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Perspectives and Practices in Business Sustainability of Micro and Small Enterprises in the CAMANAVA District National Capital Region, Philippines

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ABSTRACT

This study investigated the beliefs and practices of managers and business owners of small and micro enterprises in Caloocan, Malabon, Navotas, and Valenzuela (CAMANAVA) regarding business sustainability in the National Capital Region, Philippines. It identified their perspectives on sustainable practices, analyzed perceived benefits and barriers to implementing them, and examined the extent of sustainability implementation compared with existing literature. Using that small and micro-enterprises in CAMANAVA generally exhibit a high sense of responsibility and actively practice sustainability measures in fin quantitative research with descriptive and inferential methods, the study ancial, environmental, and social domains. Sustainability benefits include enhanced company reputation, increased customer satisfaction, and reduced negative impacts on social, cultural, and ecological environments. However, barriers such as lack of industry support, high implementation costs, and the complexity of translating sustainability into practice were also identified.

Keywords: business sustainability, business sustainability perspectives, business sustainability practices

The global financial crisis of 2008 and the recent pandemic, coupled with rising global temperatures, have exacerbated economic instability, particularly impacting small businesses (Bernstein, 2021). These crises, like climate change, disproportionately affect the poor and marginalized populations. Addressing these challenges requires a shift from traditional profit-centric business models to those that prioritize sustainability across social, environmental, and economic dimensions (Rezaee Z., 2015).

Business sustainability, as defined by the UN World Commission on Environment and Development, involves practices that meet current needs without compromising future generations' abilities to meet theirs. It integrates environmental health, social equity, and economic vitality to create resilient communities (UNWCED Report, 1987). However, implementing sustainability programs presents challenges, such as lack of funding, time constraints, employee resistance, and prioritization issues. These can be overcome with appropriate strategies and approaches (Rouse, 2013).

Results of surveys indicate a growing demand for sustainability education among business students, and an increasing number of businesses recognize the importance of sustainability strategies for competitiveness and longevity. Small and micro-enterprises (SMEs), which constitute the majority of companies in developing countries, including the Philippines, are vital to economic stability and innovation (Philippine Institute for Developmental Studies, 2024). In 2019, the Philippine Statistics Authority reported that 99.5% of business enterprises in the country were SMEs, emphasizing their critical role in the economy. Given their significance, stakeholders must support SMEs in achieving and sustaining competitive advantage through sustainable business practices (2019 PSA Annual Survey of Business and Industry).

This study explored the perspectives and practices of SME owners and managers in the CAMANAVA area of the Philippines regarding business sustainability, aiming to provide insights for enhancing these practices. This research aimed to answer some important questions about the adoption of sustainability practices for small and micro enterprises in CAMANAVA by measuring how much SME owners and managers believe in the importance of implementing sustainability practices and, if so, their sense of accountability in applying these practices within their work business. The study also examined currently adopted business sustainability practices in terms of social, environmental, and economic sustainability. The relationships between the owners' and managers' beliefs and sense of responsibility and their actual sustainability practices were also reviewed. The study further presented the perceived benefits and barriers to adopting sustainable business practices of such enterprises.

This study is based on the theoretical framework of the triple bottom line, which broadens the traditional method of accounting, beyond economic performance to include social and environmental impacts. The framework highlights the significance of rounded investment outcomes over these interconnected components as a lucrative reflection of a company's sustainable objectives. In previous research, for instance, Arowoshegbe (2016) explored the interrelationship of sustainability and the triple bottom line, which has implications for how business, management, and sustainability researchers and practitioners use these constructs for better understanding.

The research conceptual framework shows the inclination of business organizations towards sustainability, their belief in sustainable business practices and sense of responsibility, and the implementation of actual sustainability practices. It aims to test the relevance of the association between the respondents' views and practices in business sustainability.

REVIEW OF RELATED LITERATURE AND STUDIES

Business sustainability gained significant attention following the 2007–2009 global financial crisis, emphasizing the need for companies to ensure long-term viability and accountability to stakeholders. Investors and regulators now require public companies to disclose their economic, governance, social, ethical, and environmental (EGSEE) sustainability performance (Rezaee, 2015). Achieving firm value creation necessitates management's consideration of all stakeholders' interests and integrating sustainability dimensions into corporate culture, strategies, and reporting. Business sustainability has evolved from promoting environmental, social, and governance performance to initiatives that drive revenue growth and enhance financial performance (CFA Institute, 2015).

