

Corporate Social Responsibility (CSR) Awareness Towards Business Sustainability Among Malaysian Northern Region SMEs

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ABSTRACT

This study examines the impact of Corporate Social Responsibility (CSR) awareness on business sustainability among Small and Medium Enterprises (SMEs) in Malaysia's northern region. As SMEs are the backbone of the Malaysian economy, their capacity to adopt and sustain CSR practices is crucial for long-term growth. Despite the benefits, many SMEs view CSR as complex, costly, and time-consuming, facing significant barriers like limited resources and a lack of strategic planning. In response, this research investigates three key CSR awareness dimensions: knowledge of CSR principles, perceived importance of CSR, and implementation challenges, to assess their influence on SME sustainability. A quantitative approach was used, employing structured online questionnaires distributed to SME owners, managers, and decision-makers in the manufacturing, retail, agriculture, and service sectors. A total of 357 valid responses were obtained, yielding an 89.25% response rate. Data analysis using SPSS, including regression analysis, revealed that both knowledge of CSR principles ($\beta=0.311$, $p < 0.001$) and the perceived importance of CSR ($\beta=0.311$, $p < 0.001$) are significantly related to business sustainability. Conversely, while challenges such as limited resources were statistically significant, the results ($\beta = 0.223$, $p < 0.001$) suggest that SMEs may adopt adaptive strategies to overcome obstacles. The findings highlight the need for greater CSR awareness, strategic integration, and supportive frameworks to strengthen CSR practices among SMEs. Recommendations are provided for SME leaders and policymakers to enhance CSR frameworks and align them with sustainable development goals, addressing the challenges SMEs face in innovating or adopting more effective strategies to survive.

Keywords: CSR Awareness, CSR Challenges, Importance of CSR, Knowledge of CSR, SME Sustainability.

ABSTRAK

Kajian ini mengkaji impak kesedaran terhadap Tanggungjawab Sosial Korporat (CSR) terhadap kelestarian perniagaan dalam kalangan Perusahaan Kecil dan Sederhana (PKS) di wilayah utara Malaysia. Sebagai tulang belakang ekonomi Malaysia, keupayaan PKS untuk mengamalkan dan mengekalkan inisiatif CSR adalah penting bagi pertumbuhan jangka panjang. Walaupun CSR menawarkan pelbagai manfaat, ramai pemilik PKS masih menganggapnya sebagai sesuatu yang kompleks, mahal dan memakan masa, selain berhadapan dengan halangan seperti kekurangan sumber dan perancangan yang lemah. Oleh itu, kajian ini meneliti tiga dimensi utama kesedaran CSR, iaitu pengetahuan tentang prinsip CSR, kepentingan CSR yang dirasakan, dan cabaran pelaksanaan CSR, bagi menentukan pengaruhnya terhadap kelestarian perniagaan dalam kalangan PKS. Pendekatan kuantitatif digunakan dengan mengedarkan soal selidik berstruktur secara talian kepada pemilik, pengurus dan pembuat keputusan PKS dalam sektor pembuatan, peruncitan, pertanian dan perkhidmatan. Sebanyak 357 respons yang sah telah diperolehi, menghasilkan kadar respons sebanyak 89.25%. Analisis data menggunakan SPSS, termasuk analisis regresi, menunjukkan bahawa pengetahuan

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tentang prinsip CSR ($\beta = 0.311$, $p < 0.001$) dan kepentingan CSR yang dirasakan ($\beta = 0.311$, $p < 0.001$) mempunyai hubungan yang signifikan dengan kelestarian perniagaan. Selain itu, walaupun cabaran seperti kekurangan sumber didapati signifikan secara statistik, dapatan kajian ($\beta = 0.223$, $p < 0.001$) menunjukkan bahawa PKS mampu menggunakan strategi penyesuaian untuk mengatasi halangan tersebut. Dapatan kajian ini menekankan keperluan untuk meningkatkan kesedaran CSR, integrasi strategik dan kerangka sokongan yang lebih kukuh bagi memperkasakan amalan CSR dalam kalangan PKS. Kajian ini turut mengemukakan cadangan kepada pemimpin PKS dan pembuat dasar untuk memperkukuhkan pelaksanaan kerangka CSR serta menyelaraskannya dengan matlamat pembangunan mampan. Langkah ini penting bagi membantu PKS menangani cabaran yang dihadapi, terus berinovasi dan meneroka strategi yang lebih berkesan untuk kelangsungan perniagaan.

Kata kunci: Kesedaran CSR, Cabaran CSR, Kepentingan CSR, Pengetahuan tentang CSR, Kelestarian PKS.

