

Understanding the Global Awareness of Corporate Social Responsibility of Multinational Corporations in the Oil and Gas Sector

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Sarah Mohabir¹ , Yogesh C. Joshi¹ and Darshana R. Dave¹

Abstract

This study investigates global awareness of corporate social responsibility (CSR) among multinational corporations (MNCs). Despite the rapid growth of MNCs, research on public CSR awareness on a global scale is limited. To address this deficit, primary research data have been collected from across the globe to identify the level of awareness among the existing public at large of CSR in accordance with economic development. The data were collected using the purposive quota sampling method across over 100 nations, with over 1,500 respondents from North America, South America, Asia, Europe, Oceania and the Caribbean offering a global sample set. Data were then coded in accordance to the World Bank's economic development classification and analysed using Spearman's rho test. Findings reveal that there is indeed an association between the economic development of a nation and awareness of CSR. The association shows that there seems to be an inverse effect and that CSR awareness is higher in economies that are developing. This suggests that factors such as culture, religion and colonial history may influence CSR perceptions in these regions.

Keywords

Corporate social responsibility, economic development, environment, multinational corporations, Sustainable Development Goals

¹Postgraduate Department of Business Management, Sardar Patel University, Anand, Gujarat, India

Corresponding author:

Sarah Mohabir, Postgraduate Department of Business Management, Sardar Patel University, Vallabh Vidyannagar, Anand, Gujarat 388120, India.

E-mail: sarahmohabir@gmail.com



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Introduction

Multinational corporations (MNCs) are entities that operate in more than one country, giving them global reach. They have been known to carry with them a great deal of power and influence (Bouquet & Deutsch, 2008). In his study, Friedman (1970) postulated that entities often operate for economic gain rather than social considerations. Authors such as Frederick (1986), however, argued that an entity does not solely operate for their profiteering and development but also for the advancement of its stakeholders, given that it stands to benefit from society and should thus give back to it. These entities may tend to be in industries that garner vast amounts of wealth. This particularly rings true for entities that are operating in the oil and gas (O&G) sector.

In 2005, nine out of ten of the top income-earning entities were either automobile or O&G-based, with the wealthiest company in the world being in the O&G sector (Palan, 2016). O&G MNCs are considered to be the lifeline of any country and various industries as these firms engage in the extraction, refinement and production of fossil fuels, leading to them ultimately impacting the global logistics system (Prakash et al., 2023).

They are reputedly known for their impact on society (García-Rodríguez et al., 2013) and the environment in which they operate (Du & Vieira, 2012), which often brings into question their legitimacy (Ma et al., 2017).

Research has shown that an entity's image can be positively related to corporate social responsibility (CSR) (Lopez & Fornes, 2015), especially environmentally driven CSR towards the popularly known Sustainable Development Goals (SDGs). The SDGs were developed by the UN in 2015 and are expected to be accomplished by the year 2030 (Lee et al., 2016). SDG 13 calls for the mitigation of greenhouse gas emissions, while SDG 9 emphasises the need for sustainable infrastructure. These SDGs provide a unique opportunity for MNCs to enhance public perception, which can inadvertently contribute not only to their bottom line but also to their legitimacy in society (Deighton-Smith & Bell, 2018). Thus, these entities must establish a better relationship with their stakeholders through CSR (Gifford & Kestler, 2008), since they are often associated with having negative impacts on the environment (Oliver et al., 2020) and climate change (Levy & Kolk, 2002).

Despite this scrutiny, research is scarce for the O&G industry, though the industry itself is projected to expand substantially in the coming years due to the growth of the population, industrialisation and O&G demands (Maurya et al., 2023). Authors such as Mohabir and Joshi (2024) went on to emphasise that there should be research on MNCs and CSR. They posited that much of the existing literature focused on developed nations, leaving a critical gap for understanding how CSR awareness in developing regions can influence O&G MNCs' strategies on a global scale.

Public awareness of CSR globally is prone to vary significantly from the economic context. This awareness plays an important role in moulding the O&G MNCs' image. In differing economies, expectations and policies may vary significantly. Thus, understanding this awareness is important for MNCs to be more informed. This should allow them to develop and adapt effective CSR strategies

and policies to cater to the levels of awareness of diverse economic conditions and societal expectations. Hence, this research aims to address the gap by providing insights into economic development on public awareness of O&G MNCs' CSR.

The sections to come include the literature review outlining previous contributions to the body of knowledge and additional research gaps, followed by the rationale for this research and its objectives. The research methodology section describes how the data were gathered and planned to be analysed. The results are presented in the analysis section, followed by a discussion of the findings and a conclusion that will cover whether the objectives of the study are met. The implications section will be presented for academics, industry professionals and managers to more specifically hone in on the significance of this study's findings to them. As with any study, this research also has its limitations, which shall be disclosed in the last section of this article.

Literature Review

CSR has been defined as being very broad and multifaceted in nature (Frynas & Stephens, 2015). There is no set or generally agreed-upon definition of what it is as of yet (Hack et al., 2014), which contributes to its diverse interpretations. For this article, CSR has been defined as 'the obligation of decision-makers to take actions that protect and improve the welfare of society along with their own interests' (Davis & Blomstrom, 1975). It can take different forms and be used to tackle social issues in society (Carroll, 1979; Carroll & Brown, 2021), inclusive of environmental issues, which present themselves as fundamental issues to both areas of sustainable development and also have linkages to CSR (Ye et al., 2020).

CSR theoretical underpinnings help to identify why firms might choose to adopt CSR practices and how they are influenced by public awareness. MNCs may be more inclined to adopt CSR based on their ownership or their industry, as it contributes to their reputational value in society (Duhoon & Singh, 2024).

