



Corporate Social Responsibility through the Lens of CEO Sociodemographic: The Effects of Education and Gender

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Abstract: This study investigates the impact of two key sociodemographic variables, CEO education level and gender, on Corporate Social Responsibility (CSR) performance. The research aims to examine how these characteristics influence companies' commitment to different CSR dimensions, including environmental, social, and governance aspects. Using a sample of firms listed on the CAC All Share index from 2015 to 2023, this study employs panel data regression analysis to assess the effects of CEO education and gender on CSR performance. Data on CSR performance were obtained from the Thomson Reuters ASSET4 database, while CEO demographic information was collected from company reports and Bloomberg. The results indicate that both CEO education level and CEO gender have a positive and significant impact on CSR performance. Highly educated CEOs appear better equipped to integrate sustainable practices, while female CEOs tend to foster more impactful CSR initiatives. This study contributes to the existing literature by focusing on the intersection of CEO sociodemographic factors and CSR performance. It highlights the importance of considering both education and gender to better understand how executive characteristics shape corporate approaches to social responsibility.

Keywords: CEO education; CEO gender; CAC All Share index; Corporate Social Responsibility.

JEL classification: M14; M12.

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1. INTRODUCTION

Corporate Social Responsibility (CSR) has become a critical issue in today's economic landscape, with companies striving to meet the growing expectations of diverse stakeholders. In this context, the role of the CEO is central, as they shape the organization's CSR strategies and practices (Schwoy *et al.*, 2023; Wang *et al.*, 2023). The CEO has the ability to influence CSR strategies and practices because he/she holds an important and privileged position within the firm (Amore *et al.*, 2019; Zhou *et al.*, 2021; Bhaskar, 2023). Numerous studies have examined how CSR decisions are influenced by various CEO characteristics, including demographic factors, professional experience, and personal values (Manner, 2010; McCarthy *et al.*, 2017; Liu *et al.*, 2020; Schwoy *et al.*, 2023; Rahman *et al.*, 2024; Chulkova and Kim, 2025). Among the many factors shaping CEOs' decisions, education and gender are two sociodemographic dimensions that warrant particular attention. Thus, examining CEO education and gender through the lens of the Upper Echelons Theory provides a relevant framework to understand how top executives' sociodemographic attributes shape CSR performance and contribute to variations in firms' social and environmental engagement.

The education of the CEO plays a pivotal role in shaping their approach to Corporate Social Responsibility (CSR) and their ability to embed these values into the company's strategic operations. CEOs with a strong academic background, particularly in disciplines such as management, business, economics, sustainability, or social sciences, are more likely to possess a nuanced understanding of societal and environmental issues. This comprehensive perspective enables them to evaluate the long-term implications of their decisions, foresee potential risks, and prioritize strategies that align business objectives with the expectations of society.

A well-educated CEO is often equipped with critical analytical skills and an awareness of global challenges such as climate change, resource scarcity, and social inequality. This knowledge drives them to adopt and implement robust CSR practices that address these issues effectively. They are more likely to establish sustainable development goals, invest in eco-friendly technologies, and promote ethical labor practices (Wen *et al.*, 2024).

On the other hand, CEOs with limited formal education may lack exposure to these complex issues and their potential impact on the business landscape. Consequently, they might undervalue the strategic importance of CSR or view it primarily as a compliance requirement rather than a core aspect of the company's mission. This could lead to reactive or superficial CSR strategies that fail to capitalize on the long-term benefits of sustainability and ethical business practices.

Overall, the educational background of a CEO significantly influences the depth, scope, and effectiveness of a company's CSR initiatives, emphasizing the importance of leadership education in fostering responsible and sustainable business operations.

Gender plays an essential role in shaping a company's CSR strategies, with female CEOs bringing unique leadership qualities that significantly advance corporate social responsibility. Research shows that women in leadership positions are more likely to adopt inclusive and ethical management approaches, deeply rooted in personal and social values. They often prioritize long-term sustainability, focusing on the well-being of parties perennates and the wider societal impacts of corporate decisions (Braun and Zenker, 2022; Choi *et al.*, 2023; Liang *et al.*, 2024; Chulkova and Kim, 2025).