1.0 INTRODUCTION

Business sustainability is a strategic approach to operating a business in a way that minimises environmental damage, supports social responsibility, and ensures long-term economic viability. It involves incorporating these practices into a company's strategic plans and daily operations. While there is no single, universally accepted definition of corporate sustainability among business scholars, it is understood that sustainable development requires a pragmatic strategy at its core. Dynamic capabilities are also crucial for maintaining a competitive advantage in a constantly changing business landscape. Sustainable development, which is becoming a more important part of entrepreneurship, is defined as progress that meets the needs of the current generation without compromising the ability of future generations to meet theirs.

Small and Medium Enterprises (SMEs) are the backbone of the Malaysian economy, and their ability to adopt and maintain Corporate Social Responsibility (CSR) practices is crucial for the nation's long-term growth. Despite their vital role, many SMEs face significant challenges in implementing CSR. A lack of dedication from top management, limited resources, unclear CSR objectives, high campaign costs, and apathetic consumer attitudes are among the main obstacles (Thombare, 2023; Wielgórka, 2022). These factors often make CSR appear complex, costly, and time-consuming for smaller businesses. Previous studies have primarily focused on the sustainability practices of large firms and multinational companies, with limited academic literature on the sustainability of SMEs, despite their crucial role in economies and social structures.

This study contributes to bridging this knowledge gap by providing a comprehensive understanding of the factors affecting the adoption of CSR and its link to business sustainability. It is particularly relevant as the function of CSR in SMEs has attracted relatively little attention. The research aims to investigate how CSR awareness, specifically, knowledge of CSR principles, the perceived importance of CSR, and implementation challenges, influence business sustainability among SMEs in Malaysia. The findings offer insights for SME leaders and policymakers to strengthen CSR frameworks and align with broader sustainable development goals.

2.0 LITERATURE REVIEW

2.1 Business Sustainability

Business sustainability refers to an organisation's ability to operate in a way that secures long-term profitability while balancing economic, environmental, and social responsibilities (Bruce et al., 2022). This concept, often linked to the "Triple Bottom Line" (TBL), emphasises that sustainable firms must not only generate profits but also minimise negative environmental impacts and contribute positively to society (Bjartmarz & Bocken, 2024). It is a holistic approach that involves integrating sustainable practices into a company's strategic plans, decision-making, and daily operations.

Past studies highlight that sustainability practices provide a competitive advantage by building stronger stakeholder relationships, enhancing reputation, and reducing operational risks (Stawicka, 2021). For Small and Medium Enterprises (SMEs), sustainable practices are crucial, as they often face resource limitations yet still have significant influence on local communities (Qalati et al., 2020). Moreover, Desmaryani et al. (2024) found that SMEs that engage in responsible resource use maintain stronger market positioning than those that focus solely on short-term financial performance.

The literature suggests that sustainability is not a static goal but a dynamic capability that allows businesses to identify and capitalise on new opportunities and threats. This perspective, supported by scholars like Serafeim (2020) and Bari et al. (2022), highlights that a firm's ability to evolve with market dynamics is key to sustained success. Empirical findings show that sustainability contributes to long-term resilience. For instance, Najib et al. (2021) found that SMEs implementing sustainable innovation improved business survival rates, while Oyewobi et al. (2021) emphasised that sustainable operations enhance trust among stakeholders. This is further confirmed by the provided report, which shows that CSR practices help SMEs become more sustainable by increasing stakeholder trust, boosting brand reputation, and encouraging long-term growth.

Thus, business sustainability is the dependent variable of this study, as it reflects how CSR awareness influences SMEs' ability to maintain long-term performance.

2.2 Corporate Social Responsibility (CSR) Awareness

CSR awareness among SMEs is a critical precursor to their engagement in sustainable practices. This awareness is a multifaceted concept comprising three main dimensions: knowledge of CSR principles, perceived importance of CSR, and challenges in implementing CSR. A comprehensive review of the literature on these three dimensions provides the basis for the conceptual and empirical developments underpinning the study's hypotheses.

2.2.1 Knowledge of CSR Principles

Knowledge of CSR principles refers to the awareness and understanding of ethical, social, and environmental practices required to operate responsibly (Avis et al., 2022). SMEs that are well-informed about CSR can better integrate sustainability into strategic planning, stakeholder engagement, and daily operations (Koh et al., 2022). However, studies have shown that SMEs often lack sufficient CSR knowledge due to resource and training constraints (Thombare, 2023).

Based on empirical findings, Mahmood et al. (2021) reported that insufficient CSR knowledge prevents SMEs from effectively adopting sustainable practices. While Wielgórk (2022) found that most SMEs do not assess employee CSR knowledge, this weakens implementation. Conversely, Bhat et al. (2023) confirmed that SMEs with strong CSR knowledge were better able

to align business operations with sustainability goals, thereby improving financial and social performance. These findings make it clear that CSR knowledge is essential for SMEs to translate awareness into actionable strategies.

H¹: Knowledge of CSR principles is significantly related to business sustainability among SMEs.