Sustainability in business, which is a relatively new focus, refers to efforts made in the growth of a company by investing in Environmental, Social, and Governance (ESG) practices (Tonello &

Singer, 2015). This model also helps to achieve maximum effectiveness in corporate governance, captures business value, reduces negative social and environmental impacts, and maintains or advances position as a stakeholder value creator in the long term. Recently, there has been an observable transition from singular focused CSR activities to all embracing an integrated holistic framework whereby outcomes from all dimensions of sustainability are considered (Kiron *et al.*, 2015).

The social, environmental, and economic factors that contribute to sustainability are called the sustainability enterprise and are encapsulated in the triple bottom line principle. This is different from the traditional bottom line which is the only single measure of short term profit. These three pillars are deeply interconnected and one cannot do without the other (Rouse, 2013). Using the triple bottom line framework allows companies to understand their place in today's economy and their chances of long term sustainability.

A company's social license to operate depends heavily on its social sustainability efforts, as a lack of social development can hinder business operations and growth (Karbassi, 2020). Environmental sustainability involves maintaining development responsibly, and preserving natural resources (Faisal, 2019). Economic sustainability requires operating responsibly and creating value without causing undue harm to the external environment, recognizing the global economic context (Kinsey, 2019).

Sustainable business management requires a perspective shift from traditional practices. There is growing recognition that unlimited economic growth, without considering social and environmental impacts, will not address the global crises we face (Wright, 2017). Investors increasingly use ESG metrics to evaluate sustainability perspectives and practices, with high ESG-rated businesses experiencing lower costs of debt and equity and improved financial performance (Spiliakos, 2018). The World Economic Forum's (WEF) standard ESG metrics are key success factors for measuring and benchmarking sustainable business performance (Tysiac, 2020).

Investing in and enabling micro, small, and medium-sized enterprises (MSMEs) can significantly contribute to sustainable development, promoting economic growth, employment, and innovation (Inter-American Development Group, 2020). A study on the strategic capabilities for MSME sustainability identified a positive relationship between strategic capability (sensing, seizing, transforming, and innovation) and sustainability practices (Atiku *et al.*, 2020). Strategic capabilities enhance sustainability through customer satisfaction, organizational value, resource availability, profitability, and competitiveness.

Business sustainability is crucial for MSMEs, which face uncertainties in demand, supply, and competition (Dey *et al.*, 2019). The COVID-19 pandemic has significantly impacted MSMEs, highlighting the need for resilience and adaptability. Technology positively influences business sustainability, though (Kamble *et al.*, 2020). Innovation catalyzes the growth of MSMEs in the context of fierce competition, with its focus on service and product technological advancement (Raghuvanshi *et al.*, 2020). Innovation is one of the most important factors with which an MSME can emerge in the best way possible, whenever global shocks are occurring simultaneously (Bos-Brouwers, 2010).

Various internal and external factors affect the sustainability of small and medium enterprises (SMEs) businesses. Gonzalez and Rivera (2021) underscore how poor resource availability, specifically financing and skills competent enough, are the determining factors that block the ability to adopt sustainability practices. Their resource-based approach argues that, even if an SME understands the need for sustainable measures, it is challenging to implement them because, for any practical approach to be taken,sufficient resources are a prerequisite.

Environmental pressures are also important determinants of sustainability practices. For instance, Kim and Park (2022) illustrate that it is more difficult for coastal SMEs to deal with the consequences of pollution and rising sea levels, hence, there is a need for adopting more extensive sustainable policies. Working with industrial SMEs, Lee and Chen (2023) highlight that, because of regulatory impacts, there is higher compliance and better sustainability measures. The framework's agenda suggests

that, from both the regulatory and environmental sides, SMEs are encouraged to act sustainably. Concern over the effectiveness of sustainability practices has brought about the need to focus also on local community policies and engagement. Santos and Cruz (2021) s how the positive impact of supportive local government units.

