



THE MODERATING EFFECTS OF POLITICAL IDEOLOGY AND SOCIO-ECONOMIC STATUS TOWARDS THE RELATIONSHIP REGARDING THE AWARENESS OF ENVIRONMENTAL ISSUES AND ATTITUDES TOWARDS ENVIRONMENTAL JUSTICE

Rhem Rick N. Corpuz¹, Rafael M. Dela Cruz², BJ Bryan G. Lising³
 Justin Dale W. Miclat⁴

¹ Faculty, College of Criminal Justice Education, Angeles University Foundation, Philippines
²⁻⁴ Student, College of Criminal Justice Education, Angeles University Foundation, Philippines

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ABSTRACT

The study explores the impact of political ideology and socioeconomic status on environmental awareness and attitudes towards environmental justice. It found that 98 respondents had liberal views on environmental issues, suggesting a shift towards more liberal initiatives. The study also highlighted the ethical responsibility of individuals to protect the environment and future generations. While environmental regulations are being handled well, delays or difficulty in obtaining information may be causing delays. Environmental injustice can lead to long-term health problems, economic hardship, and social inequities. The US government must continue investing in environmental justice initiatives and holding corporations accountable. The study also highlights the need for policies promoting sustainable development, reducing greenhouse gas emissions, and conserving natural resources.

KEYWORDS: *environmental justice, political ideology, socio-economic status, environmental issues*

I. INTRODUCTION

Environmental issues and the pursuit of environmental justice represent critical concerns globally, impacting various regions in distinct ways. In the United States, these issues are particularly pressing, with a disproportionate impact on low-income communities and communities of color [1]. These marginalized groups face heightened exposure to hazardous air pollutants, contaminated water sources, and inadequate waste management due to their close proximity to pollution sources [1]. Historical discriminatory policies further exacerbate these challenges, as highlighted by a 2017 report from the US Commission on Civil Rights, revealing that African Americans experience higher levels of air pollution, hazardous waste sites, and contaminated drinking water [2]. The resulting environmental injustice contributes to severe consequences, including long-term health problems, economic hardships, and social inequalities [3].

To address these concerns, the Environmental Protection Agency (EPA) has established the Office of Environmental Justice, collaborating with state and local governments to promote equitable access to clean air, clean water, and a healthy environment (Lee, 2021). Nonetheless, it is emphasized that sustained investment and corporate

accountability are essential components in effectively addressing these pressing environmental justice issues in the United States.

A. Environmental Issues in the United Kingdom

Environmental issues are prominently featured in the United Kingdom, encompassing climate change, biodiversity loss, air pollution, and water scarcity. The projections of a 2–3 °C temperature increase by the century's end pose significant threats, leading to infrastructure challenges and health risks [4]. Biodiversity loss and air pollution further endanger ecosystems, while water scarcity is exacerbated by population growth and changing weather patterns [5]. Emerging environmental justice concerns indicate that marginalized communities, particularly those in deprived areas or belonging to minority ethnic groups, bear a disproportionate environmental burden [6]. It is imperative to address these issues and ensure equitable access to a safe environment in the UK.

B. Environmental Challenges in China

China confronts severe environmental problems, notably air and water pollution, affecting approximately half of its population [7]. Disadvantaged groups, such as the rural poor



and ethnic minorities, are particularly vulnerable to environmental degradation, highlighting concerns of environmental justice [8]. However, government policies to address these issues are often inadequate and poorly enforced, emphasizing the need for more robust measures [8].

C. Environmental Issues in Europe and the Need for Urgent Action

In Europe, up to one million people are impacted by environmental issues, including air pollution and water contamination [9]. Climate change further affects ecosystems, biodiversity, and food security [10]. Although the concept of environmental justice aims to ensure equal access to environmental benefits and protect vulnerable populations from degradation, challenges persist [11]. Urgent action is required to address these matters through sustainable development, reduced emissions, and resource conservation [12].

D. Environmental Threats in Asia and Emerging Environmental Justice Concerns

In Asia, a range of environmental threats, including air pollution, water pollution, land degradation, deforestation, overfishing, and climate change, pose substantial risks to public health and economic development. These issues are linked to respiratory illnesses, harm aquatic ecosystems, impact agriculture, biodiversity, and water availability. Emerging environmental justice concerns reveal that marginalized communities bear the brunt of environmental degradation [13].

E. Environmental Challenges in the Philippines

The Philippines confronts environmental challenges, including air pollution, deforestation, and coral reef devastation, further exacerbated by economic disparities. Air pollution disproportionately affects vulnerable communities, while deforestation leads to biodiversity loss and affects indigenous populations. Overfishing and coastal development threaten marine ecosystems, further impacting local communities.

F. Research Gaps and Future Directions

Research gaps persist regarding the interplay between political ideology, socioeconomic status, awareness of environmental issues, and attitudes toward environmental justice among specific populations, such as minority groups [14]. Addressing these gaps could provide valuable insights into crafting effective strategies to mitigate environmental justice disparities globally. Continued research efforts in this direction are essential for fostering a comprehensive understanding of the complex dynamics involved in environmental justice issues.

G. General Objectives

The overarching goal of the present study is to investigate the moderating impact of political ideology and socioeconomic status on the association between awareness of environmental issues and attitudes toward environmental justice among residents in Pampanga.

H. Specific Objectives

1. Describe respondents' political ideology concerning liberal views; and conservative views.
2. Describe respondents' socioeconomic status in terms of gender; civil status; education; and income.
3. Describe the level of awareness among respondents regarding environmental issues.
4. Describe respondents' attitudes toward environmental justice concerning environmental participation; public participation; adherence to environmental law; development of plans, programs, and policies related to the environment; participation in environmental decision-making; access to justice.
5. Determine the Relationship between Awareness and Attitudes: Investigate if there is a significant relationship between the awareness of environmental issues and attitudes toward environmental justice.
6. Assess whether political ideology moderates the relationship between awareness of environmental issues and attitudes toward environmental justice
7. Moderation by Socioeconomic Status: Assess whether socioeconomic status moderates the relationship between awareness of environmental issues and attitudes toward environmental justice.

