done through positive reinforcement. A token for a “green” job well done,

or even through simple recognition across a department, or even a whole organization, can make a positive impact on the employee's willingness to participate in the organization's environmental programs.

2. ***Management Support and Integration into Corporate Goals***. To ensure that the organization is going in the right direction, a measurement tool should be in place to track environmental practices being performed. A simple tracking tool, for more complex systems, can be employed to record the different activities being done by the employees. This may have built-in or manual tools to calculate carbon emission savings, energy saved, or any approximates on universal measurements for environmental impact measurement. It can be a simple tool, or a more robust one.

   With the proper tools, employee participation in environmental activities can be measured. It is also important to involve the employees in the measurement process to make it sustainable, where individuals can capture their own efforts officially. Granting access to the tool, and proper information dissemination on the tool is important. It should also be easily accessible and easy to use, so as not to discourage usage.

   Lastly, proper reporting for better assessment and decision-making is equally important to gauge where the organization stands in terms of environmental activities and impact. Useful reports and insights should be generated and derived from measurement tools. This will help the

management team to gauge whether any environmental impact goals have been achieved or not, and if any further compliance or sustenance of existing activities should be reinforced. Sharing positive environmental milestones with the whole organization through useful reports can also be a great way not only to sustain but also to further encourage employee participation in these programs.

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APPENDICES

Appendix A: Informed Consent Form and Survey Questionnaire

Informed Consent Form for the research participants of **"Lingkod Bayang Makakalikasan: Exploring Employee Perceptions of Green Behavior in a Public Organization".**

Researcher: Jonathan Q. Abinal

University of the Philippines Open University

INTRODUCTION

This research is being undertaken by Jonathan Abinal, a Master of Development Communication student at the University of the Philippines Open University (UPOU), as part of his academic requirements for the program.

PURPOSE OF THE RESEARCH

This research aims to explore how employees in a public organization perceive green behaviors by assessing their environmental knowledge, attitudes, subjective norms, perceived behavioral control, and intentions to engage in such behaviors. The findings from this research will aid organizational leaders and policymakers in crafting effective communication strategies for initiatives aimed at environmental sustainability.

WHO CAN PARTICIPATE?

Public organization employees or civil servants, particularly those assigned to the operations or frontline services.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. Participants have the right to decline participation or withdraw from the study at any time without facing any negative consequences or penalties. You may also choose not to answer specific questions.

PROCEDURES

The research participants must complete an online survey. They can choose to answer the questionnaire personally or have the researcher read it aloud, after which their responses will be transcribed. Participation will last between 10 to 20 minutes, depending on the depth and thoroughness of the participants' answers. The findings from this study will be documented, analyzed, and included in the manuscript. Please be assured that all data will be securely stored and deleted after the standard retention period of 3 to 5 years period.

RISK

The research participants may experience discomfort if they have dissent or opposing viewpoints on climate change, environmental sustainability, or green initiatives.

POTENTIAL BENEFITS

Research participants will contribute to the body of knowledge in understanding the factors influencing Employee Green Behavior (EGB) in public organizations. Their participation can inform public sector leaders, communicators, and policymakers in developing effective communication strategies and sustainability programs to promote environmentally responsible practices. Participants of the study will potentially contribute to fostering a culture of sustainability, reducing environmental impact, and supporting global efforts toward achieving long-term environmental goals, such as advancing national sustainability objectives and a more sustainable future for all.

CONFIDENTIALITY

Any information shared by participants shall be handled with utmost confidentiality and cannot be traced back to the computer used or to their identity. All data will be securely stored within the databank of the online survey platform and will only be accessible to me as the researcher.

WHO TO CONTACT

If you have any questions about this study, please feel free to contact me at +639184599432 or email me at jqabinal@up.edu.ph.

If you agree to participate, kindly sign this consent form. Thank you very much!

CERTIFICATE OF CONSENT

I have accurately read this form or had it read to me about the purpose of the survey and its possible risks and benefits. I understand that I can refuse to participate in this survey, even after signing it. I can also stop answering at any point if I feel uncomfortable with the questions.

I understand that:

- the purpose of the survey is to determine employees' perception of green behaviors by looking at their environmental knowledge, attitudes, subjective norms, perceived behavioral controls, and behavioral intentions;
- my participation is voluntary; and
- only the researcher will know my responses

Name of Participant:

Signature of Participant:

Date:

SURVEY QUESTIONNAIRE

I. PROFILE	
Name (Optional):	
Sex:	
Year of Birth	
Job Role:	
Branch Office:	
Years in Government Service:	

II. ENVIRONMENTAL KNOWLEDGE	Not at all (1)	Little (2)	Somewhat (3)	To a large extent (4)	To a great extent (5)
1. I know about the problem of environmental pollution caused by human activities.					
2. I have good knowledge of environmental issues.					
3. I can see with my own eyes that the environment is deteriorating.					
4. I am aware of how to protect the environment from pollution on the office premises.					