SMEs are supported with incentives and guidance to further develop sustainability initiatives. Moreover, Zhao and Wang (2019) contended that involvement in the community engenders a sense of responsibility, which increases the commitment of SMEs towards sustainability. According to Martinez and Lopez (2020), if SMEs understand the benefits and importance of sustainability, they are likely to adopt these practices provided that there are favorable external factors, which is why focus is so critical.

MATERIALS AND METHODS

The research was designed using descriptive-inferential methods with a quantitative approach. The study aimed to identify the perspectives and practices of business owners and managers regarding business sustainability, the perceived benefits of sustainable practices, and the barriers to their implementation in the CAMANAVA area.

It evaluated the attitudes and responsibility towards sustainable business practices through descriptive methods and measured the level of sustainability implemented in business organizations. The relationship supposed to exist between understanding and responsibility towards sustainable business practices and the performed practices was measured using Pearson Correlation analysis.

The research targeted managers and other relevant personnel of small and micro enterprises in CAMANAVA. CAMANAVA is located in the northwestern part of Metro Manila and is among the most densely populated regions in the NCR. This district includes a wide array of industries with a majority of micro and small enterprises. The four cities that compose the district are Caloocan, Malabon, Navotas, and Valenzuela.

Caloocan is the country's third most populous city with a population of 1,661,584 according to the 2020 Census. Caloocan is divided into the northern and the southern parts. Southern Caloocan is located north of Manila and is bounded by the cities of Malabon and Valenzuela. To the west is Navotas City while Quezon City is to the east. Northern Caloocan is in the northernmost area of Metro Manila. It is located east of Valenzuela City, north of Quezon City, and south of San Jose del Monte, Bulacan.

Malabon is located just north of Manila. This city has a population of approximately 380,000 as of 2020. Malabon City is primarily a residential and industrial town and is one of the most densely populated cities in the metropolis. Caloocan lies to the south and east Navotas to the west, and Valenzuela to the north. Malabon also borders the town of Obando in the province of Bulacan to the northwest.

Navotas occupies a narrow strip of land along the eastern shores of Manila Bay. Navotas is directly north of Manila, west of Malabon City, and south of Obando, Bulacan. As per the 2020 census, the City of Navotas has a population of 247,543. Dubbed the "Fishing Capital of the Philippines", Navotas is a very important fishing community with 70% of its population deriving their livelihood directly or indirectly from fishing and its related industries like fish trading, fish net mending, and fish producing.

Valenzuela City has a total land mass of 44.59 square kilometers with a population of 714,978 as per 2020 census, making it the 10th most populous city in the Philippines. The city is bordered by Meycauayan (Bulacan) in the north, Quezon City, and northern Caloocan in the east, Obando (Bulacan) in the west, and Malabon. Southern Caloocan and Tullahan River in the south.

The study's population consisted of business owners and managers of small and micro enterprises in CAMANAVA. Respondents were selected using systematic random sampling based on an official list from the Department of Trade and Industry, resulting in a sample size of 98, determined by using Slovin’s Formula with a 10% margin of error.

A purposive sampling technique ensured that respondents met the study's criteria, with participants chosen based on their relevance to the research objectives. Data was collected using a survey questionnaire designed to identify and quantify respondents' perspectives on business sustainability and the extent of its practice. The questionnaire, validated by experts, included sections on respondents' profiles, perspectives on sustainability, extent of sustainable practices, and perceived benefits and barriers to sustainability. A 4-point Likert scale was used to measure responses.

Data collection was conducted both online and in person, adhering to COVID-19 health protocols. The Analysis ToolPak in Microsoft Excel 2019 was used for statistical treatment, including descriptive statistics and correlation analysis. Descriptive analysis quantified respondents' beliefs and responsibilities towards sustainability, while correlation analysis examined the relationship between these beliefs and actual practices.

The proposal was reviewed by the UE Ethical Review Committee and was granted ethical clearance on February 2, 2021. Participants were informed about the study's purpose and assured that their information would be kept confidential. Data was stored securely and would be stored for the next three years.

RESULTS AND DISCUSSION

Perspective towards Sustainability

The descriptive analysis of respondents' perspectives towards business sustainability practices in Caloocan, Malabon, Navotas, and Valenzuela cities revealed varying degrees of belief and distribution characteristics. Table 1 shows the perspective of the different areas in CAMANAVA towards business sustainability.