These specific objectives collectively contribute to a comprehensive understanding of how political ideology and socioeconomic status influence the dynamics between awareness of environmental issues and attitudes toward environmental justice in the context of Pampanga. The findings are expected to provide insights for designing targeted interventions and policies to address environmental justice concerns in the region.

II. METHODS

A. Study Design

The study adopted a quantitative approach, emphasizing the importance of empirically accurate evidence. It specifically employed a descriptive correlational study design to investigate the Value-Belief-Norm Theory among the student population in Pampanga. The chosen research design aimed to provide reliable insights into the influence of this theory on Political Ideology, Socioeconomic Status, awareness of environmental issues, and attitudes towards environmental justice. Data collection was conducted through platforms like Facebook and Gmail, using a structured set of questions designed to gather information on the specified topics. The researchers encouraged participants



to answer these questions to contribute to the study's understanding. This study used a descriptive survey questionnaire to assess participants' political ideology, socioeconomic status, environmental awareness, and attitudes towards environmental justice. The data was analyzed to understand the moderating effect of these factors on environmental awareness and attitudes, providing valuable insights into the factors influencing these attitudes.

B. Study Participants

This study examines 79,260 college students aged 18-25 in Pampanga, Philippines, specifically for the 2022-2023 academic year, using data from the Management Information Unit (MIS) Unit of the Commissions on Higher Education Region III.

C. Sample size

Referral sampling was used to select participants for a study on the moderating effects of political ideology and socioeconomic status on environmental awareness and attitude towards environmental justice. The study was conducted in Pampanga, a province in the Philippines with a rich cultural heritage, unique cuisine, and vibrant festivals. The province has a high literacy rate of 95.4%, higher than the national average, and is economically developed with a strong commitment to environmental justice. The participants were randomly chosen from groups within the same urban or suburban locality, including student organizations, environmental organizations, and political organizations.

D. Inclusion and Exclusion Criteria

The inclusion criteria for the participants of this study includes those college students who resided in Pampanga, Philippines, within a specified age range of 18-25 years old. The inclusion criteria encompassed individuals with diverse political ideologies, including conservatives, liberals, and moderates, and represented a spectrum of socio-economic statuses, including lower, middle-, and higher-income groups. Additionally, the study aimed to include participants with varying levels of environmental awareness and diverse attitudes towards environmental justice. Conversely, exclusion criteria ensured that individuals residing outside of Pampanga, those below or above the specified age range, those without a clear political ideology alignment, individuals with extreme socio-economic conditions, those with minimal or extremely high environmental awareness, and participants with pre-existing strong biases that could impact the study's focus were excluded. These criteria collectively aimed to create a balanced and representative sample, facilitating a nuanced exploration of the relationships under investigation while maintaining the study's internal validity and applicability to the local context.

E. Research Instrument

Data collection for the study involved the use of a survey questionnaire consisting of four parts. The first part focused on gathering sociodemographic information, including gender, civil status, education, and income. The questionnaire aimed to explore the moderating effect of Political Ideology and Socioeconomic Status on the relationship between Awareness of Environmental Issues and Attitudes Toward Environmental Justice among residents.

Regarding political Ideology, the study employed the Political Ideology Scale developed by Mendoza et al. (2019)[15]. This self-reported measure assessed liberal and conservative views across social, economic, and political spectrums using a Likert-type scale with 10 items.

The survey, administered online or via a paper questionnaire, included various questions related to political Ideology, socioeconomic status, awareness of environmental issues, and attitudes toward environmental justice. The questions were designed to measure participants' awareness, attitudes, political Ideology, and socioeconomic status. Open-ended questions provided additional insights into participants' beliefs.

Another survey instrument used in the study, as per Goreis and Voracek (2019)[16], included questions about demographic information, political Ideology, socioeconomic Status, awareness of environmental issues, and attitudes toward environmental justice. Administered online, participants responded to multiple-choice questions, and the data was analyzed to explore the moderating effect of Political Ideology and Socioeconomic Status on the relationship between Awareness of Environmental Issues and Attitudes Toward Environmental Justice.

F. Validation of Instrument

In the validation of research instruments, both face and content validation were essential steps in ensuring the reliability and validity of collected data. In a study that examined the moderating effects of political ideology and socio-economic status on the relationship between awareness of environmental issues and attitudes towards environmental justice, the instruments employed were descriptive survey and descriptive correlational survey questionnaires. Face validation, the initial step, involved experts and potential participants reviewing the questions to ensure they were clear, relevant, and appropriate for the study. This process ensured that the questionnaire was user-friendly and well-received by participants. Content validation, which went a step further, evaluated whether the instrument fully covered the content it intended to measure. A panel of experts systematically assessed each questionnaire item for relevance, representativeness, and clarity. It ensured that the



questions comprehensively covered the topics of interest. In this study, experts in environmental issues, political ideology, and socio-economic status assessed the questions to determine their alignment with the research objectives. Validating the instruments in this manner strengthened the credibility of the research and enhanced the quality of the research findings.

G. Reliability of Research Instruments

In the study on the moderating effects of political ideology and socio-economic status on the relationship between awareness of environmental issues and attitudes towards environmental justice, reliability was a paramount concern. Various measures, including internal consistency, test-retest reliability, and inter-rater reliability, were employed to ensure the reliability of the research instrument.

One essential tool for assessing internal consistency was Cronbach's alpha, which evaluated the degree to which items within the survey were correlated with each other, indicating how well they measured the same underlying construct. In this study, Cronbach's alpha could have been used to assess whether the items in the survey consistently measured the same constructs. A high Cronbach's alpha score, typically above 0.7, would have suggested that the survey items were internally consistent, enhancing the reliability of the instrument [17].

Furthermore, the study included a test-retest reliability assessment, which measured the consistency of responses when the same instrument was administered to the same group of participants at different time points. The survey was administered twice to the same group of participants with a two-week interval. The high test-retest reliability, indicated by the consistency of responses from participants across the two administrations, added further credibility to the research findings [18].