III. ATTITUDE	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1. It is essential to promote green living on the part of my organization.					
2. More environmental protection works are needed from my organization.					
3. It is very important to raise environmental awareness among employees.					
4. Environmental protection works are not simply a waste of money and resources.					
5. Environmental protection issues are our business.					
6. The organization thinks environmental protection is meaningful.					

7. It is wise for the organization to spend a vast amount of money on promoting environmental protection.					

IV. SUBJECTIVE NORMS	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1. Most people who are important to me think I should protect the environment.					
2. Most people who are important to me want me to be environmentally friendly.					
3. Most people whose opinion I value think that it is important to reduce waste.					
4. Most people who I respect and admire engage in environmentally friendly behaviors.					
5. Most people who are important to me protect the environment.					
6. It is expected of me to be environmentally friendly.					
7. I feel under social pressure to preserve the environment.					
8. Most people who I admire engage in the protection of the environment					

V. PERCEIVED BEHAVIORAL CONTROL	Not at all True (1)	Slightly True (2)	Moderately True (3)	Very True (4)	Exactly True (5)
1. I find it easy to be friendly with the environment.					
2. I find it difficult to preserve resources and recycle.					
3. I am confident that I can protect the environment.					
4. I can control my involvement in environmental preservation initiatives.					
5. I am fully capable of protecting the environment.					
6. Thanks to my resourcefulness, I always find a way to be friendly with the environment.					

7. I am in full control of my actions to protect the environment.					
8. I am good at leading a green lifestyle.					
9. It is not easy for me to stick to my sustainability goals and preserve the environment.					
10. Being friendly with the environment is out of my hands.					

VI. BEHAVIORAL INTENTION	Very Unlikely (1)	Unlikely (2)	Neutral (3)	Somewhat Likely (4)	Extremely Likely (5)
1. I will minimize my environmental footprint at work by using resources efficiently and responsibly.					
2. I will conserve energy and resources by turning off lights, computers, and other devices when not in use at work and reduce waste by reusing or recycling materials whenever possible in the workplace.					
3. I will work sustainably by choosing environmentally responsible alternatives and supporting innovative practices for sustainability.					
4. I will influence my colleagues by encouraging them to adopt green behaviors.					
5. I will actively support my organization's efforts to adopt and promote green practices.					

Appendix B: Instrument Matrix

Parts		Variables
I	Socio-Demographic Characteristics	● **Sex** Male Female ● **Year of Birth** Gen Z (1997-2012) Millennials (1981-1996) Generation X (1965-1980) Baby Boomers (1946-1964) ● **Job Role** Member Services Accounts Management Tellering Administrative Supervisory/Managerial Others ● **Years in Government Service** less than a year 1-10 years 11-20 years 21-30 years 31-40 years more than 40 years ● **Branch Office** NCR North NCR East NCR West NCR South
II	Environmental Knowledge	● I know about the problem of environmental pollution caused by human activities. ● I have good knowledge about environmental issues. ● I can see with my own eyes that the environment is deteriorating. ● I am aware of how to protect the environment from pollution on the office premises.
III	Attitudes	● It is essential to promote green living from the part of my organization.

		● More environmental protection works are needed from my organization. ● It is very important to raise environmental awareness among employees. ● Environmental protection works are not simply a waste of money and resources. ● Environmental protection issues are our business. ● The organization think environmental protection is meaningful. • It is wise for organization to spend a vast amount of money on promoting environmental protection.
IV	Subjective Norms	● Most people who are important to me think I should protect the environment. ● Most people who are important to me want me to be environmentally friendly. ● Most people whose opinion I value think that it is important to reduce waste. ● Most people who I respect and admire engage in environmentally friendly behaviors. ● Most people who are important to me protect the environment. ● It is expected of me to be environmentally friendly. ● I feel under social pressure to preserve the environment. • Most people who I admire engage in the protection of the environment
V	Perceived Behavioral Control	● I find it easy to be friendly with the environment. ● I find it difficult to preserve resources and recycle. ● I am confident that I can protect the environment. ● I can control my involvement in environmental preservation initiatives. ● I am fully capable of protecting the environment. ● Thanks to my resourcefulness, I always find a way to be friendly with the environment.