The legitimisation theory suggests that it is through CSR practices that the image or reputational value of an entity may be enhanced, thereby leading to an easier flow of operations within a society due to the acceptance gained (Deighton-Smith & Bell, 2018). This is especially important since the O&G industry is perceived as controversial (Du & Vieira, 2012). Stakeholder theory, as asserted by authors such as Freeman (2010), highlights the perpetual importance of taking into consideration the stakeholders' preference in CSR rather than just the shareholders, thereby enhancing its reputational value and the firm's wealth.

The triple bottom line theory was purported by Elkington and Rowlands (1999), and is continuously supported by authors such as Anis and Siddiqui (2015) who state that firms do not simply operate to make a profit, but also to contribute socially and environmentally. However, it is dubious whether these entities will adopt environmentally driven CSR practices as authors such as Menaga et al. (2024) argue that few entities execute CSR with pure intention, even when CSR is deemed mandatory.

Furthermore, Weyzig (2009) called for more studies that focus on MNCs and CSR issues that are deemed to have an impact, as with the O&G MNCs and the

impact that they currently wield on the environment. Based on their immense global impact, these MNCs in the O&G field present a critical area of focus for CSR research. Therefore, research seeks to explore this domain, building on these recommendations.

Throughout the years, there has been a gradual increase in the level of awareness and expectation of O&G entities (Edoho, 2008), which may be linked to a scarcity of industry-specific literature (Maurya et al., 2023). Furthermore, Sookram (2007) posits that there is a limited level of awareness of CSR and its benefits to MNCs in the O&G sector, thereby affecting both the planning and implementation of CSR. This could, in turn, affect the public at large.

Similarly, Nyabakora and Mohabir (2024) presented a gap in research through their bibliometric study, which identified a deficit of studies focusing on both CSR and the MNC. They went on to discuss that MNCs have, over time, developed a more vested interest in developing nations, where related studies are similarly in deficit (Grasso et al., 2021). Accordingly, it is crucial for more research regarding this disparity to be done to enhance the understanding of CSR public awareness globally, since global trends affecting the MNCs' public image may vary due to regulatory and economic factors.

There are mixed findings regarding the level of awareness of MNCs' CSR. As can be seen from Gupta's (2011) study, the levels of awareness of MNCs' CSR were higher in the developing nations when compared to the developed ones. In their study, Arli and Lasmono (2010) conversely found that there was a higher level of awareness in developed nations as opposed to developing nations, likely due to larger investments from MNCs in their home markets (Sharma et al., 2023). The authors then called for more research to be done for developing nations and CSR. These contrasting findings highlight the need for further investigation of the relationship between economic development and CSR awareness.

Despite the previously presented literature evidencing the growth of interest in the field, there has yet to be a study which examines CSR awareness on a more comprehensive, global scale. As such, this research aims to attempt to do so through identifying the relationship between the public level of awareness of O&G MNCs' CSR and the economic development of nations globally, offering a more wide-ranging perspective.

Thus, the research questions are as follows:

RQ1: Is there an association between CSR awareness and economic development?

RQ2: What type of association exists between CSR MNC awareness and the economic development of nations?

RQ3: What are the contributing factors to the levels of awareness observed through the association of economic development?

The study hypothesis is:

H_1 : There is an association between the level of CSR awareness and economic development.

Objectives

To address the identified research gap, the primary objective of this study is to examine whether the economic development of a nation affects the public's awareness of O&G MNCs' CSR globally. To bridge this gap, the research shall include a cross-sectional analysis to examine the shared relationship between the economic development of sampled nations and the public's CSR awareness of O&G MNCs globally. Additionally, this study aims to explore what might be the potential factors influencing this relationship by shedding light on what may drive these differences in CSR throughout different economic conditions.

Through examining the existing conditions against CSR awareness levels, research should reveal where O&G MNCs stand with their stakeholders, allowing them to tailor their CSR efforts and strategies to align with their economic conditions and expectations of their stakeholders. This is crucial since the majority of existing literature focuses heavily solely on specific developed nations, leaving a gap in understanding how economic context shapes CSR awareness in developing nations through a global context.

Rationale of the Study

The reputational value of an MNC can be shifted based on public opinion. This opinion may very well hinge on CSR. This rings true for entities that operate in industries with significant environmental impact, such as the O&G sector. The relationship shared between CSR awareness and a country's economic development is still not fully understood despite the expansion of the industry.

Notably, the Energy Information Administration (EIA) indicated that there is continuous growth in the demand for renewable energy, and it will continue to grow substantially (Energy Information Administration, 2021). Demand for O&G has been similarly predicted to grow and account for the consistently dominant energy source through the year 2030 (International Energy Agency, 2023). This demonstrates that it may continue to play a role in differing economies of the world, particularly in developing nations, where there may be challenges in adapting infrastructures for renewable energies. As a result, CSR awareness comprehension should remain significant, since the stakeholders demand environmental concern, especially as the supply of renewable energy development is growing, as will the inevitable stakeholder interest.

Thus, insights must be gained to empower managers, the public and the government with the information equipping them to develop policies and shape CSR practices. This is crucial since the O&G sector has such a substantial effect on the environment and society. To narrow the current gap of knowledge, this research examines how public awareness of CSR actions by the O&G sector is influenced by the economic development of a nation.

Methodology

Sample Framework and Technique

The primary objective of this study was to identify the association shared between the level of CSR awareness and economic development globally. The chosen stakeholder, that is, the public at large, was selected as per Clarkson's (1995) list of stakeholders, since they are central to obtaining the awareness of the sample necessary for this study. Web-based questionnaires were distributed on a purposive quota sampling basis, grouping countries by continents/regions, namely North America, South America, Asia, Africa, Europe and Oceania, inclusive of the Caribbean, to obtain a global sample. This information was obtained from respondents based on their country of origin, then coded based on the assigned region/continent. This was initially done to ensure that the data emanated from the selected global regions. The Caribbean region was included due to its being prone to natural disasters because of climate change and its coastal geographical location (Middelbeek et al., 2014).