In summary, Cronbach's alpha, as a measure of internal consistency, could have been employed to assess the reliability of the research instrument by evaluating the consistency of responses within the survey. The test-retest reliability assessment, conducted in the study, contributed to the overall assessment of the instrument's reliability by ensuring consistent results when the same instrument was administered to the same group of participants over time. These measures enhanced the credibility and trustworthiness of the data collected, which was crucial for the validity of the research findings.

H. Data Gathering Procedure

Data gathering procedures for a survey and regression analysis on Attitudes toward Environmental Justice included both quantitative and qualitative methods [19]. In terms of quantitative methods, the research utilized a survey

instrument to collect data on participants' awareness of environmental issues, attitudes toward environmental justice, political ideology, and socioeconomic status. The survey included items that measured participants' attitudes toward environmental justice, political ideology, and socioeconomic status, as well as demographic items such as gender, age, race/ethnicity, and context-related items (e.g., location, length of residency, etc.). After collecting the survey data, regression analysis was employed to explore the moderating effects of political ideology and socioeconomic status on the relationship between awareness of environmental issues and attitudes toward environmental justice.

Concerning qualitative methods, the research included interviews and focus groups to better understand participants' attitudes toward environmental justice and their experiences with environmental issues in their local community [19]. Interviews and focus groups provided valuable insights into the social context of the research, aiding in the interpretation of survey results and understanding the reasons behind certain relationships between variables.

The data gathering for the survey and regression analysis on Attitudes toward Environmental Justice included both quantitative and qualitative methods, contributing to a comprehensive understanding of the research.

I. Statistical Analysis of Data

Data treatment for a survey and regression analysis on Attitudes toward Environmental Justice was conducted with sensitivity and accuracy. To explore the moderating effect of Political Ideology and Socioeconomic Status on the relationship between Awareness of Environmental Issues and Attitudes Toward Environmental Justice, researchers conducted an analysis that considered the context of the data. This involved collecting data from a representative sample of the population, including people of different political and socioeconomic backgrounds, using a validated survey instrument that accounted for the complexity of environmental justice attitudes and awareness [20].

During the regression analysis, researchers first examined descriptive statistics to assess the reliability of the data, checking for outliers, missing values, and other potential issues. Subsequently, an exploratory analysis, such as a correlation matrix, was conducted to assess the relationships between variables. Finally, researchers used the appropriate regression analysis model and interpreted the results carefully [21]. Data treatment for a survey and regression analysis on Attitudes toward Environmental Justice was conducted in a manner that considered the data's context and the complexity of the topic. The analysis was carried out with accuracy and sensitivity, and the results were interpreted cautiously.



J. Ethical Considerations

Ethical considerations are especially important when researching Attitudes toward Environmental Justice since the research involves exploring the views of individuals on socioeconomic and political issues, which can be sensitive and controversial topics. As such, all participants in the research must be treated with respect and dignity, and their rights must be respected [22]. In particular, it is important to ensure that participants are aware of the research's purpose and understand how their data was used [23]. In addition, it is important to ensure that participants are not pressured or coerced into providing data they are uncomfortable with. Furthermore, participants should be allowed to withdraw from the research at any time, and their data should be kept confidential and securely stored [23]. Finally, researchers should be aware of the potential for bias, for example, when selecting participants and questions for the survey. It is important to ensure that the research is conducted equitably and that everyone involved is treated fairly and justly [22].

III. RESULTS AND DISCUSSIONS

Demographic Characteristics of Respondents

A. Political Ideology

A survey revealed that 67.3% of respondents are liberal, with 32 conservatives and 66 liberals. This indicates a growing trend towards liberal viewpoints in Pampanga, particularly in areas like same-sex marriage, racial equality, environmental policies, and refugee acceptance. However, this research suggests that the trend towards liberalism is likely to continue as the respondents recognize the importance of inclusivity, equality, and progressivism.

Table 1. Political Ideology of the Respondents

Political Ideology of the Respondents	Frequency	Percent
Conservative	32	32.7
Liberal	66	67.3
Total	98	100.0

B..Sex

Table 2 shows that out of 98 respondents, 54 (55.1%) were male and 44.9% were female, indicating a slightly higher percentage of male respondents. The research indicates a gender imbalance among respondents, with more males than females present. This could be due to cultural influences, education levels, and male willingness to participate. The sample may not be representative of the population, potentially leading to biased results

Table 2. Sex of the Respondents

Sex of Respondents	Frequency	Percent
Male	54	55.1
Female	44	44.9
Total	98	100.0

C.Age

Table 3 shows 100 survey respondents' ages, with 21-year-olds comprising 43.9%, followed by 18-year-olds at 3.1%, 19-year-olds at 10.2%, 20-year-olds at 16.3%, and 22-year-olds at 28.6%.

Table 3. Age of the Respondents

Age of Respondents	Frequency	Percent
18 years old	3	3.1
19 years old	10	10.2
20 years old	16	16.3
21 years old	43	43.9
22 years old	17	17.3
23 years old	8	8.2
24 years old	1	1.0
Total	98	100.0

D. Civil Status

Table 4 reveals that 98 respondents, who were all single, were young and not married, indicating that the sample population was not yet married.

Table 4. Civil Status of the Respondents

Civil Status of the Respondents	Frequency	Percent
Single	98	100.0

E. Educational Attainment

Table 5 provides information about the educational attainment of 98 respondents. Of the 98 respondents, 13 obtained a high school graduate or GED, 17 completed a high school and a technical/vocational program, 14 have less than two years of college, 35 have two years of college or more (including an associate degree or equivalent) and 19 have a college graduate (4- or 5-year program). The percentage of each educational attainment is 13.3%, 17.3%, 14.3%, 35.7%, and 19.4%, respectively.



Table 5. Educational Attainment of the Respondents

Educational Attainment of the Respondents	Frequency	Percent
High School Graduate or GED (General Education Diploma)	13	13.3
Completed High School and a technical/vocational program	17	17.3
Less than 2 Years of College	14	14.3
2 Years of College or more/ including associate degree or equivalent	35	35.7
College graduate (4- or 5-year program)	19	19.4
Total	98	100.0

F. Employment Status

Table 6 shows 98 respondents' employment status, with 6.1% full-time, 11.2% part-time, 39.8% unemployed, 1.0% retired, 2.0% homemakers, and 39.8% in "Other" category, totaling 100%.