Table 1

Perspective towards Business Sustainability

Area	Mean	Standard Deviation	Interpretation
Caloocan	2.95	0.50	High degree of belief
Malabon	3.15	0.52	High degree of belief
Navotas	3.47	0.46	High degree of belief
Valenzuela	3.48	0.49	Very high degree of belief

Interpretation: 3.25-4.00 (Very high degree of belief); 2.50-3.24 (High degree of belief); 1.75-2.49 (Low degree of belief); 1.00-1.74 (Very low degree of belief)

The table represents the views of businesses in the cities with respect to sustainability. Business owners in Caloocan (2.95) and Malabon (3.15) have a high degree of belief in sustainability, while business owners in Navotas (3.47) and Valenzuela (3.48) have a very high degree of belief in sustainability. This indicates that sustainability is valued across the board in all contexts. The standard deviation demonstrates slight shifts in response to the question, but in general, business sustain ability is viewed positively in these cities.

The moderate to high levels of engagement with sustainability practices exhibited in CAMANAVA can be shaped by socio-cultural and geographical factors associated with each individual city making up CAMANAVA. Porter (2011) and Lozano (2015) suggest the varying levels of sustainability across space with possible implications for sustainability levels. Although respondents in all four cities wer. e inclined toward sustainability, there were variations based on economic stability and industrial diversity. As an economic center with a combination of logistics and manufacturing, Valenzuela exhibits a level of economic strength that that arguably permits a more systematic engagement with sustainability practices.

In contrast, Malabon and Navotas are reliant on small-scale fishing industries that are commonly affected by coastal degradation, and flooding as well as social challenges to their livelihood, which affects their ability to engage in long-term environmental planning. Epstein and Buhovac (2014), argue that local economic conditions have implications for sustainability, thus the industrial diversity in Valenzuela can make it relatively economically stable and more resilient compared to a coastal city that relies on a single industry. .

Perspective on Responsibility towards Sustainability

The descriptive analysis of the perspective on responsibility towards business sustainability practices among respondents in Caloocan, Malabon, Navotas, and Valenzuela cities reveals varying belief and distribution characteristics.

Table 2

Perspective on Responsibility towards Business Sustainability

Area	Mean	Standard Deviation	Interpretation
Caloocan	3.34	0.51	Very high degree of responsibility
Malabon	3.30	0.50	Very high degree of responsibility
Navotas	3.55	0.45	Very high degree of responsibility
Valenzuela	3.48	0.48	Very high degree of responsibility

Interpretation: 3.25-4.00 (Very high degree of responsibility); 2.50-3.24 (High degree of responsibility); 1.75-2.49 (Low degree of responsibility); 1.00-1.74 (Very low degree of responsibility)

The table gives an evaluation of the responsibility towards business sustainability in the four areas of Caloocan, Malabon, Navotas, and Valenzuela. All areas exhibit a high level of responsibility according to their mean scores. Caloocan and Malabon have mean scores of 3.34 and 3.30 respectively, showing almost the same level of responsibility. Among the areas, Navotas has the highest mean score of 3.55. Valenzuela has a mean score of 3.48. The results suggest that all regions place significant emphasis on the business sustainability goals, given that all mean scores indicate a very high level of responsibility.

The assessment of business sustainability responsibility in the CAMANAVA context resembles the real practices of SMEs in this area. The SMEs of Caloocan and Malabon have been able to implement waste reduction strategies and energy-efficient technologies to mitigate their environmental impact. Navotas

makes remarkably sustainable strategies, including sustainable fishing practices and conservation efforts. Valenzuela illustrates it industrial SMEs using cleaner production methods and resource optimization to minimize emissions and contribute to sustainability These significant practices illustrate CAMANAVAs SMEs' proactive strategiess how high level of responsibility in addressing environmental challenges and the commitment to sustainability.

Extent of Business Sustainability Practice

The descriptive analysis of the extent of business sustainability practices among companies in Caloocan, Malabon, Navotas, and Valenzuela cities shows various levels of implementation and distribution characteristics.