As per Mason (2017), 'quota sampling means there is greater flexibility; rather than fixed numbers of cases being required with particular criteria, quota sampling specifies categories and the minimum number needed for each one'. The minimum number for each category was identified as 30 to obtain normalcy in the data (Carnahan et al., 2010) per region. Due to the sample's inclusiveness, resources were allocated effectively, enabling a wide range of geographic and economic backgrounds to be collected from the sample set. As a result, quota sampling was utilised to procure global representation, with the minimum threshold per region being set at 30 respondents to obtain statistical normalcy and to guarantee data robustness across all regions. This was optimal since the researcher's capacity to contact participants in every location physically was limited.

Furthermore, purposive sampling was adopted to strategically identify respondents from across the outlined regions to share the questionnaires to obtain 'global CSR awareness'. This allowed for there to be the expression of judgement by the researcher of the sample set based on the prospective respondents' locality and their network to obtain data. Thus, the purposive quota sampling method was used since the reach of the researcher was limited to regions globally. It should be noted that the employed sampling methods introduce inherent biases and the risk of imbalances regionally. Efforts to mitigate biases include targeted survey distribution to regions that were underrepresented and customised survey introductions encouraging underrepresented regions to participate. It is also important to acknowledge that these measures bring with them limitations (Lohr, 2021), which affect the generalisability of this study's findings (Etikan, 2016).

Once this initial phase was complete, the snowball technique was employed to extend reach by requesting initial respondents to forward the questionnaire to their local networks, thus expanding the sample size in harder-to-reach regions. Notably, potential biases using the snowball technique include the possibility of overrepresentation from certain demographic networks or regions. This was minimised through careful and deliberate initial targeting to ensure a balance of

respondents. Thus, the flow of responses was monitored to ensure that the regional responses were proportionate and sufficient. Additionally, when snowballing to regions where responses were not sufficient, the introduction and conclusion sections of the questionnaire were customised to elicit support for snowballing from the initial participants, to share the questionnaire with their fellow countrymates or anyone who might be from the specific region. Through these disclosures, respondents were expected to opt to participate in the questionnaire based on the outlined region.

Data Collection

Web-based questionnaires (created using Google Forms) were deemed the primary optimal tool to obtain public perspective, granted the researcher's physical limitations. It was through this medium that questionnaires could be globally dispersed across different continents efficiently. Not only was it fast, but it was also cost-effective and ensured that data could be stored securely and systematically in real-time.

The questions in the survey were framed using a five-point Likert scale to test levels of the public's O&G MNCs' CSR awareness. This scale is a well-established measure of subjective attitudes, such as awareness. In addition, it offered granularity, thereby allowing the different levels of CSR awareness of O&G by the public to be assessed, from high awareness to no awareness. This tool was used to optimise time and enhance the efficiency in reaching respondents across diverse geographic regions, especially with the physical limitations of contacting a vast number of participants globally. Its validity was also tested through a review of the questionnaire by four experts in relevant fields, including academia, data analytics, management and CSR, to ensure that the questions would effectively capture the necessary data to obtain the research objectives.

Each expert received a document which contained the survey, an introduction to the study and its aims, and a request to provide specific and general feedback. Adjustments were made to the wording of the introduction of the survey and the questions themselves to improve their comprehensiveness and clarity regionally and cross-culturally. Suggestions include the use of the Likert scale to optimise for granularity to measure CSR awareness, and nations were revised from regions as a measure for simplicity and data collection purposes.

In addition, the introduction of the survey includes definitions of key terms, alongside detailed information about the researcher (inclusive of contact information for respondent follow-up) and data protection measures. These measures were taken for transparency purposes and to ensure respondent confidence and comfort. Based on expert recommendations, the sequence of the questions was also adjusted to ensure a logical flow. Irrelevant and redundant questions were also removed to optimise the questionnaire performance and minimise respondent fatigue without compromising data quality. Ethical considerations were also undertaken based on expert advice for recommendations regarding participant anonymity. As such, modifications were made to sections requesting personal information, such as email addresses.

To ensure the adoption of Gupta's (2011) method of testing for the reliability and consistency of the questionnaire, responses were reviewed through a developed two-item scale to measure CSR awareness using Cronbach's alpha. The test revealed a score of 0.82, which was deemed adequate in measuring CSR awareness.

The questionnaire also included a question regarding the nation of the respondent strategically to categorise respondents based on the World Bank's (2022) classifications: 'high income', 'high middle income', 'lower middle income' and 'low income' levels of economies for analysis purposes. These classifications were used as measures of economic development, granted their origins from the World Bank—a well-reputed database. Based on the responses received from each country, classifications were then coded from numbers one through four. These classifications were crucial in measuring the relationship between CSR awareness and economic development.

Social media platforms such as Yahoo.com, WhatsApp, LinkedIn and Facebook were used for the distribution of the questionnaire. Questionnaires were also published on forums such as [surveycircle.in](https://www.surveycircle.in), [surveysparrow.com](https://www.surveysparrow.com) and [surveycircle.com](https://www.surveycircle.com) to obtain additional responses that would have otherwise been difficult for the researcher to obtain globally, particularly from Oceania and Europe. To further expand reach, the Uniworld (2023) database was also accessed to obtain email addresses where surveys could be forwarded to additional recipients.