2.2.2 Perceived Importance of CSR

The perceived importance of CSR reflects how SME owners and managers value it relative to their business operations. Firms that recognise CSR as a strategic necessity are more likely to invest resources in ethical and sustainable practices (Shawkat & Fatima, 2023). Viewing CSR as an investment rather than a cost leads to improved competitiveness, stakeholder trust, and long-term profitability (Kim et al., 2023).

In a previous study, Fatima & Elbanna (2022) found that SMEs adopting CSR to strengthen their reputation improved stakeholder relationships and customer loyalty. Besides that, Hermanto et al. (2022) highlighted that the importance of CSR contributes to innovation and competitiveness among SMEs. Meanwhile, the CSR initiatives improve employee motivation and teamwork, strengthening organisational culture. These studies suggest that when SMEs highly value CSR, they are more committed to integrating it into their operations, leading to improved sustainability.

H²: Perceived importance of CSR is significantly related to business sustainability among SMEs.

2.2.3 CSR Implementation Challenges

Despite awareness of the benefits of CSR, SMEs often face significant barriers to implementing CSR effectively. Common challenges include a lack of financial resources, insufficient knowledge, time constraints, and weak support from top management (Mahmood et al., 2021). Such limitations often force SMEs to prioritise short-term survival over long-term sustainability goals.

Van Nguyen (2022) emphasised that SMEs in construction face unique CSR barriers due to financial and technical constraints. Also, Ayad et al. (2022) noted that the lack of strategic planning and top management commitment weakens CSR adoption. Additionally, Edwin et al. (2025) confirmed that financial and resource constraints remain the most consistent barriers for SMEs across sectors. These findings indicate that while SMEs may recognise CSR's importance, practical challenges often hinder effective execution, directly influencing their ability to sustain long-term performance.

H³: CSR implementation challenges are significantly related to business sustainability among SMEs.

2.3 Underpinning Theory

This study applies Stakeholder Theory to examine the link between CSR awareness and business sustainability among SMEs. The theory asserts that companies have responsibilities toward a broad range of stakeholders, including employees, customers, suppliers, communities, and government, not just shareholders (Abu Hassan et al., 2023). It evaluates stakeholder needs, trust, and power (Ali et al., 2023), aligning closely with CSR principles of ethics, transparency, and accountability.

In SMEs, where resources are often limited, stakeholder relationships tend to be closer and more community-oriented. Effective CSR requires understanding stakeholder expectations,

engaging with them, and adapting to their needs (Adomako & Tran, 2022). This alignment builds trust, credibility, and long-term sustainability, even if it reduces short-term profits (Zhang et al., 2022). Government support can further mitigate such trade-offs.

Stakeholder theory also highlights that stakeholder-specific CSR communication can significantly influence trust, brand perception, and ethical judgment (Oh et al., 2023). Motivation driven by stakeholder credibility and strategic alignment enhances SME performance (Kumar & Singh, 2023). However, mismatches between corporate goals and community expectations can hinder the effectiveness of CSR, as seen in Southeast Asia, including Indonesia (Sani et al., 2024; Arinnis et al., 2022).

Overall, stakeholder theory provides a structured lens for understanding how CSR strengthens relationships, improves decision-making, and enhances adaptability in SMEs, ultimately contributing to sustainable business outcomes.

2.4 Theoretical Framework and Research Methodology

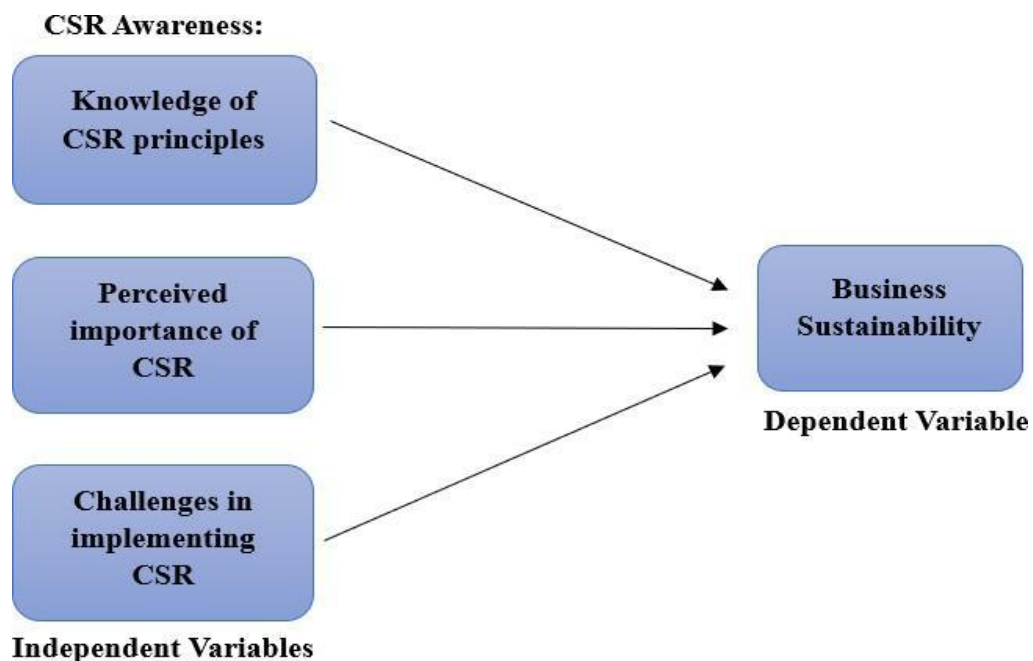


Figure 1. Theoretical Framework.