Table 3
Extent of Business Sustainability Practices

Area	Mean	Standard Deviation	Interpretation
Caloocan	3.12	0.49	High degree of practice
Malabon	3.24	0.36	High degree of practice
Navotas	3.31	0.37	High degree of practice
Valenzuela	3.50	0.40	Very high degree of practice

Interpretation: 3.25-4.00 (Very high degree of practice); 2.50-3.24 (High degree of practice); 1.75-2.49 (Low degree of practice); 1.00-1.74 (Very low degree of practice)

The table evaluates the extent of business sustainability practices of SMEs. Caloocan, with a mean score of 3.12, exhibits a high degree of sustainability practices, reflecting consistent efforts to address environmental and social concerns. Malabon shows similar results, with a mean score of 3.24. Navotas, with a slightly higher mean score of 3.31, further reflects strong sustainability

practices within its business sector. Valenzuela has the highest mean score of 3.50, indicating a very high degree of sustainability practices. These results suggest a collective emphasis on integrating sustainability into business operations of SMEs in CAMANAVA.

The sustainability practices of SMEs in CAMANAVA are exemplified by various companies actively implementing eco-friendly initiatives. In Caloocan, small manufacturing firms have adopted waste segregation and recycling programs to minimize their environmental footprint. Malabon-based food processing businesses have integrated water conservation measures and energy-efficient technologies into their operations, reflecting their commitment to sustainability. In Navotas, seafood processing companies have embraced sustainable fishing practices and improved waste management systems to protect marine ecosystems. Valenzuela, known for its industrial sector, showcases SMEs that have transitioned to cleaner production methods, such as using renewable energy sources and reducing emissions.

Relationship between Perspective and Practice

The correlation analysis examines the relationship between the perceived responsibility for business sustainability and the actual implementation of sustainability practices among small and micro enterprises in four cities.

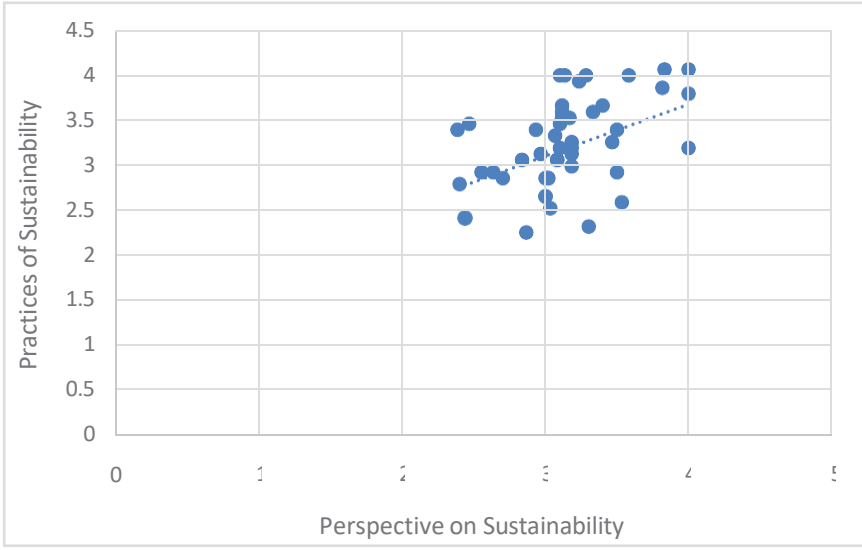
Table 4
Coefficient of Relationship of Perspective and Practices in Business Sustainability, Caloocan City

	x, Perspective	*y, Practice*
x, Perspective	1	
y, Practice	0.464190447	1

In Caloocan City, the correlation coefficient between sustainability perspective and practice is 0.46, indicating a moderate positive relationship. This suggests that as business owners' sense of responsibility increases, their implementation of sustainability measures also rises. The scatter plot supports this finding, with a significant p-value of 0.00 and a best-fit line equation of y=0.57x+1.38.

Figure 1

Scatter Plot showing the level of Sustainability Perspective and the Extent of Practice, Caloocan City