Analysis

In this section, the results of the study will be discussed. It includes the descriptive tables of the study, which will include tables, bar charts of both variables and a frequency chart of the sampled regions' responses. In addition to the inferential analysis output of Spearman's rho to display the relationship existing between the two variables and to also provide answers to the primary research question. Data analysis was executed using the Jamovi 2.3.28 (The Jamovi Project, 2022) software. It was chosen as the primary tool for analysis since it has a user-friendly interface and robust statistical capabilities. The Excel 365 software tool has been used because it is user-friendly and capable of facilitating adequate visualisations for the descriptive and inferential data, as can be seen in the sections below. Additionally, its capabilities have been utilised for collecting, organising and coding the data.

The Shapiro–Wilk test (see Table 1) indicates that both variables have a p value that is less than .001. This implies that there is evidence that suggests that the null hypothesis of both variables' normality is rejected. Therefore, it is reasonable to draw the conclusion that the data for the economic development and awareness variables are not normally distributed. With these considerations, suitable inferential tests will be utilised moving forward.

From the dissemination of the questionnaire to all regions, feedback was garnered from 1,505 respondents, indicating that the collected data are sufficient to move forward with the study, with consideration of the fact that the sample size

Table 1. Descriptive Data of Global Corporate Social Responsibility (CSR) Awareness and Economic Development Variables.

Variable	Mean	Median	SD	Variance	Skewness		Kurtosis		Shapiro-Wilk	
					Value	SE	Value	SE	W	p
Global CSR awareness	2.1	2	0.922	0.849	0.9714	0.0631	0.9	0.126	0.885	<.001
Economic development	1.65	1	0.928	0.86	1.13	0.0631	-0.0423	0.631	0.701	<.001

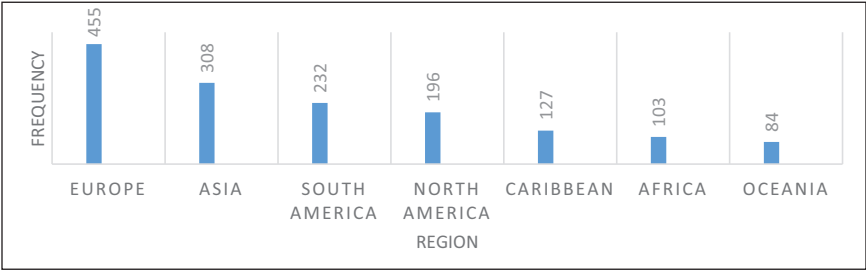


Figure 1. Global Dispersion of Respondents by Region.

was greater than the requisite 384 (Ahmad & Halim, 2017). The highest levels of responses were received from Europe, and the least number of responses were garnered from Africa (see Figure 1). The number of responses per region is well within the requisite level of feedback, in addition to the total sample size.

Figure 2 shows that the highest levels of feedback were gathered from higher income levels, and the lowest number of feedback was garnered from low-income levels. Based on the frequency of each range of the economic development indicator, the feedback was sufficient to move forward with the study, granted that a large population can utilise a sample size of 30 or more (Kothari, 2004).

Figure 3 displays the level of awareness of the participants using the five-point Likert scale, with one being the highest level of awareness and five being the lowest. Figure 3 demonstrates that there is a high level of awareness among aggregate respondents, with the lowest levels of skews emanating from respondents who were deemed ‘fully not aware’ of CSR.

The inferential non-parametric test, Spearman’s rho (see Table 2), was the applied and appropriate test to obtain the association between CSR awareness and economic development since the tested data were not normally distributed. Considerations were also given to the fact that the data collected to obtain CSR awareness were ordinal. Additionally, it was chosen due to its suitability for larger sample sizes and its robustness in measuring the strength and direction of the monotonic relationship between the level of CSR awareness and the economic development level.

As can be seen in Table 2, the output ($-0.070, p = .003$) indicated that p value when the alpha was set at 0.05 is .003, which is significant. Furthermore, the test’s

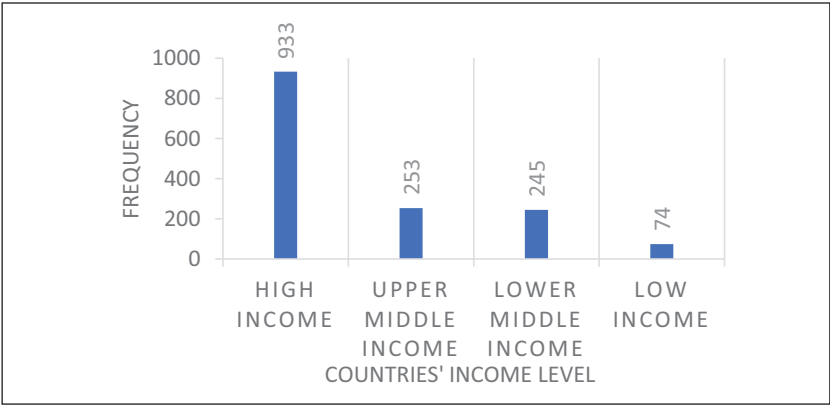


Figure 2. Distribution of Economic Development of Sampled Respondents.

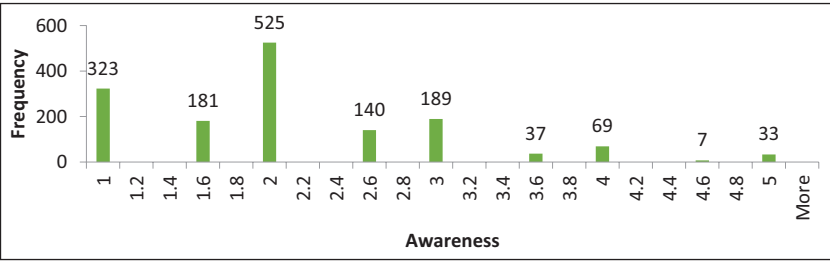


Figure 3. Distribution of Frequency of Awareness of Sampled Respondents.

Table 2. Spearman's Rho Test Between Corporate Social Responsibility (CSR) Awareness and Economic Development.