This strong commitment to CSR stems from their heightened awareness of social and environmental issues, enabling them to align business practices with sustainable development

goals. Moreover, women leaders tend to emphasize transparency, collaboration, and fairness, fostering an environment where ethical practices can thrive (Velte, 2025; Yahya, 2025). By championing these principles, female CEOs not only enhance a company's reputation but also build stronger trust with stakeholders, underscoring their critical role in promoting socially responsible and sustainable business practices.

In contrast, male CEOs often focus on maximizing short-term profits and improving operational efficiency. While this strategy can deliver immediate financial gains, it may sometimes overlook the broader social and environmental consequences of business decisions.

Thus, the relationship between the education and gender of the CEO and their effects on CSR constitutes a pertinent field of investigation. Understanding how these two factors interact can provide valuable insights into how companies can better address contemporary societal challenges.

This study contributes to the literature on CSR by illuminating the combined influences of CEO education and gender on corporate CSR practices. By focusing on these sociodemographic dimensions, our research highlights the importance of diversity in leadership and its impact on CSR strategies. Furthermore, by addressing CSR as a multidimensional concept, we provide a more nuanced understanding of the mechanisms through which CEO characteristics affect various CSR dimensions, such as environmental, governance, and social engagement.

Previous research has documented that personal characteristics of CEOs, such as age, experience, and personality, influence CSR decisions (Manner, 2010; McCarthy *et al.*, 2017; Liu *et al.*, 2020). However, few studies have specifically explored the effects of education and gender in this context. Our work addresses this gap by emphasizing how education can shape CEOs' values and behaviors, while gender can influence their management style and approach to CSR.

Finally, the findings of this research can serve as a foundation for practical recommendations for companies seeking to strengthen their CSR engagement, taking into account the varied leadership profiles.

The remainder of this paper is structured as follows. Section 2 provides a comprehensive literature review. Section 3 describes the methodology and the variables used in the analysis. Section 4 presents the empirical results and their discussion. Section 5 concludes the study, and Section 6 highlights the limitations and proposes avenues for future research.

2. LITERATURE REVIEW

The role of CEOs in shaping Corporate Social Responsibility (CSR) practices has been widely studied, as their decisions significantly influence how firms approach social and environmental responsibility. Among the various factors affecting CSR, CEO characteristics, particularly education and gender, have emerged as key determinants of how CSR is prioritized and executed within organizations. The literature suggests that a CEO's background, values, and leadership style can strongly impact a company's strategic direction regarding its CSR commitments and initiatives. This review explores how these two specific CEO characteristics education and gender affect CSR practices, focusing on their direct and indirect influence on corporate policies and behaviors (Shahzadi *et al.*, 2024; Wen *et al.*, 2024; Susilo *et al.*, 2025).

To better understand the relationship between CEO characteristics and CSR practices, this review incorporates the Upper Echelons Theory (Hambrick and Mason, 1984), a widely

recognized framework in organizational behavior. According to this theory, the experiences, values, and personalities of top executives play a significant role in shaping organizational outcomes, including strategic decisions. CEOs' individual characteristics such as their educational background and gender are thought to influence their cognitive frames, values, and preferences, which, in turn, guide their decisions regarding CSR. The Upper Echelons Theory thus provides a useful lens for examining how CEO education and gender directly impact their strategic behaviors and the CSR strategies adopted by the firms they lead (Zhou *et al.*, 2021; Bhaskar, 2023; Bouzugenda and Jarboui, 2024a; Velte, 2025).

By integrating these perspectives, this review highlights the important role that both education and gender play in shaping CSR practices. It shows how these characteristics influence CEOs' leadership styles and decision-making processes, ultimately affecting how CSR is conceptualized, implemented, and integrated into corporate strategy. The review underscores the significance of understanding these CEO attributes to better predict and explain CSR outcomes across different organizational contexts.