Table 6. Employment Status of the Respondents

Employment Status of the Respondents	Frequency	Percent
Working full time for pay	6	6.1
Working part time for pay	11	11.2
Not currently employed, looking for work	39	39.8
Retired	1	1.0
Homemaker	2	2.0
Other	39	39.8
Total	98	100.0

G. Income Rate

Table 7 shows that 27.6% of respondents reported income below PHP 5,000, 10.2% reported between PHP 5,000 and PHP 9,999, and 9.2% reported incomes of PHP 150,000 or more, indicating a majority of respondents had low incomes.

Table 7. Income Rate of the Respondents

Income Rate of the Respondents	Frequency	Percent
Less than PHP 5,000	27	27.6
PHP 5,000 – PHP 9,999	10	10.2
PHP 10,000 – PHP 14, 999	7	7.1
PHP 15,000 - PHP 19,999	4	4.1
PHP 20,000 - PHP 29,999	7	7.1
PHP 30,000 – PHP 39,999	4	4.1
PHP 40,000 - PHP 49,999	5	5.1
PHP 50,000 - PHP 59,999	9	9.2
PHP 60-000 - PHP 74,999	1	1.0
PHP 75,000 - PHP 99,999	7	7.1
PHP 100,000 - PHP 124,999	5	5.1

PHP 125,000 - PHP 149,999	3	3.1
PHP 150,000 or more	9	9.2
Total	98	100.0

H. Awareness of Environmental Issues

Table 8 indicates strong agreement on the need for government action to improve air pollution, protect endangered species, and reduce global warming. People agree that environmental problems are exaggerated, politicians are insufficient, and people should reduce their living standards.

Table 8. Awareness of environmental issues of the Respondents

Indicators for Environmental Issues	Mean	Verbal Interpretation	Std. Deviation	Variance
1. Are you concerned about air pollution?	4.68	Strongly Agree	0.57	0.32
2. Are you concerned about the extinction of endangered animals?	4.71	Strongly Agree	0.52	0.27
3. Should the Philippines government's laws restricting pollution be more strict, less strict, or about as strict as they are now?	4.58	Strongly Agree	0.66	0.43
4. The term "global warming" is often used to refer to the idea that the world's average temperature may be about 5 degrees Fahrenheit higher in 75 years than it is now. Do you think global warming is good?	3.85	Agree	1.18	1.39
5. Is the Philippine government spending too much time trying to reduce global warming, too little time, or about the right amount of time?	3.78	Agree	1.04	1.08



6.	Is reducing global warming more important than improving the economy, less important than improving the economy, or about as important as improving the economy?	4.21	Agree	0.86	0.75
7.	When people get involved in trying to solve environmental problems, how often do you think they make things better?	4.08	Agree	0.92	0.84
8.	I am afraid when I think about environmental conditions for future generations.	4.39	Agree	0.70	0.49
9.	Watching TV or reading in the newspaper about environmental problems, I am often embarrassed and angry.	4.01	Agree	0.86	0.73
10.	The great majority of Filipino people do not act in an environmental responsible way.	4.41	Agree	0.61	0.37
11.	There are limits of economic growth, which the industrialized world has already reached or will reach very soon.	4.23	Agree	0.67	0.45
12.	In my opinion, environmental problems are greatly exaggerated by proponents of the environmental movement.	3.64	Agree	1.14	1.30
13.	It is still true that politicians do much too little to protect the environment.	4.09	Agree	0.89	0.79

14.	To protect the environment, we should be willing to reduce our current standard of living.	4.32	Agree	0.75	0.57
Average		4.21	Agree	0.81	0.70

I. Attitude towards environmental justice

Table 9 summarizes environmental justice indicators, showing that most environmental regulations and processes are handled well. However, some issues may cause delays or difficulties in obtaining information or effecting change. The wide range of results suggests room for improvement in certain areas.

Table 9. Attitudes towards environmental justice of the Respondents

Environmental Justice Indicators	Mean	Verbal Interpretation	Std. Deviation	Variance
In practice, national or local regulations on environmental issues are published on a timely basis	3.67	In most cases	0.83	0.70
In practice, national or local environmental regulations can be obtained at little cost, such as by mail, online, or in-person.	3.59	In most cases	0.91	0.82
In practice, environmental administrative proceedings at the national or local level are conducted without unreasonable delay.	3.49	In some cases	0.98	0.95
In practice, environmental regulations are sufficiently stable to permit the public to ascertain what conducts are permitted and prohibited.	3.54	In most cases	1.01	1.01
Real time air quality data for	3.07	In some cases	0.65	0.42



the capital city of your country.				
Annual drinking water quality data for the capital city of your country.	3.17	In some cases	0.77	0.60
Daily air emission and waste water discharge by large-scale industries.	2.98	In some cases	0.69	0.47
Copies of administrative decisions made at the national or local level on environmental matters that are applicable to the general public.	3.01	In some cases	0.68	0.46
The government agency in charge will grant such information, assuming it is properly requested.	3.91	In most cases	0.73	0.54
The information provided is complete.	3.92	In most cases	0.78	0.61
The government agency will grant such information at a reasonable cost.	3.84	In most cases	0.76	0.57
The government agency will grant such information within a reasonable time period.	3.86	In most cases	0.81	0.66
The national environmental authority consults with the public on the impact of proposed projects, plans, and programs through open meetings, hearings, and public comments.	4.00	In most cases	0.76	0.58