Awareness		Awareness	Income
Income	Spearman's rho	—	
	p value	—	
	Spearman's rho	−0.070**	—
	p value	.003	—

Notes: Spearman's rho correlation coefficients. ** Statistically significant at $p < 0.01$.

results also revealed that the relationship was negative in nature, given that the above-placed figure was -0.070 . It should be noted, however, that though the relationship is significant, the correlation between the two variables is still deemed weak.

In the sections to follow, there will be a discussion of the results presented above to introduce the meaningfulness of the data and information presented in the results section, followed by an implications section discussing the theoretical, practical and social implications of this study's findings.

Discussion

As previously mentioned, this section will cover the interpretations and inferences that can be drawn from the analysis section. This study's findings will be used to discuss the relevance of the results to the research question and whether or not the literature ties into the findings.

Through Spearman's rho test, it was identified that there was indeed a relationship between the development of a nation and the level of awareness of MNCs' CSR, thereby answering the first question of this study. The relationship presented through the p value indicated that the probability of the occurrence of the finding was not by chance and that there is indeed a correlation between the two variables.

These findings contradict Visser's (2011) assumption that CSR is static across nations. Instead, it supports Werther and Chandler's (2010) argument that, given the shift in communication brought about by technological development, there would be even more awareness of corporate acts, regardless of whether they were positive or negative. This may be why the O&G sectors have been increasingly scrutinised publicly in both developing and developed nations. In their study, Arli and Lasmono (2010) also called for clarity regarding CSR awareness about the development of a nation, which has thus been provided through confirmation that CSR awareness is associated with economic development through empirical evidence.

Having established the relationship between CSR awareness and economic development, the second question aimed to determine the nature of the association. Findings reveal a negative association between the two variables, though the magnitude of the negative association is weak. Thus, when CSR awareness of the O&G MNCs increases, economic development seems to decrease, but this decrease is only slight. To be more precise, when the economic development of a nation increases, there is only a slight decrease in the level of awareness of CSR. The weak association may be based on the fact that the interest in CSR is still growing and has not yet become pronounced (Rajapakse, 2005).

In building upon the first two questions, the final question endeavoured to identify possible factors influencing the levels of CSR observed. The negative association identified was contrary to Arli and Lasmono's (2010) study, where they stated that developing nations are preoccupied with actively pursuing necessities; thus, they are not fully aware of MNC CSR.

Furthermore, developing nations may have had a higher level of awareness of CSR because the entities that carry out acts of philanthropy in these existing areas, though superficial, may seem impactful because of high visibility as Mbalisi and Okorie (2020) purported. This may also be the case, given that these nations are more deeply influenced by factors such as religion and colonisation (Gupta, 2011), which increase their propensity to be more attuned to CSR activities emanating from their deep-rooted religious views emphasising ethical behaviour and acts of philanthropy.

Barrena Martínez et al. (2016) emphasised stakeholder power as a factor since society can expel entities that are not operating in accordance with the stakeholders' interests. Therefore, there must be awareness of O&G MNCs' CSR, as it will allow society to have a stance. This will facilitate a wider perception of CSR,

allowing the public at large to better decide whether or not the CSR activities being executed by these entities are sufficiently contributing to the enhancement of the O&G MNCs' reputational value and legitimacy.

Furthermore, the weak association identified indicates that economic development as a factor is not dominant, nor does it solely affect CSR awareness (Visser, 2009). These findings suggest that CSR awareness may also be influenced by other factors such as sociocultural variables (Hofstede, 1984; Matten & Moon, 2008), which may play a more prominent role. The slightly negative association could also be demonstrative of a growing interest in CSR globally, especially in economically developing nations, though it has yet to become significant to the public.

In addition, the weak association may demonstrate that though economically developed nations might have better institutional frameworks for CSR, there might also be a deficit in public awareness due to the disconnect between corporate practices and public understanding caused by insufficient corporate–public communication, lack of public engagement or the actual presence of CSR activities. Conversely, CSR awareness in low-income regions may be slightly higher since these regions might be more inclined to prioritise immediate economic concerns, thus overshadowing CSR awareness. Their slightly higher levels of awareness might have been brought about by the direct relevance of socio-economic challenges (Visser, 2009).

A final contributing factor might include collaborations with governments, NGOs and supranationals (Pizzi et al., 2021; Sookram, 2007) for resources and more comprehensive databases with skillsets that will not only enhance public CSR awareness levels but also perceptions of CSR initiatives. This especially applies to O&G MNCs with diverse and developing host economies where, through support, they should be able to align CSR strategies with the public's expectations. Thus, it can be seen that CSR awareness is multifaceted (Orlitzky et al., 2003) as it may also be predicted through stakeholders, reputation, religion, sociocultural, and historical contexts, along with economic development.

Conclusion

Through this study, the primary objective—to determine if a relationship exists between the two variables: economic development and CSR awareness—was achieved through incorporating Spearman's rho test. The relationship was deemed to be significant, thereby answering the first research question posed in the study. These findings challenged earlier assumptions made by Visser (2011) of CSR being universally static.

The second research question aimed at investigating the nature of the relationship, which was similarly answered through Spearman's rho test results. It revealed that there was a negative correlation between the two variables; thus, when economic development decreases, the level of awareness increases. The negative association, however, was deemed to be relatively weak. Though this is the case, the *p* value shows that it is by no means coincidental and is thus still supported. The weak inverse association suggests that more studies can be done to

identify potential factors that influence the relationship, including social and cultural influences on CSR awareness. Through this expansion, a more comprehensive understanding of how CSR awareness varies is gained.

The final question of the study aimed to identify contributing factors that might affect the level of CSR awareness and economic development. Suggested factors based on previous literature indicated that sociocultural factors included religion, colonialism and pressure from stakeholders—especially in developing nations. This conclusion was derived based on the weak association from Spearman's rho test, indicating that, though CSR awareness is affected by a nation's development, there may also be other underlying influential factors.