The dependent variable of this study is business sustainability, which refers to SMEs' ability to maintain long-term operations by balancing economic performance, environmental responsibility, and social well-being. CSR practices support this by enhancing stakeholder trust, brand reputation, and long-term growth (Andriyani & Rochayatun, 2023). The independent variables under CSR awareness are knowledge of CSR principles, perceived importance of CSR, and challenges in implementing CSR. Knowledge of CSR principles reflects how well SME decision-makers understand sustainable development, stakeholder engagement, and ethical practices, which promotes CSR adoption (Nustini et al., 2024). Perceived importance of CSR refers to recognising CSR as a strategic priority, often influenced by organisational culture and leadership (Yusoh et al., 2021). However, implementation is often hindered by resource limitations, lack of expertise, time constraints, and inadequate government support, leading SMEs to focus on short-term survival over long-term sustainability (Andriyani & Rochayatun, 2023).

3.0 RESEARCH METHODOLOGY

3.1 Research Design

This study employed a quantitative research design, which is well-suited to examining the relationship between Corporate Social Responsibility (CSR) awareness and business sustainability among Small and Medium Enterprises (SMEs) in the northern region of Malaysia. A quantitative approach allows the researcher to measure constructs objectively using numerical data and apply statistical techniques to test hypotheses. The unit of analysis in this research is the individual SME owner, manager, or decision-maker, as they are directly responsible for implementing CSR practices and shaping business sustainability strategies within their enterprises.

The population (N) for this study comprises approximately 4,735 SMEs in the northern region of Malaysia (Lin et al., 2024). Based on Krejcie and Morgan's (1970) sample size determination table, a minimum of 357 respondents ($n = 357$) was required to ensure representativeness and reliability. This sample size is statistically sufficient to generalise findings to the broader SME population within the region.

A probability sampling technique, specifically simple random sampling, was applied to ensure that all SMEs in the population had an equal chance of being selected. This method was chosen to reduce sampling bias and ensure the sample reflects different sectors such as manufacturing, retail, agriculture, and services. The research instrument was a structured questionnaire, which was divided into five sections, with 18 items as in Table 1.

Each construct was measured using a five-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree, which allows respondents to express varying levels of agreement. The Likert scale was selected because it is widely used in social science research to measure attitudes and perceptions (Taherdoost, 2022). The structured questionnaire was distributed online via Google Forms to ensure convenience and wider reach. Respondents were informed of the research objectives, confidentiality assurances, and the voluntary nature of participation. By employing this design, the study ensures methodological rigour, reliability of data collection, and the ability to conduct statistical analyses such as correlation and multiple regression to test the hypothesised relationships.

3.2 Population and Sampling

The population of this study comprises Small and Medium Enterprises (SMEs) operating in the northern region of Malaysia. SMEs are defined according to SME Corp Malaysia's classification, which includes enterprises in manufacturing, services, agriculture, and retail sectors. SMEs were selected as the target population because they represent more than 97% of all registered businesses in Malaysia and are crucial contributors to employment, innovation, and economic growth (SME Corp Malaysia, 2023).

Based on recent statistics, the total population size (N) of SMEs in the Malaysian northern region is approximately 4,735 enterprises (Lin et al., 2024). However, due to time and resource constraints, it was not feasible to survey the entire population. Therefore, an appropriate sample size (n) was determined using Krejcie and Morgan's (1970) sample size determination table, which indicated that for a population of over 4,000, a sample of at least 357 respondents is sufficient to achieve a 95% confidence level with a 5% margin of error. Accordingly, this study targeted $n = 357$ SME respondents, including owners, managers, and decision-makers.

The unit of analysis is the individual decision-maker within the SME, such as the owner, manager, or senior employee, since they possess knowledge about CSR practices and sustainability strategies in their organisation.

Followed by that, a probability sampling method was employed, specifically simple random sampling, to ensure every SME within the population had an equal chance of being selected. This technique minimises sampling bias and enhances the representativeness of the findings across different sectors in the Malaysian northern region. The sampling procedure involved obtaining contact lists of SMEs through SME business directories and local business associations. The structured questionnaire was distributed online via Google Forms, as well as in person through direct visits to selected enterprises. This hybrid method ensured sufficient responses while accommodating SMEs with varying levels of digital accessibility.