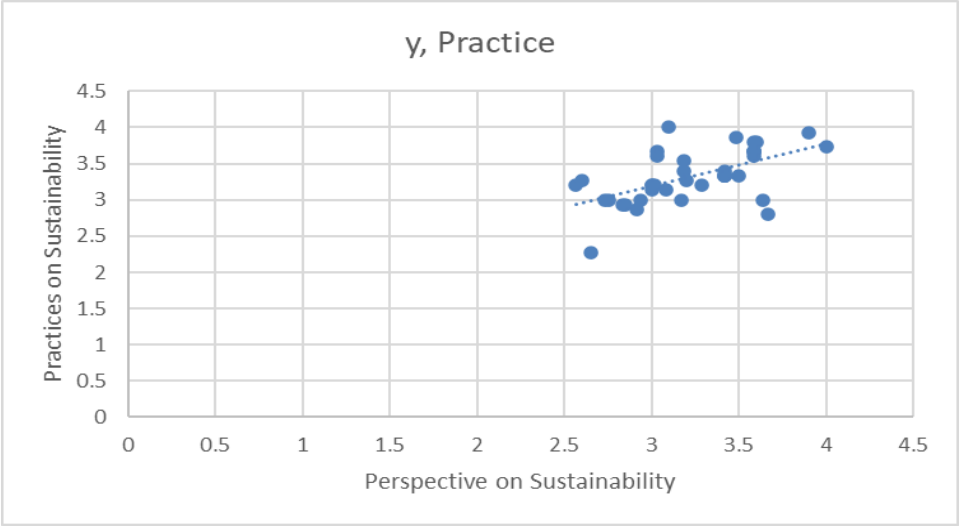
The correlation coefficient of 0.46 indicates a moderate positive relationship between sustainability perspective and practice. This finding aligns with Martinez and Lopez (2020), who reported that SMEs with moderate awareness of their environmental impact are likely to initiate basic sustainability practices. However, barriers such as limited resources and knowledge may prevent full implementation (Gonzalez & Rivera, 2021).

Table 5
Coefficient of Relationship of Perspective and Practices in Business Sustainability, Malabon City

	x, Perspective	*y, Practice*
x, Perspective	1	
y, Practice	0.576878769	1

Malabon City exhibits a stronger positive relationship, with a correlation coefficient of 0.58 (Table 5). The scatter plot (Figure 2) confirms this significant relationship with a p-value of 0.00 and a regression line given by y=0.58x+1.45. This stronger correlation suggests that SMEs in Malabon more consistently translate their perceived responsibility into sustainability practices.

Figure 2
Scatter Plot showing the level of Sustainability Perspective and the Extent of Practice, Malabon City



Malabon City shows a stronger positive correlation, with a coefficient of 0.58. This suggests that SMEs here more consistently translate their perceived responsibility into actions. According to Santos and Cruz (2021), in urban areas with proactive local policies, SMEs tend to show stronger engagement in sustainability practices, which may support the higher correlation in Malabon.

Table 6

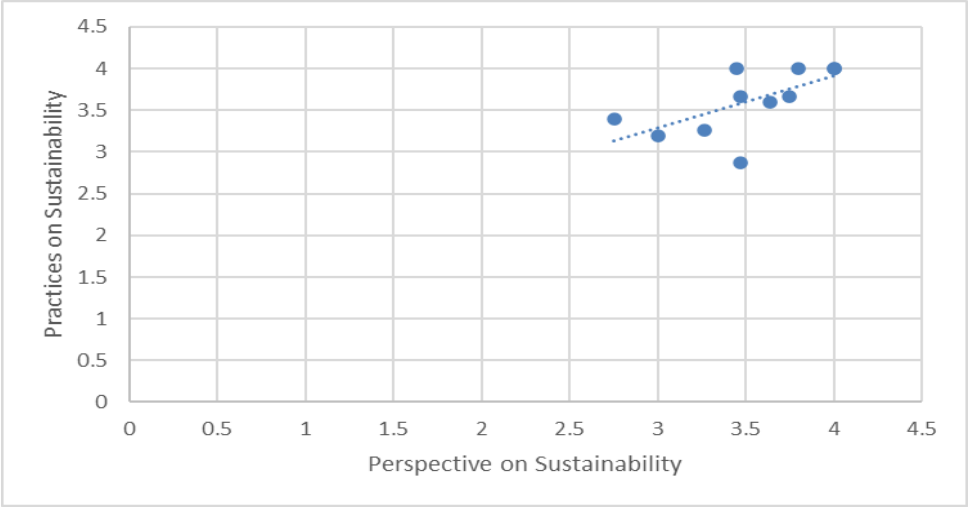
Coefficient of Relationship of Perspective and Practices in Business Sustainability, Navotas City

	x, Perspective	*y, Practice*
x, Perspective	1	
y, Practice	0.635973815	1

The correlation coefficient in Navotas City is 0.64 (Table 6), indicating a substantial positive relationship. The scatter plot (Figure 3) reveals a significant relationship with a p-value of 0.04, and the best-fit line is modeled by y=0.63x+1.41y. This suggests that businesses in Navotas are more likely to act on their sustainability perceptions compared to those in Caloocan and Malabon.