This study provides insights into important relationships between CSR awareness and economic development. Through it, additional avenues have presented themselves for future research, inclusive of the exploration of the nuanced sociocultural factors that might influence CSR in different economic environments. It contributes to the CSR body of knowledge of O&G MNCs by presenting the fact that CSR awareness is not the sole function of economic development and encouraged that practitioners also include different factors when designing their CSR initiatives, in addition to partnering locally with institutions such as NGOs and governments, granted their expertise, especially in developing nations.

Implications of the Study

Practical Implications

The results provided insights which might be useful to both policymakers and managers, especially those who are working for MNCs in the O&G sector. Since there is a significant relationship existing between a nation's development and CSR awareness, it is recommended that managers customise CSR programmes with more consideration for the country's economic development and level of awareness. Granted that the magnitude of the association was inverse and weak, managers should also consider other influential factors that might be more dominant, such as the social, technological and cultural dimensions, when crafting CSR initiatives, since the weak correlation suggests that economic development is not the only factor driving CSR awareness.

Additionally, rather than implementing CSR that might be visible but superficial, they might want to collaborate with influential, more knowledgeable local bodies about regional and sociocultural contexts to implement impactful CSR initiatives that resonate with the community. This should contribute to their effectiveness and social legitimacy. Managers should also focus on other factors, including engaging the community and providing public awareness campaigns to bridge the awareness gap and promote long-term CSR effectiveness.

Theoretical Implications

The findings of this study contribute to the ongoing discourse on CSR with a nuanced approach to CSR, as it challenged Viser's (2011) assumption of CSR

being static, since the relationship between both CSR awareness and economic development was significant. This indicated that the relationship was dynamic. The negative correlation went on to challenge the assumptions made by Arli and Lasmono (2010), who implied that CSR was not as prevalent in developing nations. This negative correlation was, however, weak in magnitude. This shows that, though there is indeed a relationship, other factors such as religion or culture may also play a role in CSR awareness and could thus be studied more in-depth in future research. In addition, due to the weak association, it sheds more light on the fact that, though CSR may not be directly correlated with economic development, there may still be other sociocultural factors that might also have a role to play. Through these findings, research provides nuanced insights into the relationship between CSR awareness and economic development, especially with regard to the controversial O&G sector. It also acts as a basis for more research to understand additional factors that might affect CSR awareness.

Social Implications

From a societal perspective, the findings of the study demonstrate that public awareness can have a role in how MNCs in the O&G sector might design their CSR initiatives, particularly in developing nations. From the weak negative correlations of the Spearman's rho test, it can be seen that, though slight, there is value in including more engagement and education regarding the topic. This is especially true for those who might be from developing nations, where the CSR might be superficial but still impactful based on this study's findings. Thus, better-informed societies might be more likely to demand quality, long-term social benefits. The study also called for more collaborations of these MNCs with NGOs or governments in executing CSR, especially in developing nations, since these bodies might have first-hand knowledge of how to implement suitable CSR strategies.

Limitations/Future Research

The findings of this study can be used by those within the O&G industry to identify which economic development areas they may be deficient in, in an effort to increase the CSR awareness level. Through doing so, they would be able to proactively empower those in the public at large to acknowledge these entities' CSR contributions.

Limitations of this article include that the study was executed on a cross-sectional basis, limiting it to a finite period. Furthermore, while the purposive quota and snowball sampling methods employed enabled global inclusivity, they are still subject to trade-offs (Smith & Lewis, 2011) such as biases and under/overrepresentation. Attempts to mitigate these issues include monitoring feedback and customised introductions soliciting participation from underrepresented regions.

Further mitigation was obtained through outreach to a wide range of respondents across different backgrounds and regions, regardless of awareness levels. The questionnaire was solely distributed online, which limits the sample to respondents who have access to the internet. Because of the sampling methods employed, there is a risk of the data applying to just the sampled data set, thereby affecting the generalisability of this study (Patton, 2014). These findings, however, do provide insights into what can be expected in the field and provide the opportunity for growth in the research field as they provide empirical-based findings on global CSR awareness.

In addition, this study focuses heavily on quantitative data to study the economic development's association with CSR awareness. While this approach allowed for there to be a wider reach, it limited the ability to explore contextual nuances that qualitative measures could have provided. Future researchers could thus include a mixed-methods approach, which would complement their quantitative findings and enhance the depth of understanding.

Moreover, given the growing worldwide usage of electric vehicles, there may be halts or cancellations in several O&G projects globally, thereby affecting this study's findings. Future research may also need to take into account the continuous shift towards alternative energy sources and their effects on CSR preferences, practices and reporting within the O&G industry. Finally, this research was executed utilising solely data to obtain public awareness, but it did not take into consideration the secondary data that could be gathered from annual reports of companies. By analysing profitable CSR O&G companies' annual reports, researchers would be able to identify effective CSR practices within the sector.

Lastly, based on the findings, though the economic development of a country does have its impact, there are also other factors that can contribute to influencing CSR awareness globally (Carroll & Shabana, 2010), including stakeholders, reputation, sociocultural, regional and religious factors. Thus, future research can also include these variables moving forward to provide deeper insights into the complex dynamics affecting CSR awareness globally.

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Authors' Contributions

All authors contributed to the study's conception and design. Material preparation, data collection and analysis were performed by Sarah Elizabeth Mohabir and Professor (Dr) Yogesh C. Joshi. The first draft of the manuscript was written by Sarah Elizabeth Mohabir. Editing of the manuscript was done by Professor (Dr) Yogesh C. Joshi and Professor (Dr) Darshana R. Dave. All authors commented on the versions of the manuscript, read and approved the final manuscript for publication.