In summary, by using a scientifically determined sample size and a probability-based sampling approach, the study enhances the reliability, generalizability, and validity of its findings on the relationship between CSR awareness and business sustainability among SMEs in the northern region of Malaysia.

3.3 Instrument and Measurement

This study employed primary data collection using a structured questionnaire with closed-ended questions. A five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree was used for all items, as it is widely recognised in social science research for measuring attitudes, perceptions, and behavioural intentions (Taherdoost, 2022). The Likert scale was selected because it allows respondents to express varying degrees of agreement and has been proven reliable in CSR and sustainability research.

The questionnaire was distributed online via Google Forms and shared via face-to-face visits, WhatsApp, and SME-related forums to ensure broader coverage of respondents. The instrument was adapted from previously validated studies to strengthen construct validity.

Table 1 The Instrument

Variable	Source	Original Questionnaire	Modified Questionnaire
Business Sustainability	Shah et al., (2023)	Our company's sustainable business practices are about making money for all stakeholders involved.	Our company's sustainability practices aim to create long-term value for all stakeholders involved.
		Our company's sustainable business practices improve cost efficiency.	Our company's sustainability initiatives help improve overall cost efficiency. Our company's sustainability initiatives help improve overall resource use.
		Our company's sustainable business practices require that all direct business partners are engaged in such practices.	Our company encourages all direct business partners to engage in sustainability practices.
		Our company's sustainable business practices are transparent to all those interested.	Our company ensures that its sustainability practices are transparent to all relevant stakeholders.
Knowledge of CSR Principles	Italy China Foundation et al., (2010)	Lack of knowledge	We have a clear understanding of what CSR means.
		Lack of specific legislation on CSR	We are familiar with the main principles and components of CSR (economic, social, and environmental).
		Few interests of the company	We understand how CSR can improve stakeholder relationships and company reputation.

		Lack of specific legislation on CSR	We are aware of CSR-related laws relevant to our business.
Perceived Importance of CSR	Italy China Foundation et al., (2010)	Enhancing corporate reputation Improving relations with suppliers, institutions, donors, community To strengthen the sense of employees Acquisition of commercial benefits	The role of CSR in enhancing our corporate reputation. The CSR is improving our relations with suppliers. The CSR practices strengthen employee engagement. The CSR helps in achieving commercial/business benefits.
Challenges in Implementing CSR	Mahmood et al., (2021)	Lack of finance Lack of CSR knowledge Lack of strategic planning for CSR Lack of top management commitment	Limited financial resources hinder our ability to implement CSR initiatives. Insufficient knowledge of CSR principles is a major obstacle. Lack of a strategic plan or direction for CSR within our company poses a challenge. Lack of commitment from top management affects the success of CSR efforts.

Table 1 presents the measurement items used in this study, with each construct measured using validated instruments adapted from prior studies to ensure reliability and validity. The dependent variable, Business Sustainability, was measured using four items adapted from Shah et al. (2023), focusing on long-term value creation, cost and resource efficiency, partner involvement, and transparency. The first independent variable, Knowledge of CSR Principles, was assessed using four items from the Italy China Foundation et al. (2010) instrument, which emphasises awareness of CSR principles, stakeholder impact, and compliance with CSR-related regulations. Similarly, the second independent variable, Perceived Importance of CSR, was also measured with four items adapted from the Italy China Foundation et al. (2010) instrument, focusing on CSR's impact on reputation, supplier relations, employee engagement, and business performance. Finally, the third independent variable, CSR Implementation Challenges, was measured using four items adapted from Mahmood et al. (2021), covering financial constraints, knowledge gaps, lack of planning, and insufficient top management commitment. The use of established instruments enhances the validity and comparability of the study's findings with existing literature.

3.4 Data Collection Procedure

First, a pilot test was carried out with 30 SME respondents in the Malaysian northern region to assess the clarity, reliability, and validity of the questionnaire items. The pilot test ensured that the wording, structure, and scaling of the questions were appropriate and easily understood by respondents. Feedback from participants was used to refine ambiguous statements and improve the questionnaire's overall flow. The reliability analysis from the pilot test indicated that all constructs achieved Cronbach's Alpha values above 0.7, which confirms acceptable internal consistency (Nunnally, 1978). Based on these results, minor adjustments were made before proceeding with full-scale distribution.

In the main data collection phase, the final structured questionnaire was distributed to the targeted sample of 357 SME respondents. To maximise response rate and inclusivity, a hybrid distribution method was employed through online distribution via Google Forms shared through WhatsApp, email, and SME-related forums. Plus, face-to-face distribution by visiting selected SME premises in the Malaysian northern region, particularly those with limited digital access.