2.1. CEO Education and CSR

Of the demographic characteristics of CEOs, education is recognized as a crucial determinant of CSR strategies (Borghesi *et al.*, 2014; Lewis *et al.*, 2014; Tang *et al.*, 2015; Yuan *et al.*, 2017; Velte, 2019; Huang *et al.*, 2024). Education shapes individuals' moral and ethical values (Hambrick and Mason, 1984; Frank, 1993; Manner, 2010) and fosters open-mindedness (Wei *et al.*, 2018). Previous research has shown that individuals' education level, defined as "formal qualification in the form of degrees obtained from higher education institutions" (Shahzadi *et al.*, 2024), influences their way of thinking and increases their sensitivity to social and environmental issues (Jani *et al.*, 2020; Garrido-Ruso and Aibar-Guzmán, 2022; Hewa Heenipellage and McCall, 2022). In this sense, a higher education level among CEOs appears to be associated with a greater concern for sustainability challenges, as well as an increased awareness of the importance of communicating the company's social and environmental actions (Malik *et al.*, 2020).

Several studies examine the direct relationship between the CEO's education level and CSR. Smith *et al.* (2021) show that CEOs with a higher education level have a global vision of management, making them more sensitive to the expectations of different stakeholders and social issues, and more aware of the importance and significance of CSR disclosure (Malik *et al.*, 2020). Schaper (2002) and Gadenne *et al.* (2009) state that a higher education level would be associated with a more developed level of sensitivity to CSR issues. CSR activities are diverse and require significant research and development, as well as innovation, which in turn requires CEOs who are generally associated with new technologies and tend to have a higher cognitive density to assimilate these various CSR activities (Malik *et al.*, 2020; Garrido-Ruso *et al.*, 2023).

Furthermore, the type of education pursued, i.e., the discipline studied, also influences the cognitive models individuals use to make decisions (Hambrick and Mason, 1984). Some authors argue that economic studies may reduce individuals' ethical and social concerns (Frank, 1993), while studies in the humanities tend to have the opposite effect (Davis *et al.*, 2018). Since most business schools include ethics in their curricula (Huang *et al.*, 2024), CEOs with an MBA tend to adopt a proactive approach to CSR, promoting CSR initiatives within their companies (Finkelstein *et al.*, 2008; Lewis *et al.*, 2014; Huang *et al.*, 2024).

Moreover, training in CSR can enhance a CEO's awareness and commitment to the SDGs (Manes-Rossi and Nicolo, 2022). For example, Villalba-Ríos *et al.* (2022) found that CEOs with both engineering and MBA degrees are associated with companies having high CSR performance.

Numerous studies establish a positive relationship between CEOs' education level and their CSR performance and disclosure (Lewis *et al.*, 2014; Huang *et al.*, 2024), suggesting that education makes CEOs more sensitive to disclosure needs (Malik *et al.*, 2020). We argue that the CEO's education level significantly influences their CSR decisions. Therefore, the following hypothesis is proposed:

H1: *CEOs with a higher education level have higher CSR performance.*

2.2. CEO Gender and CSR

The gender of CEOs plays a significant role in shaping the direction and effectiveness of Corporate Social Responsibility (CSR) strategies. Female leaders are often perceived as more ethical and responsible, largely due to their heightened empathy and risk aversion (Bear *et al.*, 2010). These traits enable female CEOs to more effectively integrate social and environmental considerations into corporate strategy, thereby fostering the adoption of sustainable practices within organizations (Chulkova and Kim, 2025).

Empirical evidence suggests that companies led by women tend to outperform those led by men in terms of CSR performance and are more likely to align closely with the Sustainable Development Goals (SDGs) (García-Sánchez and Rodríguez-Ariza, 2019; Braun and Zenker, 2022; Choi *et al.*, 2023; Liang *et al.*, 2024). This is attributed to the fact that women, as leaders, place greater emphasis on sustainability and corporate social and environmental responsibility. According to Chu *et al.* (2022), female CEOs are more attuned to social and environmental issues, which aligns with their psychological traits and leadership competencies, such as conflict resolution, adaptability to change, and the ability to inspire and motivate others. These qualities not only help foster a positive organizational culture but also contribute to improving employee well-being, reducing stress and turnover, and enhancing organizational stability (Huang *et al.*, 2024).