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ORCID iD

Sarah Mohabir  <https://orcid.org/0000-0003-3733-6248>

References

- Ahmad, H. B., & Halim, H. B. (2017). Determining sample size for research activities: The case of organizational research. *Business Review*, 2(1), 20–34.
- Anis, M. D., & Siddiqui, T. Z. (2015). Issues impacting sustainability in the oil and gas industry. *Journal of Management and Sustainability*, 5(4), 115. <https://doi.org/10.5539/jms.v5n4p115>
- Arlı, D. I., & Lasmono, H. K. (2010). Consumers' perception of corporate social responsibility in a developing country. *International Journal of Consumer Studies*, 34(1), 46–51. <https://doi.org/10.1111/j.1470-6431.2009.00824.x>
- Barrena Martínez, J., López Fernández, M., & Romero Fernández, P. M. (2016). Corporate social responsibility: Evolution through institutional and stakeholder perspectives. *European Journal of Management and Business Economics*, 25(1), 8–14. <https://doi.org/10.1016/j.redee.2015.11.002>
- Bouquet, C., & Deutsch, Y. (2008). The impact of corporate social performance on a firm's multinationality. *Journal of Business Ethics*, 80, 755–769.
- Carnahan, S., Agarwal, R., & Campbell, B. (2010). The effect of firm compensation structures on the mobility and entrepreneurship of extreme performers. *Business*, 920(October), 1–43.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *The Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B., & Brown, J. A. (2021, January). Corporate social responsibility: A chronicle and review of concept development and refinements. In *The Routledge companion to corporate social responsibility*. Routledge. <https://doi.org/10.4324/9781003152651-3>
- Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management*, 12(1), 85–105. <https://doi.org/10.1111/j.1468-2370.2009.00275.x>
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117. <https://doi.org/10.5465/AMR.1995.9503271994>
- Davis, K., & Blomstrom, R. L. (1975). *Business and society: Environment and responsibility*. McGraw Hill.
- Deighton-Smith, N., & Bell, B. T. (2018). Objectifying fitness: A content and thematic analysis of #fitspiration images on social media. *Psychology of Popular Media Culture*, 7(4), 467.
- Du, S., & Vieira, E. T. (2012). Striving for legitimacy through corporate social responsibility: Insights from oil companies. *Journal of Business Ethics*, 110(4), 413–427. <https://doi.org/10.1007/s10551-012-1490-4>

- Duhoon, A., & Singh, M. (2024). Corporate governance in family firms: A bibliometric analysis. *IMIB Journal of Innovation and Management*, 2(1). <https://doi.org/10.1177/ijim.231174155>
- Edoho, F. M. (2008). Oil transnational corporations: Corporate social responsibility and environmental sustainability. *Corporate Social Responsibility and Environmental Management*, 15(4), 210–222.
- Elkington, J., & Rowlands, I. H. (1999). Cannibals with forks: The triple bottom line of 21st century business. *Alternatives Journal*, 25(4), 42.
- Energy Information Administration. (2021, October 7). *EIA projects nearly 50% increase in world energy use by 2050, led by growth in renewables*. <https://www.eia.gov/today-in-energy/detail.php?id=49876>
- Etikan, I. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Frederick, W. C. (1986). Toward CSR3: Why ethical analysis is indispensable and unavoidable in corporate affairs. *California Management Review*, 28(2), 126–141.
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge University Press.
- Friedman, M. (1970). A Friedman doctrine—The social responsibility of business is to increase its profits. *New York Times Magazine*, 6(33), 122–124. <http://www.nytimes.com/>
- Frynas, J. G., & Stephens, S. (2015). Political corporate social responsibility: Reviewing theories and setting new agendas. *International Journal of Management Reviews*, 17(4), 483–509. <https://doi.org/10.1111/ijmr.12049>
- García-Rodríguez, F. J., García-Rodríguez, J. L., Castilla-Gutiérrez, C., & Major, S. A. (2013). Corporate social responsibility of oil companies in developing countries: From altruism to business strategy. *Corporate Social Responsibility and Environmental Management*, 20(6), 371–384.
- Gifford, B., & Kestler, A. (2008). Toward a theory of local legitimacy by MNEs in developing nations: Newmont mining and health sustainable development in Peru. *Journal of International Management*, 14(4), 340–352. <https://doi.org/10.1016/j.intman.2007.09.005>
- Grasso, M. S., del Carmen Valls Martínez, M., & Ramírez-Orellana, A. (2021). Health policies based on patient satisfaction: A bibliometric study. *Healthcare*, 9(11), 1520.
- Gupta, S. (2011). Consumer stakeholder view of corporate social responsibility: A comparative analysis from USA and India. *Social Responsibility Journal*, 7(3), 363–380. <https://doi.org/10.1108/17471111111154518>
- Hack, L., Kenyon, A. J., & Wood, E. H. (2014). A critical corporate social responsibility (CSR) timeline: How should it be understood now? *International Journal of Management Cases*, 16(4), 46–55.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5). Sage Publications.
- International Energy Agency. (2023). *World Energy Outlook 2023*. <https://www.iea.org/reports/world-energy-outlook-2023>
- Kothari, C. R. (2004). *Research methodology: Methods & techniques*. New Age International (P) Ltd.
- Lee, B. X., Kjaerulf, F., Turner, S., Cohen, L., Donnelly, P. D., Muggah, R., Davis, R., Realini, A., Kieselbach, B., MacGregor, L. S., Waller, I., Gordon, R., Moloney-Kitts, M., Lee, G., & Gilligan, J. (2016). Transforming our world: Implementing the 2030 Agenda through sustainable development goal indicators. *Journal of Public Health Policy*, 37(1), S13–S31. <https://doi.org/10.1057/s41271-016-0002-7>