This dual approach ensured a broader reach across diverse SME sectors, including manufacturing, services, retail, and agriculture. Respondents were provided with an introductory cover letter explaining the research objectives, assuring them of confidentiality, anonymity, and voluntary participation. No personal identifiers were recorded, and participants were informed that they could withdraw at any stage without penalty.

To improve response quality, clear instructions were included in the questionnaire, and a five-point Likert scale was consistently applied to minimise confusion. Respondents were given adequate time to complete the survey at their convenience, with reminders sent to increase completion rates. Upon collection, responses from Google Forms were exported into Microsoft Excel and later imported into SPSS software for cleaning and analysis. This process included checking for missing values, duplicate entries, and inconsistent responses to ensure the dataset's validity and readiness for statistical testing.

Overall, the systematic data collection procedure ensured that the research achieved a sufficient response rate, minimised bias, and maintained ethical standards, thereby supporting the reliability and validity of the findings.

The pilot test demonstrated the internal consistency of the measurement constructs, with all Cronbach's Alpha values exceeding the 0.60 threshold, indicating that the instrument is appropriate for full-scale data collection. The pilot test was done with 30 respondents. Specifically, the dependent variable, Business Sustainability, recorded a good reliability score of 0.838. The independent variables, Knowledge of CSR Principles and Challenges in Implementing CSR, also showed acceptable reliability, with values of 0.759 and 0.740, respectively. However, the Perceived Importance of CSR construct recorded a questionable, though still usable, Cronbach's Alpha of 0.691, which is just slightly below the conventional 0.70 threshold. This suggests that while the items for this construct are relatively consistent, minor revisions could further improve their reliability in future studies. Overall, the results confirm that the questionnaire is sufficiently reliable to measure the key constructs of CSR awareness and business sustainability among SMEs.

4.0 FINDING AND DISCUSSION

4.1 Data Analysis

The questionnaires were distributed to SMEs in the Malaysian northern region, covering various sectors. The data collection process was successfully completed, yielding an initial response rate of 89.25%, with 357 eligible questionnaires used for analysis. The response rate is credible towards the reliability and accuracy of the data gathered for the study.

4.2 Reliability Analysis

Table 2 Reliability Test Result

Variables	Number of Items	Cronbach's Alpha	Interpretation
Business Sustainability	5	0.758	Acceptable
Knowledge of CSR Principles	5	0.705	Acceptable
Perceived Importance of CSR	4	0.626	Questionable

Challenges in Implementing CSR

4

0.773

Acceptable

The questionnaire consisted of two sections: Part A on respondents' demographics and Part B on CSR awareness, including knowledge of CSR principles, perceived importance of CSR, and challenges in implementing CSR. A pilot test with 30 SME respondents in the Malaysian northern region ensured clarity and respondent-friendliness.

Cronbach's Alpha values from the actual data indicated acceptable reliability for Business Sustainability (0.758) and Knowledge of CSR Principles (0.705), while Challenges in Implementing CSR showed good reliability (0.773). However, the Perceived Importance of CSR scored 0.626, classified as "questionable," likely due to straight-lining or unclear items, suggesting a need for refinement. Overall, most variables met acceptable reliability standards, with only one requiring improvement.

4.3 Demographic Profile

Table 3 Demographic Profile

Demographic	Category	Frequency	Percentage
Age	Below 20	10	2.8
	21 - 49	270	75.6
	Above 50	77	21.6
Gender	Female	177	49.6
	Male	180	50.4
Ethnicity	Malay	211	59.1
	Chinese	103	28.9
	India	43	12
Years of Experience	Less than 1 year	110	30.8
	2 – 5 years	148	41.5
	More than 6 years	99	27.7
Type of Enterprise	Sole trader	194	54.3
	Limited Liability Ent.	163	45.7
Size of Enterprise	Small Ent.	148	41.5
	Medium-sized Ent.	209	58.5

The demographic profile of the 357 SME respondents in the northern region of Malaysia provides a comprehensive overview of their characteristics across various categories.

The majority of respondents were aged between 21 and 49 years, making up 75.6% (270 respondents), while those aged over 50 years comprised 21.6% (77 respondents). The gender distribution was nearly balanced, with 180 males (50.4%) and 177 females (49.6%). Regarding ethnicity, the largest group was Malay with 59.1% (211 respondents), followed by Chinese (28.9%, 103 respondents) and Indian (12.0%, 43 respondents).

In terms of working experience, the majority of respondents had between 2 and 5 years (41.5%, 148 respondents). Those with less than one year of experience accounted for 30.8% (110

respondents), while those with more than six years of experience accounted for 27.7% (99 respondents). The data on enterprise type showed that sole traders were the majority, at 54.3% (194 respondents), with the remaining 45.7% (163 respondents) coming from limited liability enterprises. Lastly, the distribution by enterprise size revealed that most respondents were from medium-sized enterprises (58.5%, 209 respondents), while small enterprises made up the remaining 41.5% (148 respondents) of the sample.