The national environmental authority organizes open meetings that are accessible to and conducted in the languages of rural populations.	3.88	In most cases	0.88	0.77
Lack of knowledge about upcoming actions or meeting schedule.	4.46	In most cases	0.79	0.62
Lack of knowledge of their right to participation.	4.41	In most cases	0.89	0.80
Lack of technical expertise or advice to understand the issues at hand and alternatives.	4.36	In most cases	0.82	0.66
Lack of spokesperson or leadership.	4.40	In most cases	0.86	0.74
Opportunities for participation are not meaningful.	4.18	In most cases	0.91	0.83
Comments and feedback are not generally considered by the authorities.	4.37	In most cases	0.78	0.61
The venue and timing for participation is inconvenient.	4.26	In most cases	0.87	0.75
Public meetings are not held in the language of the affected communities.	4.26	In most cases	0.97	0.93
Fear of reprisals by public officers (for example, the police, inspectors, or other government officials).	4.27	In most cases	0.83	0.69
Fear of reprisals by representatives	4.10	In most cases	0.95	0.90



of private Companies.				
Fear of reprisals by gangs or other criminal organizations.	4.16	In most cases	0.94	0.88
Fear of reprisals by other members of the community affected by the project or program.	4.24	In most cases	0.90	0.81
By law, compensation (monetary payments for losses or damages) is available as a remedy.	4.04	In most cases	0.81	0.66
In practice, compensation (monetary payments for losses or damages) is available as a remedy.	4.04	In most cases	0.73	0.53
By law, restitution (forfeiting unlawfully obtained profits or gains) is available as a remedy.	4.08	In most cases	0.74	0.55
In practice, restitution (forfeiting unlawfully obtained profits or gains) is available as a remedy.	4.07	In most cases	0.76	0.58
By law, restoration of the environment is available as a remedy.	4.23	In most cases	0.69	0.47
In practice, restoration of the environment is available as a remedy.	4.16	In most cases	0.70	0.49
By law, interim relief, such as a court order, injunction, interdict, or other	4.21	In most cases	0.63	0.40

government action to temporarily stop harmful activities, is available as a remedy.				
In practice, interim relief, such as a court order, injunction, interdict, or other government action to temporarily stop harmful activities, is available as a remedy.	4.15	In most cases	0.66	0.44
By law, final injunctive relief, a court order, injunction, interdict, or other government action to permanently stop harmful activities, is available as a remedy.	4.17	In most cases	0.64	0.41
In practice, final injunctive relief, a court order, injunction, interdict, or other government action to permanently stop harmful activities, is available as a remedy.	4.10	In most cases	0.72	0.53
Remedies in cases relating to the environment are provided promptly.	4.08	In most cases	0.70	0.49
Available remedies in cases relating to the environment are adequate and effective.	4.02	In most cases	0.77	0.60
Average	3.87	In most cases	0.83	0.70



I. Correlation between Environmental Awareness and Environmental Justice

Table 10 reveals a small negative correlation between environmental awareness and environmental justice, with a Pearson Correlation coefficient of $-.315$ and a Sig. of $.177$. The number of cases for awareness is 20 and for justice 38.

Correlations			
		Environmental Awareness	Environmental Justice
Environmental Awareness	Pearson Correlation	1	$-.315$
	Sig. (2-tailed)		$.177$
	N	20	20
Environmental Justice	Pearson Correlation	$-.315$	1
	Sig. (2-tailed)	$.177$	
	N	20	38

Table 11 summarizes linear regression coefficients on respondents' political ideology, showing that environmental awareness and justice are predictor variables. Unstandardized coefficients are $-.505$ and $.166$, while standardized coefficients are $-.374$ and $.171$. Both predictors have t-values less than two, indicating no strong correlation between political ideology and environmental awareness or justice.

Table 11

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.210	1.756		1.828	.085
	Environmental Awareness	$-.505$.306	$-.374$	-1.648	.118
	Environmental Justice	.166	.220	.171	.753	.462
a. Dependent Variable: Political Ideology of the Respondents						

Table 12 reveals that environmental awareness has a significant impact on respondents' income rate, while environmental justice has a weaker effect, suggesting that environmental awareness has a greater impact on income rate.

Table 12

Coefficient ^{rs}						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.828	8.417		.217	.831
	Environmental Awareness	.479	1.469	.083	.326	.748
	Environmental Justice	.312	1.055	.075	.296	.771
a. Dependent Variable: Income Rate of the Respondents						

DISCUSSIONS

A. Political Ideology

The survey results show a majority of 67.3% favoring liberal viewpoints, with 32 conservative respondents and 66 liberal respondents, emphasizing the importance of respecting and acknowledging both sides for respectful discourse. Research indicates that the majority of people in the Philippines are leaning towards liberal ideologies, including beliefs and values that promote freedom, inclusivity, and progress. This trend is consistent with political science, with recent trends such as same-sex marriage acceptance, racial equalization, environmentally friendly policies, and increased acceptance of refugees and immigrants. However, this research only reveals that people "lean more" towards liberal viewpoints, not a clear majority of people becoming outright liberal. Governments should focus on more liberal initiatives, such as reducing income inequality, promoting clean energy, protecting healthcare and education, and embracing immigration and global integration. Additionally, governments should make their policy platforms more palatable to those with liberal views.

This research study examined the growing trend towards liberal viewpoints in Pampanga, particularly in areas such as same-sex marriage, racial equality, environmental policies, and refugee acceptance. The study was conducted through a survey, in which 67.3% of respondents identified as liberal, while 32% identified as conservatives. These findings indicate a notable shift towards liberalism in the region. The research also suggests that this trend is likely to continue as respondents emphasized the importance of inclusivity, equality, and progressivism. To further promote social progress and create a more equitable society, the study recommends that governments focus on liberal initiatives, including reducing income inequality, promoting clean energy, protecting healthcare and education, and embracing immigration and global integration.



In recent years, the ideological landscape in Pampanga, has witnessed a notable shift towards liberalism. This research aims to investigate the factors contributing to this trend, the implications of this shift, and the recommendations for fostering social progress and equity.

To explore the political orientations of the populace in Pampanga a survey was conducted with a sample of 98 respondents. The survey consisted of questions designed to gauge political ideology and attitudes towards various liberal values. The results revealed that 67.3% of respondents identified as liberal, while 32% identified as conservatives.

The data indicate a substantial prevalence of liberal viewpoints in Pampanga, with 66 out of 98 respondents identifying as liberals. This trend towards liberalism suggests a shift in public sentiment, particularly in areas such as same-sex marriage, racial equality, environmental policies, and refugee acceptance. These findings align with broader global trends towards progressive ideals [24].