- Levy, D. L., & Kolk, A. (2002). Strategic responses to global climate change: conflicting pressures on multinationals in the oil industry. *Business and Politics*, 4(3), 275–300. <https://doi.org/10.2202/1469-3569.1042>
- Lohr, S. L. (2021). *Sampling: Design and analysis* (3rd ed.). Chapman and Hall/CRC.
- Lopez, B., & Fornes, G. (2015). Corporate social responsibility in emerging markets: Case studies of Spanish MNCs in Latin America. *European Business Review*, 27(2), 214–230. <https://doi.org/10.1108/EBR-03-2013-0053>
- Ma, H., Zeng, S., Lin, H., Chen, H., & Shi, J. J. (2017). The societal governance of mega-project social responsibility. *International Journal of Project Management*, 35(7), 1365–1377. <https://doi.org/10.1016/j.ijproman.2017.01.012>
- Mason, J. (2017). *Qualitative researching*, 1-288.
- Matten, D., & Moon, J. (2008). “Implicit” and “explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424.
- Maurya, A. M., Padval, B., Group, T. E., Kumar, M., & Pant, A. (2023, July). To study and explore the adoption of green logistic practices and performance in manufacturing industries in India. *Innovation and Management*, 1(2). <https://doi.org/10.1177/ijim.221148882>
- Mbalisi, O. F., & Okorie, C. U. (2020). Implementation of corporate social responsibility by oil companies in the Niger Delta Region of Nigeria: Myth or reality. *African Research Review: An International Multidisciplinary Journal*, Ethiopia, 14(57), 119–132.
- Menaga, A., Lokesh, S., & Vasantha, S. (2024). Corporate social responsibility initiatives during COVID-19: A study on the Indian FMCG sector. *IMIB Journal of Innovation and Management*, 2(1). <https://doi.org/10.1177/ijim.221148837>
- Middelbeek, L., Kolle, K., & Verrest, H. (2014). Built to last? Local climate change adaptation and governance in the Caribbean—The case of an informal urban settlement in Trinidad and Tobago. *Urban Climate*, 8, 138–154. <https://www.sciencedirect.com/science/article/pii/S2212095513000631>
- Mohabir, S. E., & Joshi, Y. (2024). A bibliometric analysis of the knowledge base on multinational corporations’ behavior. *SN Business & Economics*, 4, 105.
- Nyabakora, W. I., & Mohabir, S. E. (2024). Corporate social responsibility knowledge base: A bibliometric analysis. *Modern Finance*, 2(1), 101–120.
- Oliver, R., Jamie, G., Ugboaku, I. M., & Oyono, E. E. (2020). Communities’ perception and expectations of CSR: Implication for corporate-community relations. *European Journal of Business and Management*, 12(18), 25–33. <https://doi.org/10.7176/EJBM/12-18-03>
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441. <https://doi.org/10.1177/0170840603024003910>
- Palan, R. (2016). Corporate power in a global economy. In *Susan Strange and the future of global political economy: Power, control and transformation* (pp. 152–164). Routledge. <https://doi.org/10.4324/9781315627878>
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage Publications.
- Pizzi, S., Moggi, S., Caputo, F., & Rosato, P. (2021). Social media as stakeholder engagement tool: CSR communication failure in the oil and gas sector. *Corporate Social Responsibility and Environmental Management*, 28(2), 849–859. <https://doi.org/10.1002/csr.2094>

- Prakash, A. S., Gupta, A. K., & Kaur, S. (2023). Economic aspect of implementing green HR practices for environmental sustainability. *IMIB Journal of Innovation and Management*, 1(1), 94–106.
- Rajapakse, B. (2005). Trend of social and environmental reporting practices in developing countries: Evidence from Sri Lanka. In *Monograph*. University of Colombo.
- Sharma, R., Mishra, N., & Sharma, G. (2023). India's frugal innovations: *Jugaad* and unconventional innovation strategies. *IMIB Journal of Innovation and Management*, 1(1), 25–45.
- Smith, W. K., & Lewis, M. W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*, 36(2), 381–403. <https://doi.org/10.5465/amr.2011.59330958>
- Sookram, R. R. (2007). *Mapping corporate social responsibility in Trinidad & Tobago: Private sector and sustainable development*. UNDP. <http://www.abovestudios.com>
- The Jamovi Project*. (2022). (Version 2.3). <https://www.jamovi.org>
- Uniworld*. (2023). *Uniworldonline*. <https://uniworldonline.com/>
- Visser, W. (2009). Corporate social responsibility in developing countries. In *The Oxford handbook of corporate social responsibility* (pp. 473–500). <https://doi.org/10.1093/oxfordhb/9780199211593.003.0021>
- Visser, W. (2011). *The age of responsibility: CSR 2.0 and the new DNA of business*. John Wiley & Sons.
- Werther, W. B. J., & Chandler, D. (2010). *Strategic corporate social responsibility: Stakeholders in a global environment*. https://books.google.com/books?hl=en&lr=&id=4si6VV5RGNC&oi=fnd&pg=PR1&dq=%22csr%22+or+%22corporate+social+responsibility%22+or+%22csp%22+%22social+issues%22&ots=zajNZRZI-x&sig=u16_dwJwFeXILSuP4Er9Y_rkQHs
- Weyzig, F. (2009). Political and economic arguments for corporate social responsibility: Analysis and a proposition regarding the CSR agenda. *Journal of Business Ethics*, 86(4), 417–428.
- World Bank. (2022). *The world by income and region*. The World Bank Group. <https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html>
- Ye, N., Kueh, T. B., Hou, L., Liu, Y., & Yu, H. (2020). A bibliometric analysis of corporate social responsibility in sustainable development. *Journal of Cleaner Production*, 272, 122679. <https://doi.org/10.1016/j.jclepro.2020.122679>