Figure 3

Scatter Plot showing the level of Sustainability Perspective and the Extent of Practice, Navotas City



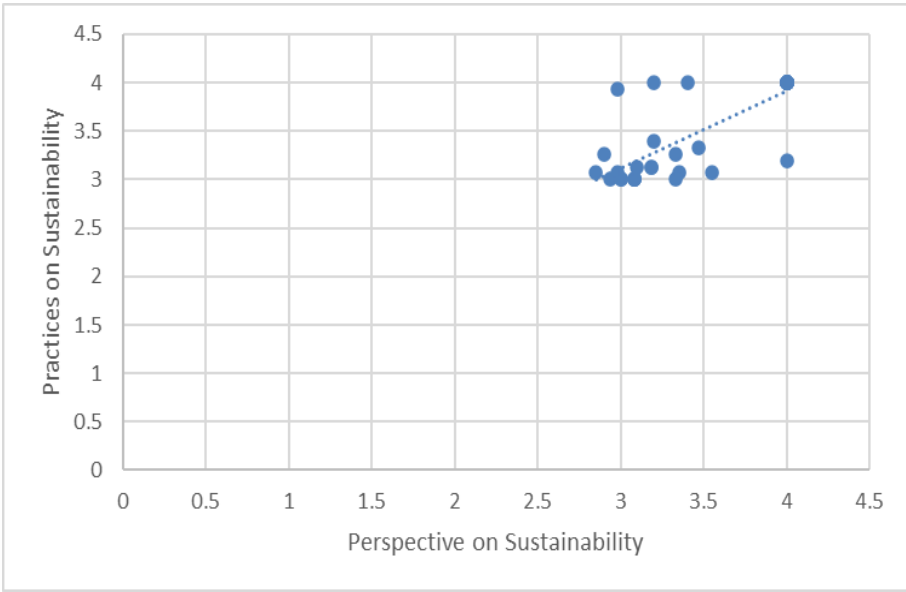
Navotas City's correlation coefficient of 0.64 indicates a substantial positive relationship. Research by Kim and Park (2022) suggests that SMEs in coastal cities like Navotas may face greater environmental pressures, driving a stronger alignment between perception and practice. This aligns with the findings that businesses in Navotas are more likely to act on their sustainability perceptions.

Table 7
Coefficient of Relationship of Perspective and Practices in Business Sustainability, Valenzuela City

	x, Perspective	*y, Practices*
x, Perspective	1	
y, Practices	0.773406267	1

Valenzuela City shows the strongest positive relationship with a correlation coefficient of 0.77 (Table 7), indicating a very strong connection between perception and practice. The scatter plot (Figure 4) supports this finding with a p-value of 0.04 and a best-fit line of y=0.84x+0.56. This high correlation suggests that SMEs in Valenzuela are the most consistent in aligning their perceived responsibility with actual sustainability actions.

Figure 4
Scatter Plot showing the level of Sustainability Perspective and the Extent of Practice, Valenzuela City



Valenzuela City's SMEs demonstrate a strong alignment between their sustainability perspective and practices, as evidenced by the highest correlation coefficient of 0.77. This consistency can be attributed to the city's industrial landscape, where businesses face significant regulatory pressures and heightened social expectations. For example, SMEs in Valenzuela's industrial estates have adopted cleaner production methods, such as utilizing renewable energy sources and implementing waste reduction strategies. Additionally, partnerships with local government initiatives, such as solid waste management programs, have further reinforced their commitment to sustainability. These practices align with Lee and Chen's (2023) findings, which highlight the influence of external pressures on SMEs' dedication to sustainable operations. Valenzuela's data underscores the effectiveness of these measures in fostering a culture of sustainability among its SMEs.