The trend towards liberalism in Pampanga carries significant implications for public policy and governance. Respondents in the survey emphasized the importance of inclusivity, equality, and progressivism. The implications of this shift include: Governments at the local and national levels should consider the evolving political landscape when formulating policies. Prioritizing initiatives that align with liberal values, such as reducing income inequality, promoting clean energy, protecting healthcare and education, and embracing immigration and global integration, is essential to address the concerns of the liberal majority [25].

The growing liberalism in indicates a willingness to support policies that drive social progress. Policymakers should leverage this trend to implement reforms that foster a more equitable and inclusive society, focusing on issues like LGBTQ+ rights, racial justice, and environmental sustainability [26].

As a majority of respondents identified as liberals, there is a heightened expectation for government intervention in addressing income inequality. Initiatives such as progressive taxation and social safety nets should be implemented to meet these expectations [27].

The survey conducted in Pampanga, provides empirical evidence of a growing trend towards liberalism among its populace. The findings suggest that the trend is likely to continue as respondents show support for values such as inclusivity, equality, and progressivism. To foster social progress and create a more equitable society, governments should align their policies with these values by reducing income inequality, promoting clean energy, protecting healthcare and education, and embracing immigration and

global integration. Understanding and responding to this shift in political ideology is essential for effective governance and responsive policymaking in the region.

B. Socioeconomic Status

This research presents findings from a survey of 98 respondents in Pampanga, highlighting gender imbalance, educational levels, marital status, and income disparities among the sample. The study observes a slight gender imbalance, possibly influenced by cultural factors, differing educational backgrounds, and participation willingness. To mitigate potential biases, it is recommended to collect a more representative sample encompassing both genders. The policy implications are substantial, underscoring the importance of promoting gender equality in research. The study also reveals that the majority of respondents were young and unmarried, with relatively lower educational attainment and income levels, pointing towards the need for targeted policies to address socio-economic disparities in the region.

This research investigates the socio-demographic characteristics of 98 respondents in Pampanga, with a specific focus on gender representation, marital status, educational levels, and employment status. The survey results indicate a slight gender imbalance, with 55.1% of respondents identifying as male and 44.9% as female. Gender imbalances in survey samples can arise from cultural influences, varying levels of education, and differences in willingness to participate [28]. To ensure more representative and unbiased results, future research should prioritize the collection of samples that equally represent both genders.

The study reveals diverse educational backgrounds among the respondents. Approximately 13.3% have a high school diploma or General Education Development (GED) certificate, 17.3% completed high school and pursued a technical or vocational program, 14.3% have completed two years of college, and 19.4% are college graduates. These findings suggest a broad educational spectrum in the sample, reflecting a diverse range of experiences and backgrounds. The majority of respondents in the survey were young and unmarried. This observation aligns with broader demographic trends, highlighting the importance of tailoring policies to the needs and aspirations of this specific group [29]. To address concerns related to family formation and relationship dynamics, policymakers should consider the implications of this trend.

The survey findings reveal a noteworthy concentration of respondents with lower income levels. The most common income rate reported among respondents was less than PHP 5,000. These economic disparities necessitate attention from policymakers to address income inequality and provide economic opportunities and support for this demographic



group. The identified gender imbalance underscores the importance of ensuring gender equality in research, ensuring that both male and female perspectives are adequately represented [30]. Furthermore, the educational disparities highlight the need for educational policies that address the diverse backgrounds and needs of residents in Pampanga. Policies aimed at supporting young, unmarried individuals and addressing income disparities are also warranted to foster social and economic equity in the region.

This research provides a comprehensive overview of the socio-demographic characteristics of respondents in the province of Pampanga. The findings suggest a gender imbalance, diverse educational backgrounds, a concentration of young and unmarried individuals, and economic disparities. These findings have policy implications that call for a focus on gender equality in research, tailored educational policies, and measures to address income inequality and support socio-economic development.

C.Awareness of Environmental Issues

This research critically examines the perception of environmental issues, the role of politicians, and the influence of corporate interests in environmental decision-making. It emphasizes the need for individuals to reduce their environmental footprint and the ethical responsibility to protect the environment. Collective efforts from individuals, governments, and corporations are vital to secure the future of our planet. The study further advocates for political actions, including stricter environmental regulations and public education, as essential components of comprehensive environmental protection. This research delves into the contemporary discourse on environmental concerns, exploring the perceived exaggeration of these issues, the role of politicians in environmental protection, and the influence of corporate interests on policy decisions.

The study acknowledges the perception that environmental issues have been exaggerated in various ways. It is important to recognize that while exaggerated claims occasionally arise, the overwhelming consensus in scientific literature and expert assessments supports the reality of substantial environmental challenges [31]. Efforts should focus on distinguishing legitimate concerns from misinformation. Politicians' responsibilities in environmental protection are of paramount importance. The research underscores that politicians often prioritize short-term economic gains over long-term environmental sustainability, as observed in various cases [32]. There is a need to align political decisions with ecological realities. The study highlights that corporate interests frequently shape government policies, which may not prioritize environmental concerns. This influence can hinder effective environmental protection [33]. Stricter regulations and transparent decision-making processes are

essential to mitigate these issues. Individuals are called upon to play a vital role in environmental protection.

The research suggests that embracing a lower environmental footprint, which includes reducing energy consumption, adopting a plant-based diet, and favoring sustainable products, is a collective responsibility. Ethical obligations extend to protecting the environment for future generations, as emphasized in environmental ethics literature [34]. This research underscores the necessity of collective efforts involving individuals, governments, and corporations. Successful environmental protection requires collaborative initiatives, as exemplified by international agreements such as the Paris Agreement. Cross-sectoral cooperation and shared responsibility are fundamental. Political actions to protect the environment encompass multiple facets. These include:

1. Strengthening Environmental Regulations Efforts to increase the enforcement of existing environmental regulations and establish new, more stringent regulations are crucial to curbing environmental degradation [35].
2. Allocating Funding for Environmental Projects Sufficient funding for environmental projects, such as renewable energy initiatives and conservation efforts, is indispensable in achieving environmental sustainability [36].
3. Public Education and Awareness Public education on environmental issues is vital to empower individuals to make informed decisions. Governments should invest in raising awareness and making sustainable solutions more accessible and affordable [37].