4.4 Descriptive of Study Variables

Table 4 Descriptive Analysis

Variables	Mean	Standard Deviation	Min	Max
Business Sustainability	4.2482	0.48913	1.00	5.00
Knowledge of CSR Principles	4.1227	0.51611	2.20	5.00
Perceived Importance of CSR	4.3347	0.46356	2.00	5.00
Challenges in Implementing CSR	4.3445	0.56773	1.00	5.00

Descriptive analysis measured the mean, standard deviation, minimum, and maximum for all variables on a five-point Likert scale. All mean scores exceeded 3.75, indicating positive perceptions among respondents. Challenges in Implementing CSR had the highest mean (4.3445), followed by Perceived Importance of CSR (4.3347), Business Sustainability (4.2482), and Knowledge of CSR Principles (4.1227). Low standard deviations show minimal response variation, with the highest variability for challenges in CSR (0.56773) and the lowest for perceived importance of CSR (0.46356). These results suggest SMEs generally view CSR awareness factors as influential to business sustainability.

4.5 Multiple Regression

Table 5 Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.696 ^a	.485	.481	.35247

a. Predictors: (Constant), Challenges in Implementing CSR, Knowledge of CSR Principle, Perceived Importance of CSR

Table 5 presents the results of the multiple regression analysis used to examine the relationship between the independent variables, Knowledge of CSR Principles, Perceived Importance of CSR, and Challenges in Implementing CSR and the dependent variable, Business Sustainability.

The regression model recorded a correlation coefficient (R) of 0.696, which indicates a moderate relationship between the observed and predicted values of business sustainability. According to Cohen (1988), correlation values between 0.50 and 0.70 are considered moderate, suggesting that the predictors collectively have a substantial influence on the dependent variable.

The R^2 value of 0.485 indicates that 48.5% of the variance in business sustainability is explained by the three independent variables in the model. This indicates that nearly half of the variability in business sustainability among SMEs is accounted for by differences in CSR knowledge, perceived importance, and implementation challenges. The remaining 51.5% may be influenced by other external factors not included in the model. The Adjusted R^2 of 0.481 further supports this result by adjusting for the number of predictors in the model, confirming the model's moderate explanatory power (Hair et al., 2019).

Additionally, the standard error of the estimate (0.35247) indicates the average distance between the actual and predicted values of business sustainability. A smaller standard error reflects a more accurate prediction (Field, 2018), and in this case, the relatively low value suggests that the model provides a good fit to the data.

Overall, the regression results confirm that the independent variables collectively help explain business sustainability in SMEs. These findings highlight that CSR knowledge, perceptions of CSR's importance, and challenges in CSR implementation are significant predictors of sustainable business practices among SMEs in the northern region of Malaysia.

4.6 Hypothesis Testing

Table 6 Regression Analysis for Hypotheses

Model	β	t	P	R ²	R ² Δ	F
Knowledge of CSR Principles	.295	.044	< .001	.485	.481	110.855
Perceived Importance of CSR	.328	.056	< .001			
Challenges in Implementing CSR	.192	.041	< .001			

Table 6 presents the results of hypothesis testing through multiple regression analysis, examining the impact of the three independent variables, such as Knowledge of CSR Principles, Perceived Importance of CSR, and Challenges in Implementing CSR on Business Sustainability.

The results indicate that Knowledge of CSR Principles recorded a standardised beta coefficient ($\beta = 0.311$, $p < 0.001$), showing a statistically significant effect on business sustainability. This suggests that SMEs with greater awareness and understanding of CSR principles are more likely to adopt sustainable practices. This finding is consistent with prior studies (Bhat et al., 2023; Mahmood et al., 2021), which confirmed that CSR knowledge enhances firms' ability to implement sustainability strategies effectively. Thus, Hypothesis 1 (H1) is supported.

H¹: Knowledge of CSR Principles significantly influences business sustainability among SMEs in the Malaysian northern region.

Similarly, the Perceived Importance of CSR also showed a significant relationship with business sustainability ($\beta = 0.311$, $p < 0.001$). This indicates that when SME owners and managers perceive CSR as valuable, they are more likely to integrate it into their operations, resulting in better long-term sustainability outcomes. This aligns with the findings of Fatima and Elbanna (2022) and Hermanto et al. (2022), who reported that SMEs valuing CSR benefit from stronger stakeholder relationships and improved competitiveness. Therefore, Hypothesis 2 (H2) is supported.

H²: Perceived Importance of CSR significantly influences business sustainability among SMEs in the Malaysian northern region.

Finally, Challenges in Implementing CSR displayed a significant relationship with business sustainability ($\beta = 0.223$, $p < 0.001$). Although challenges often hinder CSR adoption, the significant result suggests that SMEs facing such obstacles may still pursue sustainability initiatives, possibly by adopting adaptive strategies to overcome resource or knowledge limitations. This is in line with the work of Van Nguyen (2022) and Ayad et al. (2022), who highlighted that despite financial and managerial barriers, SMEs often strive to maintain sustainable practices to remain competitive. Hence, Hypothesis 3 (H3) is also supported.