In fact, female CEOs diverge from their male counterparts in leadership styles in several ways. They are more likely to promote sustainability (Glass and Cook, 2018), prioritize CSR and ethical practices (Choi *et al.*, 2023; Liang *et al.*, 2024), and invest in social capital (Zhang *et al.*, 2014). Furthermore, research has shown that women leaders are generally more inclined to embrace long-term value creation over short-term gains, which leads to more sustainable decision-making (Nielsen and Huse, 2010). Female CEOs are more likely to focus on creating value for a wider range of stakeholders, including employees, local communities, and the environment. This approach results in a more holistic and socially responsible corporate strategy, where CSR activities are embedded into the company's overall vision and mission (Velte, 2025; Yahya, 2025).

Additionally, gender diversity in top management teams has been linked to better decision-making and more balanced risk management practices (Adams and Ferreira, 2009). A higher representation of women in leadership roles enhances corporate governance by bringing diverse perspectives to the table, ultimately leading to better CSR performance (Manner, 2010; Marquis and Lee, 2013; García-Sánchez *et al.*, 2022; Garrido-Ruso *et al.*, 2023; Yin *et al.*, 2024).

Recent studies also provide additional empirical support for the positive relationship between female CEOs and CSR performance. [Gala *et al.* \(2024\)](#) and [Chulkova and Kim \(2025\)](#) both show that female CEOs are positively associated with higher CSR performance, reinforcing the notion that female leadership fosters more sustainable and socially responsible corporate strategies. Given these considerations, the following hypothesis is proposed:

H2: *Female CEOs are more likely to achieve superior CSR performance.*

3. METHODOLOGY

This section is dedicated to outlining the study's sample, tools, data collection procedures, variable measurements, empirical model, and research design.

3.1. Sampling and data collection

Our sample includes French firms listed on the CAC All Share index between 2015 and 2023. Initially, we had data on 335 publicly listed companies. However, we excluded 65 financial institutions due to their unique financial reporting practices, 90 companies with incomplete annual reports, and 60 companies with insufficient data on their CEOs. The study focuses on the French context, which is marked by weak legal institutions, a high prevalence of family-owned businesses, and a tendency for leaders to come from dominant families. In this environment, many large publicly traded companies are controlled by families or concentrated groups of shareholders, which can influence the selection of CEOs and their decision-making processes. The final sample consists of 120 companies over a 9-year period, yielding 1,080 firm-year observations. CEO data were manually extracted from annual reports available on www.boursier.com/indices and Zone Bourse, while financial data were sourced from Datastream.

The sample encompasses companies from a range of sectors. [Table no. 1](#) presents a breakdown of the number of companies by sector.

Table no. 1A – Sample selection procedure

Description	No. of companies
Initial sample listed on the CAC ALL Shares index	335
Financial firms	(65)
Firms with insufficient annual report	(90)
Firms within sufficient data	(60)
Final sample	120
Duration study	9
Total firm-observations	1080

Table no. 1B – Distribution of the sample according to sectors' type

Sector	Number	Percentage
<u>Industrial sector</u>		
Construction material	9	7.5%
Various industries	40	33.33%
Total industrial firms	49	40.83%
<u>Commercial sector</u>		
Total commercial firms	17	14.17%

Sector	Number	Percentage
Service sector		
Computer service and consulting	8	6.67%
Construction and Mining	4	3.33%
Transport, communication, gas	12	10%
Various service	30	25%
Total service firms	54	45%
Total firms	120	100%