The differences in correlation coefficients among the four cities imply that local circumstances, including governmental policies, local pressures, and environmental issues, have important contributions to make toward determining how SMEs perceive and respond to their sustainability responsibilities. The work of Zhao and Wang (2019) underlines the significance of support policies and participation from the public in improving the sustainability practices of SMEs. Support policies have a major impact on the sustainability measures of SMEs. For example, local governments regularly introduce tax incentives to businesses adopting eco-friendly technologies or grants for sustainability programs. Such as the case of some cities that have established public-private partnerships to promote waste management programs, where local authorities work with SMEs to improve recycling and reduce landfill waste. Community involvement is represented through efforts such as environmental awareness campaigns in which citizens actively support the SMEs by using sustainable products and services.

As a whole, the analysis implies a high level of positive correlation across all four cities, showing that higher perceived responsibility towards sustainability is linked with higher business sustainability practice implementation. Coefficients show different levels of positive correlations, which are further corroborated by scatter diagram analysis.

CONCLUSION

The survey findings on the belief toward sustainability indicate that business owners across CAMANAVA recognize how important sustainability is, with Caloocan and Malabon showing a high degree of belief and Navotas and Valenzuela very high levels of belief. The general views across all four cities suggest a positive inclination toward sustainability. Valenzuela's industrial diversity and economic stability may have contributed to a more structured approach to sustainability practices, while the dependence on vulnerable industries, such as fishing in Malabon and Navotas, poses challenges to long-term planning. These results suggest the interplay between local conditions and sustainability perspectives, with implications for fostering targeted initiatives to promote sustainable development in CAMANAVA.

On the perspective of responsibility towards sustainability, the study showed a commendably high commitment across various aspects, evident in the mean scores obtained. Guided by the strong sense of responsibility are the sustainability practices among the SMEs in these cities. The adoption of waste reduction procedures, energy efficiency solutions, sustainable fishing, and cleaner production is a demonstration of how the SMEs in CAMANAVA stand firm in addressing environmental issues. The results emphasize the level of shared commitment toward sustainability that demonstrates the capacity of local industries to nurture sustainability in business operations.

An examination of business sustainability practices among SMEs in Caloocan, Malabon, Navotas, and Valenzuela reveals a unified dedication to sustainability which manifests through different stages of application. Caloocan and Malabon demonstrate substantial sustainability practices yet Navotas and Valenzuela display even more progress with Valenzuela achieving the highest level of practice. The adoption of eco-friendly initiatives including waste segregation, water conservation, sustainable fishing practices, and cleaner production methods demonstrates some of the proactive efforts of SMEs in CAMANAVA.

The analysis of the relationship between the perceived responsibility for business sustainability and the implementation of sustainability practices reveals a positive correlation across all four cities. Caloocan exhibits a moderate relationship, while Malabon demonstrates a stronger alignment between perception and practice. Navotas shows substantial alignment, and Valenzuela leads with the strongest correlation. These varying degrees of correlation highlight the significant role of local contexts, such as governmental policies and environmental challenges, in shaping the behaviors of SMEs. Overall, all cities show a positive relationship. Our research found that businesses' relationship with sustainability is heavily shaped by local elements, including a supportive policy environment and social pressure from the community," the study says.

The study reflects an important narrative of sustainability among SMEs in CAMANAVA, connecting perspectives, responsibility, and practices. The belief in sustainability remains robust across all four cities, with Navotas and Valenzuela expressing stronger alignment, likely shaped by their specific economic and industrial contexts. Responsibility toward sustainability is uniformly high, as evidenced by proactive practices, such as eco-friendly initiatives and cleaner production methods. Valenzuela leads in implementation, showcasing the strongest correlation between sustainability perspective and practice, driven by its industrial diversity and external pressures. Meanwhile, local challenges, such as reliance on vulnerable industries in Malabon and Navotas, highlight the interplay between context and sustainability efforts. Overall, the positive correlation across all cities underscores the transformative potential of aligning perspectives with practices to advance sustainable development.

Future studies may draw attention to sector-specific sustainability practices for a more granular understanding of how different industries collectively address sustainability challenges in urban centers, like CAMANAVA. This can inform specific opportunities and challenges not always seen in high-level studies. Long-term studies might capture more persistent consequences of sustainability investments for corporate profitability and societal well-being. Future studies can steer policy development and business strategies focusing on different sectors, ensuring that sustainability efforts are both effective and relevant.

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