H³: Challenges in implementing CSR significantly influence business sustainability among SMEs in the Malaysian northern region.

Overall, the regression analysis demonstrates that all three independent variables significantly contribute to explaining business sustainability among SMEs in the Malaysian northern region. The supported hypotheses confirm that both awareness (knowledge and perceived importance) and barriers (implementation challenges) play meaningful roles in shaping sustainable business outcomes.

5.0 CONCLUSION AND RECOMMENDATIONS

This study examined the relationship between Corporate Social Responsibility (CSR) awareness and business sustainability among SMEs in the northern region of Malaysia, focusing on three main aspects: Knowledge of CSR Principles, Perceived Importance of CSR, and Challenges in Implementing CSR. Using a quantitative approach with survey data from SME owners and managers, the research found that CSR knowledge and perceived importance have a significant impact on business sustainability, while implementation challenges can hinder the outcomes if not addressed.

The findings confirm all three hypotheses: (H1) Greater knowledge of CSR principles enhances sustainable business practices; (H2) Viewing CSR as strategically important increases adoption and long-term benefits; and (H3) Challenges such as limited resources, lack of government support, and insufficient expertise significantly affect sustainability. These results align with Stakeholder Theory, emphasising that businesses have responsibilities beyond profit-making, including meeting the needs of employees, customers, suppliers, and the community.

The implications are notable for multiple stakeholders. For SME management, CSR should be integrated into core business strategies, supported by staff training and stakeholder engagement. For unions and interest groups, collaboration, technical support, and best-practice sharing can help SMEs adopt CSR effectively. For policymakers, incentive-based programs, simplified regulations, and CSR capacity-building initiatives are essential, especially for rural SMEs. For nation-building, widespread CSR adoption can strengthen social trust, support equitable growth, and contribute to Malaysia's sustainable development goals.

While the study offers valuable insights, it acknowledges limitations such as the use of a solely quantitative design, reliance on self-reported data, limited geographic scope, and one variable with slightly lower reliability. Future research should consider a mixed-method approach, expand the study to urban and diverse regions, refine measurement tools, and adopt a longitudinal design to track changes in CSR practices over time.

In conclusion, CSR awareness, when coupled with strategic importance and effective implementation, plays a vital role in ensuring the long-term sustainability of SMEs in the Malaysian northern region. However, awareness alone is insufficient; practical support, resources, and favourable policies are crucial. Strengthening CSR culture across SMEs can

promote ethical, sustainable growth and contribute to Malaysia's broader social and economic development.

5.1 Limitations and the Direction for Future Research

Like all research, this study is subject to several limitations that should be acknowledged when interpreting the findings. These limitations also provide opportunities for future research to extend and refine the current study.

Firstly, the study was conducted within a single geographic area Malaysian northern region. While this focus allowed for a detailed examination of SMEs in the region, the findings may not be generalizable to SMEs in other states or countries, which may operate under different cultural, economic, or regulatory environments. Future research should broaden its scope by including SMEs from multiple regions in Malaysia or by conducting comparative studies across countries to enhance generalizability.

Secondly, the study relied on self-administered questionnaires to collect data from SME owners and managers. While this method is efficient, it is also subject to common method bias and social desirability bias, as respondents may provide answers that they perceive as more favourable rather than their actual practices. Future studies could employ mixed methods approaches, combining surveys with qualitative methods such as interviews, focus groups, or case studies to capture deeper insights into CSR practices and challenges.

Thirdly, the study employed a cross-sectional research design, in which data were collected at a single point in time. This limits the ability to establish causal relationships between CSR awareness variables and business sustainability. Future research could adopt a longitudinal design to examine how CSR awareness and implementation evolve over time and their long-term effects on business sustainability.

Then, the study focused on three independent variables likewise Knowledge of CSR Principles, Perceived Importance of CSR, and Challenges in Implementing CSR. While these factors explained 48.5% of the variance in business sustainability, other influential variables, such as government support, organisational culture, leadership style, or financial performance, were not included. Future research should consider expanding the model by integrating additional variables to provide a more holistic view of the determinants of business sustainability.

Finally, the measurement of variables relied on Likert-scale items adapted from prior studies. Although the pilot test confirmed their reliability, one construct (Perceived Importance of CSR) showed a Cronbach's Alpha slightly below the conventional 0.70 threshold, indicating that further refinement of items is needed. Future studies could develop more robust measurement scales tailored to the Malaysian SME context to strengthen reliability and validity.

In conclusion, despite these limitations, this study provides valuable insights into the relationship between CSR awareness and business sustainability among SMEs in the northern region of Malaysia. Addressing these limitations in future research would enhance the robustness, generalizability, and practical implications of the findings.

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