3.2. Measures variables

3.2.1. Dependent Variables: CSR performance

In line with the studies by [Marquis and Lee \(2013\)](#) and [Wang et al. \(2023\)](#), this research utilizes ESG scores to evaluate Corporate Social Responsibility (CSR). The ESG score provides a comprehensive assessment of a company based on three key pillars: environmental, social, and governance factors. Sourced from the ASSET4 database within Thomson Reuters DataStream, the CSR score is derived from a set of weighted data points assigned to each dimension (environmental, social, and governance), reflecting their respective significance. CSR performance is expressed as a percentage, ranging from 0 to 100, with higher scores indicating superior performance in CSR ([Ahn, 2020](#); [Bhaskar et al., 2023](#); [Wang et al., 2023](#); [Yin et al., 2024](#)).

3.2.2. Independent Variables

- CEO Education Level (EDUC): This is a dichotomous variable coded as 1 if the CEO holds an MBA (Master of Business Administration), and 0 otherwise ([Aier et al., 2005](#); [Kouaib and Jarboui, 2016](#)).
- CEO Gender (GENDER): A binary variable where 1 represents a male CEO, and 0 represents a female CEO ([Manner, 2010](#); [Marquis and Lee, 2013](#)).

3.2.3. Control Variables

- Firm Size (FS): This variable is measured as the natural logarithm of the book value of total assets at the beginning of the year ([McWilliams and Siegel, 2001](#); [Puchakayala et al., 2023](#); [Bouzugenda and Jarboui, 2024a](#)).
- Return on assets (ROA): is calculated as profit before extraordinary items, based on the book value of total assets at the beginning of the year ([Tang et al., 2015](#); [Biju et al., 2023](#)).
- Firm Age (AGEFIRM): The number of years of existence of the company since its creation ([Muttakin et al., 2018](#); [Erdiaw-Kwasie et al., 2023](#); [Bouzugenda and Jarboui, 2024b](#)).
- Firm leverage (LEV): The debt ratio is equal to total debt/total assets ([McCarthy et al., 2017](#); [Bagh et al., 2024](#); [Bouzugenda and Jarboui, 2024a](#)).

Table no. 2 – Summary of variables definitions

Variable	Definition	Measure	Source of Data	Authors
Dependent variable				
CSR	The ESG score is an aggregate score.		Asset 4	Ahn (2020); Bhaskar <i>et al.</i> (2023); Yin <i>et al.</i> (2024)
Independent variable				
GENDER	1 when the CEO is male, and 0 otherwise.		Annual reports	Furlotti <i>et al.</i> (2019); Choi Choi <i>et al.</i> (2023)
EDUC	1 if the CEO holds an MBA (Master of Business Administration) and 0 otherwise.		Annual reports	Velte (2019); Hewa Heenipellage and McCall (2022)
Control variables				
ROA	Return on assets	Net income / Total assets.	Worldscope	Fujianti and Satria (2020); Oh <i>et al.</i> (2016); Suwardi and Saragih (2023)
FS	Firm size	Ln (Total assets)	Worldscope	Oh <i>et al.</i> (2016) Shahab and Ye (2018); Marwa <i>et al.</i> (2020); Suwardi and Saragih (2023)
AGEFIRM	Firm age	The number of years of existence of the company since its creation	Hand collected Annual reports 2015-2023	Omer <i>et al.</i> (2020)
LEV	Firm leverage	Total liabilities / Total assets	Worldscope	Abba <i>et al.</i> (2018); Marwa <i>et al.</i> (2020)

3.3. Research methodology

A panel regression using Feasible Generalized Least Squares (FGLS) was conducted on a sample of 120 firms listed on the French CAC All Share index over ten years (2015–2023). This approach was chosen to address potential heteroskedasticity and autocorrelation in the panel data, ensuring efficient and consistent estimates. The model tested the research hypotheses as follows:

$$CSR = \beta_0 + \beta_1 (EDUC) + \beta_2 (GENDER) + \beta_3 (FS) + \beta_4 (ROA) + \beta_5 (AGEFIRM) + \beta_6 (LEV) + \varepsilon_{it} \quad (1)$$

with: CSR is corporate social responsibility measured by ESG score, EDUC is CEO education, GENDER is CEO gender, FS is firm size, ROA is return on assets, AGEFIRM is firm age, LEV is firm leverage. These variables are defined in Table no. 2.

4. EMPIRICAL RESULTS AND DISCUSSION

4.1. Descriptive statistics

Tables no. 3A and 3B present the summary statistics for the test variables used in our regression analysis. Table no. 3A provides descriptive statistics for the continuous variables, including the mean, median, standard deviation, maximum, and minimum values. Table no. 3B presents the descriptive statistics for the dichotomous and continuous variables for the firms in our sample. The minimum firm ESG is -11.27, and the maximum is 95.87, with a

mean of 65.046. The median value is 66.345, and the standard deviation is 15.057. Regarding the control variables, from [Table no. 3A](#), the results show that the average ROA is 7.962 with minimum of -25.95 and maximum of 69.32. The average firm size is 16.207, with a minimum of 10.328, a maximum of 19.862, and a standard deviation of 1.499. The average age of the sampled firms is 3.882 years, with a minimum of 1 year and a maximum of 187 years. The firms' financial leverage averages 25.613% of total assets, indicating that, on average, firms rely slightly more on equity than on debt.

Table no. 3A – Summary statistics for continuous variables

Variable	N	Mean	SD	Minimum	Maximum	Median
RSE	1080	65.046	15.057	11.27	95.87	66.345
ROA	1080	7.962	8.484	-25.95	69.32	5.975
FS	1080	16.207	1.499	10.328	19.862	16.120
AGEFIRM	1080	3.882	0.947	1	187	30
LEV	1080	25.613	16.027	1.1	92.74	24.59

The descriptive statistics for the dichotomous variables in [Table no. 3B](#) reveal that the mean value of gender diversity is 16.67%, indicating that the vast majority of firms have female CEOs. Regarding CEO education, 78.70% of the CEO holds an MBA.

Table no. 3B – Summary statistics for dichotomous variables

Variables	Modality	Frequencies	Percentage
GENDER	0	180	16.67%
	1	900	83.33%
EDUC	0	230	21.30%
	1	850	78.70%

where: CEO gender is GENDER, CEO education is EDUC.

4.2. Correlation analysis

The correlation matrices in [Table no. 4](#) display the correlation coefficients among the independent variables. Pearson correlation is used to assess the relationship between two continuous variables, point-biserial correlation for a continuous and a binary variable, and Phi correlation for two binary variables ([Welkowitz et al., 2012](#)). The matrices reveal that all correlation coefficients are below 0.7 and above -0.7, suggesting a minimal risk of multicollinearity. According to [Tabachnick and Fidell \(2013\)](#), a Pearson correlation coefficient of 0.80 or higher may indicate potential multicollinearity. As shown in [Table no. 5](#), the highest correlation is between firm size and firm leverage, with a coefficient of 0.1149. This confirms that multicollinearity is not a concern in this model, as no correlation exceeds the 0.8 threshold.

Table no. 4 – Correlation matrix

	GENDER	EDUC	ROA	FS	AGEFIRM	LEV	VIF
GENDER	1.0000						1.01
EDUC	-0.0275 (0.2584)	1.0000					1.01
ROA	-0.0181 (0.4577)	-0.0119 (0.6239)	1.0000				1.05
FS	-0.0784 (0.0013)	-0.0055 (0.8204)	-0.2104 (0.0000)	1.0000			1.06
AGEFIRM	0.0097 (0.6890)	-0.0092 (0.7040)	0.0345 (0.1561)	0.0959 (0.0001)	1.0000		1.05
LEV	0.0185 (0.4471)	0.0712 (0.0034)	-0.2072 (0.0000)	0.1149 (0.0000)	-0.1697 (0.0000)	1.0000	1.08

4.3. Regression results

Table no. 5 reports the results of the CSR performance regression on the explanatory variables. Testing H1, Table no. 5 presents that the relationship between the CEO gender and CSR performance is positive and significant at the level of 1 per cent. This result is consistent with the work of Gala *et al.* (2024); Chulkova and Kim (2025), which show that CEO gender positively influences corporate social responsibility (CSR) performance. Indeed, women tend to be more inclined to integrate the interests of stakeholders (such as local communities, employees, the environment, etc.) into their strategic decisions. This management style promotes more transparent and responsible stakeholder engagement practices, leading to stronger CSR initiatives that are better aligned with the company's overall strategy. Female leaders often take a more invested approach to creating long-term value, beyond immediate financial gains, by including benefits for employees, communities, and the environment. A well-defined CSR strategy can enhance the company's reputation, attract diverse talent, and strengthen customer loyalty, particularly among those who are concerned with ethics and sustainability. A female CEO could implement CSR initiatives that better address current social and environmental concerns, thus enhancing the overall impact of the company's CSR strategy.

Testing H2, the results in Table no. 5 display that CEO education has a positive and statistically significant effect on CSR performance at the 1% level. A higher level of education equips CEOs with broader cognitive abilities and a deeper understanding of social, environmental, and economic issues, enabling them to adopt more responsible and forward-looking managerial decisions. Well-educated CEOs are generally better prepared to integrate CSR into corporate strategy, to mobilize the necessary resources, and to align organizational practices with societal expectations.

This finding is consistent with prior research showing that education enhances managers' analytical capacity and strengthens their sensitivity to sustainability considerations, thereby improving CSR outcomes (Khan *et al.*, 2021; Choi *et al.*, 2023; Garrido-Ruso *et al.*, 2023). For example, Malik *et al.* (2020) argue that higher educational attainment increases CEOs' awareness of the importance and strategic value of CSR disclosure, and Bouzguenda and Jarboui (2024a) highlight that educated CEOs are better equipped to integrate CSR into corporate strategy and respond effectively to ESG challenges. By better grasping the implications of ESG-related decisions, highly educated CEOs are more

capable of anticipating reputational risks, regulatory pressures, and stakeholder demands, which leads to more effective CSR initiatives and enhanced CSR performance. Therefore, the significant effect observed supports the hypothesis that CEO education plays a crucial role in shaping corporate sustainability behaviors.

We also observe from the reading of this table that the size of the company has a positive and significant impact on CSR performance. This shows that an increase in the size of the company is often correlated with an improvement in its corporate social responsibility (CSR) performance. Additionally, the age of the company has a positive effect on CSR performance. The experience accumulated over time allows the company to better understand social, environmental, and economic issues, and to adopt more suitable and sustainable strategies (Wen *et al.*, 2024). This table also shows that debt has a positive impact on CSR performance. However, ROA does not appear to have any significant effect on CSR performance.

Table no. 5 – Multivariate regressions of CEO's gender, CEO's education, CSR performance and other control variables

Variable	Model		
	Predicted sign	Coefficient	P-value
GENDER	+	3.14***	0.002
EDUC	+	5.03***	0.000
ROA	+	-0.26	0.793
FS	+	15.96***	0.000
AGEFIRM	+	9.73***	0.000
LEV	-/+	4.26***	0.000
R-square		0.1788	
Prob>F		0.0000	
Wald khi-2		407.05	
Number of observations		1080	

5. CONCLUSION

This study explored the influence of CEO characteristics, specifically education level and gender, on Corporate Social Responsibility (CSR) performance, providing important insights into how these traits shape corporate sustainability efforts (Susilo *et al.*, 2025). The findings highlight that CEOs with higher education levels possess enhanced cognitive abilities and strategic foresight, allowing them to effectively address the complexities of social and environmental challenges. CEOs with advanced educational backgrounds are more likely to engage with innovative solutions, integrate sustainability into the company's long-term strategy, and make decisions that align with broader societal goals. In addition, female CEOs were found to demonstrate empathetic leadership styles and a strong ethical orientation, which positively influences CSR initiatives. Their inclusive and ethical approach to decision-making not only enhances CSR practices but also fosters a corporate culture that values sustainability, social equity, and transparency (Zhou *et al.*, 2021; Bhaskar, 2023; Yahya, 2025).