		● I am in full control of my actions to protect the environment. ● I am good at leading a green lifestyle. ● It is not easy for me to stick to my sustainability goals and preserve the environment. • Being friendly with the environment is out of my hands.
VI	Behavioral Intentions	● I will minimize my environmental footprint at work by using resources efficiently and responsibly. ● I will conserve energy and resources by turning off lights, computers, and other devices when not in use at work and reduce waste by reusing or recycling materials whenever possible in the workplace. ● I will work sustainably by choosing environmentally responsible alternatives and supporting innovative practices for sustainability. ● I will influence my colleagues by encouraging them to adopt green behaviors. ● I will actively support my organization's efforts to adopt and promote green practices.

Appendix C: Letters

FACULTY OF INFORMATION AND COMMUNICATION STUDIES
UNIVERSITY OF THE PHILIPPINES
OPEN UNIVERSITY

Maahas, Los Baños, Laguna 4031
(049) 536 6001 to 06 loc. 841, 334; 536-5993

18 January 2025

[redacted]

Dear [redacted]:

Greetings!

I am writing to formally request your permission to conduct a survey among the employees of the NCR Operations Group as part of my research study titled ***"Lingkod Bayang Makakalikasan: Exploring Employee Perceptions of Green Behavior in a Public Organization."*** The study aims to explore employees' perspectives and behavioral intentions regarding green behaviors in the workplace. This research is being conducted as a partial requirement for DEVC 300 – Master's Thesis.

The survey will be conducted in two phases:

ACTIVITY	DETAILS	SCHEDULE
1. Pilot Survey	This phase will involve a small sample size of **30 respondents** *(see attached List of Employees for Pilot Survey)* to test and refine the survey questionnaire for clarity, reliability, and validity. Here is the link to the online survey: **Pilot Survey - EGB**	5 days Tentative: January 27-31, 2025
2. Final Survey	Once the questionnaire has been finalized, the survey will gather comprehensive data from a broader employee base of **300 respondents** *(see List of Employees for Final Survey)*. The link to the final survey questionnaire shall be sent to the respondents.	10 days February 1-10, 2025

FACULTY OF INFORMATION AND COMMUNICATION STUDIES
UNIVERSITY OF THE PHILIPPINES
OPEN UNIVERSITY

Maahas, Los Baños, Laguna 4031
(049) 536 6001 to 06 loc. 841, 334; 536-5993

The findings from this study are expected to provide valuable insights that can support our organization's sustainability initiatives and promote employee green behavior in the workplace.

To ensure minimal disruption to the employees' work, the survey will be designed to be straightforward and time-efficient. Participation will be entirely voluntary, and all responses will be treated with the utmost confidentiality. The data collected will be used solely for academic purposes.

Should you grant approval, I would be glad to coordinate with the relevant personnel to ensure the smooth and efficient implementation of the survey. Please let me know if there are additional requirements or processes to adhere to the office's protocols.

Thank you for considering this request. I am confident that this study will contribute positively to both academic and organizational objectives. Should you have any questions or require further details, please feel free to contact me at **jqabinal@outlook.up.edu.ph** or **+639184599432**.

I look forward to your favorable response.

All the best,

JONATHAN Q. ABINAL
Graduate Student | ID No. 2022-30126
Master of Development Communication

Enclosures:

1. Online Survey Questionnaire - Pilot
2. List of Employees for Pilot Survey (Randomized)
3. List of Employees for Final Survey (Randomized)

FACULTY OF INFORMATION AND COMMUNICATION STUDIES
UNIVERSITY OF THE PHILIPPINES
OPEN UNIVERSITY

Maahas, Los Baños, Laguna 4031
(049) 536 6001 to 06 loc. 841, 334; 536-5993

11 February 2025

[redacted]

Dear [redacted]:

Greetings!

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The survey will be conducted in two phases:

ACTIVITY	DETAILS	SCHEDULE
1. Pilot Survey	This phase will involve a small sample size of **30 respondents** *(see attached List of Employees for Pilot Survey)* to test and refine the survey questionnaire for clarity, reliability, and validity. Here is the link to the online survey: **Pilot Survey - EGB**	5 days Tentative: February 17-21, 2025
2. Final Survey	Once the questionnaire has been finalized, the survey will gather comprehensive data from a broader employee base of **300 respondents** *(see List of Employees for Final Survey)*. The link to the final survey questionnaire shall be sent to the respondents.	10 days February 24 - March 7, 2025

FACULTY OF INFORMATION AND COMMUNICATION STUDIES
UNIVERSITY OF THE PHILIPPINES
OPEN UNIVERSITY

Maahas, Los Baños, Laguna 4031
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I look forward to your favorable response.

All the best,

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Graduate Student | ID No. 2022-30126
Master of Development Communication

Enclosures:

1. Online Survey Questionnaire - Pilot
2. List of Employees for Pilot Survey (Randomized)
3. List of Employees for Final Survey (Randomized)

APPROVAL: