Sustainability orientation, CSR implementation and new venture growth

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Abstract

Purpose: Building on the upper echelons theory and sustainability orientation (SO) literature, we examined the possibility that the relationship between chief executive officers' (CEOs') SO and venture growth might be mediated by levels of CSR implementation.

Design/methodology/approach: We used data obtained from from 211 new ventures operating in Ghana. Multiple regression analysis was used to test the hypotheses.

Findings: We found that CSR implementation mediates the relationship between SO and venture growth. In addition, we found that, at higher levels of financial slack, the effect of SO on CSR implementation is attenuated. However, our results show that, at higher levels of CEO power, the influence of SO on CSR implementation is amplified.

Originality: To the best of our knowledge, this study is among the first to examine mediating role of CSR implementation in the relationship between SO and venture growth, and also, examines two internal contingency factors (i.e., CEO power and financial slack) on this association.

Theoretical/Academic Implications: This study builds on prior scholarly works by articulating a key managerial characteristic that shapes the implementation of environmental and social policies. Specifically, we show that SO influences venture growth through CSR implementation. We also provide insights on the connection of CSR implementation to growth of new business ventures.

Practitioner/Policy Implications: Our study encourages CEOs to voluntarily adopt CSR and sustainability initiatives. The analysis also reinforces the need that higher levels of CEO power have a major impact in amplifying the effects of sustainability orientation on degree of CSR implementation. There is a need for government to create forums where organizational decision-makers, i.e., CEOs, exchange not only the best knowledge about CSR implementation and sustainability, but also best practices to provide opportunities for cross fertilization of ideas and increased innovations.

Key words: *sustainability orientation; venture growth; CSR implementation; Ghana.*

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1. Introduction

In today's rapidly changing global environment, firms require extra effort to identify and exploit opportunities for business growth. Given the potential performance benefits of sustainability orientation (SO), it is not surprising that scholarly effort has been geared towards identifying benefits of this construct (Amankwah-Amoah et al., 2019; Danso, et al., 2019; Roxas, Ashill, & Chadee, 2017). Sustainability orientation focuses on organizational awareness and adoption of environmentally friendly measures towards greening the business model (Danso, et al., 2019). Indeed, the SO literature has spawned two main schools of thought. First, SO has been conceptualized from the firm-level perspective (e.g., Danso, et al., 2019; Roxas, Ashill, & Chadee, 2017) and at the individual perspective (Kuckertz & Wagner, 2010). The proponents of the firm-level SO hypothesis proffer that SO generally enhances firms' performance. Second, from the individual level perspective, the jury is that SO spurs entrepreneurial outcomes such as intentions to start a business (Kuckertz & Wagner, 2010). Our study adopts the individual level perspective to examine the influence of the CEO's SO on venture growth.

We consider the influence of the CEO's SO important because from the perspective of the CEO, exploiting entrepreneurial opportunities can be beneficial given that such opportunities bring them the promise of harvesting superior rents of being socially responsible. For example, embracing environmental policies and practices beyond legal requirements, firms position themselves to gain favourable ratings from consumers and other stakeholders (Sroufe, 2018). As such, top executives have recognized the need for their organizations to go beyond the "mainstream" business imperative of being socially responsible as they face increasing pressure to implement CSR strategy (Mohr, Webb, & Harris, 2001; Sen & Bhattacharya, 2001). Thus, the issue of characteristics of top management especially the CEO is particularly important given that

they hold considerable power, control over resources allocation and latitude in shaping the strategic directions of their organizations (Daily & Johnson, 1997).

Despite the progress made by researchers toward understanding both the firm-level and individual-level SO and the way it influences entrepreneurial and organizational outcomes, previous studies have failed to examine the underlying mechanisms through which SO influences the success of their firms and the mediating role of corporate social responsibility (CSR) implementation. Understanding the mechanism through a micro-level variable such as the CEO's SO impacts on venture growth has been found to be a crucial task for the field of strategy and management (e.g., Baum & Locke, 2004).

To address these gaps, the current paper draws on the Upper Echelons Theory (Hambrick & Mason, 1984) to examine how top executives' characteristics (Fassin & Van Rossem, 2009; Hambrick, 2007; Carpenter et al., 2004; Hambrick & Mason, 1984) such as their SO impact on venture outcomes. For example, a CEO with a strong SO is primarily motivated by positive outcomes such as positive environmental reviews from stakeholders (Kuckertz & Wagner, 2010). However, top executives do not take decisions in isolation but several factors such as the organizational, individual, and environmental factors affect the decision-making process. Thus, managerial discretion determines the latitude of action that top executives' decision-making process which is influenced by the organizational and external environments surrounding the decision-making situation (Hambrick, 2007). Accordingly, we suggest that these relationships will be moderated by financial slack resource and CEO power.

To test our conceptual model, we conduct a survey with 211 CEOs in Ghana, a growing emerging market (Wold Bank, 2019). We make important contributions to the literature in several ways. First, unlike previous studies, our study empirically explains the mediating mechanism of the relationship between individual level SO and venture growth. In doing so, we shed light on

how micro-level variables such as CEOs' SO indirectly effects venture growth. This is an important research agenda since CSR implementation and venture growth is particularly dependent on CEOs' characteristics (Helmig, Spraul, & Ingenhoff, 2016). For example, the Upper Echelons Theory (Hambrick, 2007; Hambrick & Mason, 1984) suggests that a firm's strategic decision mostly depends on top management's personality characteristics. Arguably, personality characteristics of top management have been found to exert very crucial influence on a firm's decision-making process (Hsu, Chen & Cheng, 2013; Francioni, Musso & Cioppi, 2015). Second, this study explores the role of the CEO power and slack resources as moderators of the relationship between CSR implementation and venture growth, thus establishing crucial boundary conditions under which a firm's degree of CSR implementation drive venture growth. Thus, this study establishes theoretically that CEO power has a significant moderating indirect influence on the relationship between their SO and venture growth. However, the indirect effect of SO on venture growth is nonsignificant at greater levels of financial slack resources. Therefore, we consider it relevant to examine the extent to which varying degrees of financial slack and CEO power amplify or reduce the indirect link between SO and venture growth. Third, we extend the scope of previous SO research by investigating the potential indirect impact of CEOs' SO on venture growth in a context different from what has not been studied in previous studies (Ghana). First, Ghana is a sub-Saharan country that has increasingly been specializing in pollution-intensive production but reacted by implementing environmental policies regarding air and water pollution as well as waste disposal to enhance environmental protection (Solarin et al, 2017). Second, Ghana as a leading sub-Saharan economy is characterized by ecological fragility (Kuada & Hinson, 2012) and will be most severely impacted by environmental deterioration including climate change and biodiversity loss in the next decades (World Bank 2019). The ecological integrity of sub-Saharan Africa has a

key importance for Global Sustainability (World Bank, 2018). Thus, studying CEOs' SO in Ghana offers an emerging market perspective on debates about environmental sustainability.

The article is organized as follows. The next section reviews the literature on CEO power, sustainability orientation and CSR implementation leading to our hypotheses' development. This is followed by illustrations of the following research context, data collection and analysis. We then set out our key findings. The concluding section outlines the theoretical contributions and practical implications.

2. Theoretical background and hypotheses

2.1 Upper echelons theory and strategic decision-making

The effect of top executives on organization's strategic decisions is rooted in the upper echelons theory, which suggests that strategic decisions are made by a firm's top executives (Hambrick & Mason, 1984; Zhang & Greve, 2019). The upper echelon theory views an organization and the quality of its strategic decisions as a reflection of its top executives (Hambrick & Mason, 1984; Carpenter, Geletkanycz & Sanders, 2004). Thus, a firm's strategic decision-making partly reflects the characteristics of powerful actors in the organization such as their level of education, training and knowledge. The powerful position can enhance decision-makers' ability to scan every aspect of the organization and the environment before making a decision (Hambrick & Mason, 1984). Thus, the Upper Echelons Theory views top executives' behaviours as criteria or, at minimum, intervening variables (e.g., Finkelstein et al., 2009). The view that top executives' behaviours predict strategic decisions in organizations offers a more comprehensive approach for understanding how and when top managers' characteristics or behaviours influence strategy and outcomes.

In this study, we focus on CEOs' SO for two major reasons. First, CEOs' actions and behaviours towards the environment are dependent on the predisposition of the founding CEO/entrepreneurs (Roxas & Coetzer, 2012). By imprinting their values, beliefs and care for the environment on their venture (Amankwah-Amoah, Boso & Antwi-Agyei, 2018), the CEOs also commit additional resources to green activities and environmentally friendly policies. Second, CEOs' SO may affect their attention to environmental issues, which influences the firm's strategies for achieving goals, and resource-allocation patterns. In this study, we argue that the effect of CEOs' SO on venture growth is mediated by degree of CSR implementation and this relationship is contingent on the degree of financial slack and CEO power. We capture this reasoning in our proposed conceptual model in Figure 1.