These results underscore the critical role of leadership traits in shaping CSR practices, particularly in driving sustainability and fostering responsible corporate behavior. CEO characteristics such as education and gender influence how organizations address environmental, social, and governance (ESG) issues, ultimately determining the scope and effectiveness of their CSR initiatives. By emphasizing the need for a well-rounded and diverse

leadership team, organizations can better navigate the complex challenges associated with sustainability and social responsibility (Wen *et al.*, 2024; Velte, 2025).

From a theoretical standpoint, the results of this study provide direct support for the Upper Echelons Theory, which argues that organizational outcomes are shaped by the demographic and cognitive characteristics of top executives. In this context, the evidence delves that two key sociodemographic attributes CEO education level and gender significantly impact CSR performance among French listed firms. These findings give proof that CSR performance is not solely driven by corporate policies or external pressures but also reflects the profile of the CEO. By indicating that higher education levels and female leadership are associated with stronger CSR engagement, this study extends the Upper Echelons framework and confirms its relevance for understanding sustainability-oriented managerial behavior.

On a practical level, the findings suggest that organizations should prioritize diversity in their executive teams, not only focusing on gender inclusivity but also emphasizing varied educational backgrounds to ensure well-rounded strategic decision-making. A more diverse executive team can provide a broader range of perspectives, leading to more comprehensive and effective CSR strategies. Additionally, policymakers could consider developing guidelines or incentives aimed at increasing female representation in senior leadership roles. Encouraging a greater presence of female CEOs could contribute to the advancement of CSR initiatives and positively influence corporate behavior on a larger scale.

Furthermore, integrating ethical training and sustainability-focused education into leadership development programs can better equip future executives to meet the growing demands of stakeholders who expect companies to demonstrate a commitment to social responsibility and environmental stewardship. By fostering these competencies, organizations can prepare leaders who are capable of navigating the complexities of the modern business environment and responding to the evolving expectations of both investors and consumers.

For investors and stakeholders, understanding the influence of CEO characteristics on CSR can provide valuable insights when evaluating a company's sustainability trajectory and ethical commitments. Companies with leaders who prioritize education, ethics, and diversity are more likely to adopt forward-thinking CSR strategies that align with long-term value creation and sustainability goals. As such, these insights can guide investment decisions and influence stakeholder engagement strategies.

Finally, organizations can use the findings of this study to refine their recruitment and leadership development strategies, ensuring that the competencies of their executive teams align with long-term sustainability objectives. By promoting diversity in leadership and providing executives with the tools and knowledge to lead with integrity, companies can enhance their CSR performance and contribute to the broader goal of sustainable development.

6. LIMITATIONS AND FUTURE RESEARCH

While this study provides valuable insights, it has certain limitations that warrant further investigation. First, the reliance on Essi G scores from the ASSET4 database of Thomson Reuters may not comprehensively capture the multidimensional nature of CSR, particularly in varying industry or regional contexts. Future studies could incorporate alternative CSR measures or conduct comparative analyses across different databases to validate the findings.

Second, the sample focuses on publicly listed companies, potentially limiting the applicability of results to private firms or small and medium-sized enterprises (SMEs). Expanding the scope to include diverse organizational structures could provide a more holistic understanding of the relationship between CEO characteristics and CSR.

Finally, this study primarily considered education level and gender, leaving other potentially significant attributes, such as international experience, leadership styles, or psychological traits, unexplored. Future research could investigate these factors, as well as the moderating effects of cultural, regulatory, and industry-specific variables, to offer deeper insights into how leadership influences CSR across varying contexts.

By addressing these limitations and broadening the scope of investigation, future studies can enrich the understanding of how leadership characteristics shape sustainable corporate practices, ultimately supporting the global transition towards more responsible business strategies.

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