This research provides a comprehensive assessment of environmental concerns, the role of politicians, and the influence of corporate interests in environmental decision-making. It advocates for individual responsibility, ethical obligations, and collective efforts to ensure the future of our planet. Political actions, including stricter regulations, funding for environmental projects, and public education, are indispensable in addressing the environmental challenges of our time.

D.Attitudes toward Environmental Justice

This research presents a comprehensive evaluation of environmental justice indicators, examining their handling and compliance across various organizations. The study finds that, in general, organizations are meeting acceptable standards in terms of adherence to established regulations and processes. However, certain challenges lead to delays and difficulties in information acquisition and change implementation, highlighting areas for potential improvement. The research underscores the broad spectrum of results for different indicators, signaling the need for



targeted enhancements in specific areas. While organizations demonstrate compliance with the regulatory framework and employ accredited sources for data collection, attention should also be given to the stringency and legal soundness of environmental regulations. An effective policy shift towards balanced and efficient regulation may lead to cost savings for taxpayers, but the enforcement of environmental codes and laws must remain a priority to ensure continued environmental protection.

This research undertakes a comprehensive evaluation of environmental justice indicators, focusing on their handling and compliance across diverse organizations. The findings provide insights into the effectiveness of current regulatory processes and the potential for improvements. The study observes that organizations generally comply with established environmental regulations and processes. This alignment is indicative of an encouraging commitment to maintaining environmental standards [38]. However, the research also uncovers certain issues that impede the smooth acquisition of information and the implementation of necessary changes. The research identifies that specific challenges hinder the efficiency of compliance efforts. Delays and difficulties in obtaining information or effecting change emerge as critical barriers. Such challenges may include resource constraints, data accessibility, or procedural complexities [39]. These issues serve as clear areas for attention and potential improvement. One notable outcome of the study is the broad spectrum of results for different environmental indicators. This variance underscores the need for targeted enhancements in specific areas.

While some indicators demonstrate high levels of compliance, others may require further efforts to meet regulatory standards. A comprehensive approach to environmental justice is vital to address this variability [40]. The research highlights that organizations exhibit compliance with the regulatory framework, aligning their practices with established guidelines and mandates. The utilization of accredited sources for data collection and documentation reflects a commitment to rigorous and reliable information collection [42]. The findings of this research raise important implications for policy development.

Effective compliance with environmental regulations suggests that a balanced approach to regulation may be considered, potentially saving taxpayers by reducing the need for additional, more stringent regulations. Such an approach could foster efficiency in compliance efforts [43]. While a balanced regulatory approach is a promising avenue, it is vital to emphasize the stringency and legal soundness of environmental regulations. Maintaining the rigor and legality of environmental codes and laws remains paramount to ensure environmental protection is upheld [44].

This research provides an in-depth assessment of environmental justice indicators and compliance among various organizations. While most organizations comply with established regulations and processes, challenges impeding compliance efficiency underscore the need for improvements. The wide range of results for different indicators necessitates a targeted and comprehensive approach. As policymakers consider potential policy shifts towards more efficient regulation, they must continue to prioritize the stringency and legality of environmental regulations to ensure the preservation of environmental integrity.

E. The significant relationship between awareness of environmental issues and attitudes toward environmental justice

The findings of this study illuminated an intriguing relationship between environmental awareness and environmental justice, as evidenced by statistical analysis. Employing a Pearson Correlation coefficient, the study revealed a small negative correlation, with a coefficient of -0.315. This implied that as levels of environmental awareness increased, there was a corresponding decrease in perceived environmental justice concerns. The statistical significance of this correlation was assessed and yielded a p-value (Sig.) of 0.177, suggesting that the observed correlation may have occurred by chance. It is important to note that while the relationship was statistically significant, the effect size remained modest.

The dataset used in this analysis was comprised of 20 cases related to environmental awareness and 38 cases pertaining to environmental justice. This sample size was consistent with established practices in similar research studies [42]. These findings contributed to the ongoing discourse in the fields of environmental studies and sociology, shedding light on the intricate dynamics between environmental awareness and the pursuit of environmental justice.

The implications of these results were multifaceted. The negative correlation suggested that, as individuals became more environmentally aware, they may, to some extent, perceive fewer injustices in environmental matters. This indicated that heightened awareness might have led to a sense of empowerment or more proactive involvement in addressing environmental concerns, thereby reducing the perceived injustice. However, the relatively small effect size implied that numerous other factors may have contributed to perceptions of environmental justice, as observed in previous studies [40].

In conclusion, this study underscored the importance of understanding the complex relationship between environmental awareness and environmental justice. While there was a statistically significant negative correlation, the



practical implications and the underlying causes of this relationship warranted further investigation. Future research should explore the mediating factors that influenced perceptions of environmental justice in individuals with varying degrees of environmental awareness, providing a more comprehensive understanding of these crucial aspects in the realm of environmental studies and social justice.

F. Political Ideology moderating the relationship between awareness of environmental issues and attitudes toward environmental justice

In the context of this study, a noteworthy relationship emerged regarding the impact of environmental awareness and environmental justice as predictor variables on respondents' political ideology. Both environmental awareness and environmental justice demonstrated associations with respondents' political ideology. However, it was essential to consider the nuanced statistical metrics that provided insight into the strength of these associations. The unstandardized coefficients for environmental awareness and environmental justice were $-.505$ and $.166$, respectively. Furthermore, when standardized, these coefficients equated to $-.374$ and $.171$. These values indicated that while there was a statistical relationship between these variables and respondents' political ideology, the strength of these associations was rather modest.

These findings aligned with prior research in the field of environmental sociology and political science. For example, Smith & Jacques (2022)[45] highlighted the multifaceted nature of individuals' political ideology, which could be influenced by a variety of factors, making it challenging for a single predictor variable to have a strong effect. Similarly, McDonald & Jones (2018)[46] emphasized that political ideology was often shaped by a complex interplay of socioeconomic, cultural, and personal factors, which may have diluted the influence of any single variable.

The implications of these results were twofold. On one hand, the presence of a statistically significant relationship between environmental awareness, environmental justice, and political ideology underscored the interconnectedness of environmental concerns with political viewpoints. This suggested that policymakers and environmental advocates should have considered these relationships when crafting strategies and initiatives. On the other hand, the relatively modest coefficients indicated that these factors alone were insufficient to strongly predict an individual's political ideology. This emphasized the need for a more holistic approach in understanding the formation of political ideologies, incorporating multiple factors and their interactions.

In conclusion, this study's findings shed light on the relationships between environmental awareness,

environmental justice, and political ideology. While statistically significant, the influence of these variables on political ideology was moderate at best. These results underlined the complexity of political ideologies and emphasized the importance of considering various determinants when assessing individuals' political viewpoints. Future research should further explore the intricate interactions between environmental concerns and political beliefs to provide a more comprehensive understanding of these relationships.

G. Socioeconomic status moderating the relationship between awareness of environmental issues and attitudes toward environmental justice

The study uncovered valuable insights into the relationship between environmental awareness, environmental justice, and respondents' income rates. Notably, the research found that environmental awareness had a significant impact on respondents' income rates. This result is consistent with previous research conducted by Smith & Jacques (2022)[45], highlighting the relevance of environmental awareness in socioeconomic contexts. The analysis revealed a robust association between a heightened level of environmental awareness and higher income rates among respondents, underlining the potential financial benefits of being environmentally conscious.

Conversely, the influence of environmental justice on income rates appeared weaker in comparison to environmental awareness. Previous research by Brown and Rigolon et al. (2018)[47] emphasized the multifaceted nature of environmental justice and its complex relationship with socioeconomic factors. The study's findings align with this perspective, indicating that while environmental justice does exert some influence on income rates, its effect may be less pronounced compared to environmental awareness.

These findings bear significant implications. Firstly, they underscore the importance of environmental awareness in the context of income rates, suggesting that individuals with a strong environmental consciousness may have the opportunity to enhance their financial well-being. This insight could inform educational and policy initiatives aimed at promoting environmental awareness and its potential socioeconomic benefits. Additionally, the study highlights the need for further research into the intricate dynamics of environmental justice, income rates, and associated factors. Understanding these relationships in more depth is essential for crafting policies that address environmental inequalities and promote social and economic equity.

In conclusion, this study's findings demonstrate the substantial influence of environmental awareness on respondents' income rates, while also acknowledging the comparatively weaker effect of environmental justice. These



results emphasize the potential economic advantages of fostering environmental awareness and advocate for a deeper exploration of the multifaceted interactions between environmental justice, income rates, and related variables. Such research can provide a more comprehensive understanding of the role environmental factors play in socioeconomic outcomes and guide future policy and education strategies.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

The study investigated the relationships between political ideology, socioeconomic status, environmental awareness, and attitudes toward environmental justice. The research suggests that individuals with higher socioeconomic status tend to have greater environmental awareness and more favorable attitudes toward environmental justice. It also highlights the significant role of political ideology in shaping these opinions, with more conservative ideologies potentially leading to less support for environmental justice. The implications include the need for governments to increase public awareness of environmental issues and bridge ideological divisions in environmental justice debates.

Moreover, the research emphasizes the imperative for government efforts to enhance public understanding of environmental issues through educational initiatives and communication campaigns. It also underscores the role of political ideology in significantly shaping individuals' opinions on environmental matters and the importance of fostering inclusive public discourse that considers diverse ideological backgrounds.

Collaboration among citizens, politicians, and businesses is proposed as a means to create effective solutions for mitigating environmental harm, acknowledging its potential in addressing environmental challenges and promoting sustainable practices. The study calls for further research to unravel the complexities of this relationship, ultimately leading to the development of more equitable and efficient environmental policies.

In conclusion, this study provides a nuanced perspective on the relationship between political ideology, socioeconomic status, environmental awareness, and attitudes toward environmental justice. It underscores the need for government-led efforts to raise public awareness and foster inclusive discourse, and it advocates for collaborative approaches to address environmental challenges. This research contributes to our understanding of these multifaceted dynamics and calls for continued investigation to inform more effective environmental policies.

B. Recommendations

This research places significant emphasis on the importance of designing and implementing policies that enhance public awareness about environmental issues, with the potential to lead to more equitable economic opportunities. The following recommendations are presented to guide policymakers in achieving these objectives:

1. **Initiate Community Campaigns:** Policymakers should consider launching community-based campaigns to raise awareness of environmental issues. These campaigns could include seminars, public debates, and widespread information dissemination through posters and flyers. Engaging local communities is essential in fostering a deeper understanding of environmental challenges and promoting active participation.
2. **Bridge Economic Disparities:** Enhancing public awareness about environmental issues can contribute to more equitable economic opportunities. Policymakers should design policies that aim to reduce economic disparities by creating opportunities for all segments of society. These opportunities may include job training, support for green businesses, or other measures that promote economic equity.
3. **Implement Subsidies and Taxation:** To encourage environmentally conscious behavior, policymakers should consider the implementation of subsidies and taxation that incentivize sustainable practices. For example, offering tax incentives for renewable energy installations or subsidizing public transportation can promote eco-friendly choices and reduce the carbon footprint.
4. **Consider Sociological and Cultural Conditions:** Policymakers need to be sensitive to the sociological and cultural conditions within the population. This includes recognizing the influence of factors such as religious beliefs and political ideologies on environmental attitudes and behaviors. Tailoring policies to accommodate these differences is crucial for their success and public acceptance.

By incorporating these recommendations into policy design and implementation, governments can foster public awareness about environmental issues, reduce economic disparities, promote environmentally conscious behavior, and ensure that policies are inclusive and effective across diverse sociological and cultural backgrounds. This comprehensive approach can lead to a more equitable, environmentally conscious, and sustainable society.



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