Insert Figure 1 about here

2.2 Sustainability orientation and venture growth

Prior studies recognize SO as an integral part of strategic business approaches that are driven by the strong orientations of CEOs/entrepreneurs (Spence, Gherib & Biwole, 2011; Roxas, Ashill & Chadee, 2017). CEOs' SO necessitates the implementation of changes to strategic, tactical and operational goals towards integrating environmental dimensions of business and society into the firm's business model. However, the successful and proactive integration of the environmental dimensions are mostly triggered by the CEOs'/entrepreneurs' innovative propensity to mitigate the actual and probable adverse business effects on the natural environment (Bos-Brouwers, 2010). Accordingly, Spence, Gherib & Biwole, (2011) argue that CEO proactiveness, innovativeness, and risk-taking propensity are central to the adoption and integration of sustainable practices amongst firms. By addressing environmental issues successfully, CEOs can boost their firms'

competitiveness, and create new opportunities and approaches that create and enhance overall business value (Adomako et al., 2021; Danso et al., 2019). Furthermore, when CEOs' actions and behaviours are environmentally responsive, they attain a favourable reputation with customers, pressure groups and other stakeholders, and this should favourably reflect in their performance and consequently growth. For instance, environmentally cognisant customers are very likely to purchase goods and services from firms with sound environmental management practices.

In this study, we contend that firms whose CEOs are sustainability oriented will have better growth relative to those that neglect the environmental and sustainability expectations of their stakeholders. This is particularly true given that highly satisfied stakeholders lessen the prospect of organizational failure (DiMaggio & Powell, 1983) and can enhance performance and firm growth (King and Lenox, 2000; Wahba, 2008; Lartey et al., 2019). Therefore, we expect that a CEO's SO will be positively related to degree of venture growth. Accordingly, we propose the following hypothesis:

H1: *A CEO's sustainability orientation is positively related to new venture growth*

2.3 The mediating role of CSR implementation

Prior studies suggest that firms that invest in CSR practices as a strategic choice tend to reap positive business outcomes such as improved reputation, financial performance and growth (e.g., McWilliams & Siegel, 2001; Dögl & Behnam, 2015). Arguably, CEOs whose actions are consistent with the regulatory, market and social expectations of their stakeholders anticipate that the implementation of CSR practices stimulates greater incentives beyond that of firms that fail to respond to these pressures (Suchman, 1995). Accordingly, Missimer, Robèrt & Broman (2017) argue that in a socially sustainable society, people are not constrained by structural obstacles to

health, competence, and meaning-making. Thus, firms bidding to exploit greater growth potential whilst championing sustainability must adopt socially responsible or sustainable practices that certainly support societal themes such as education (social capital), employment (empowerment and participation), equity (social cohesion), human rights (sense of identity), poverty (health and safety), and social justice (quality of life) (Landorf, 2011). The implementation of CSR (e.g. transition to more efficient renewable energy sources, implementation of green technologies and processes, or green communication and strategies) stimulates short-term firm investments (Dögl & Behnam, 2015). Nevertheless, CSR implementation can boost long-term financial performance and ultimately growth (King & Lenox, 2000), given that environmentally/socially responsible production, processes and products reduce waste of financial slacks and other corporate resources (Boiral, Henri & Talbot, 2012). Further, green technologies and products boosts productivity and decreases compliance costs, which mitigates threats to new market entry and consequently increases financial performance and growth (Darnall, Henriques & Sadorsky, 2010). Moreover, CSR practices such as green strategy and green communication may stimulate a rise in employees' morale towards attracting new clients/customers, and/or boost corporate reputation via increased positive media reports, which ultimately exacerbates and sustains the company's competitiveness (Buysse & Verbeke, 2003). Hence, in a competitive environment, firms must adopt and implement CSR practices that enhance their competitive advantages over others while sustaining firm growth and survival (Lartey et al., 2019). Grounded on the above, we expect that CSR implementation mediates the relationship between CEO sustainability orientation, and venture growth. Accordingly, we propose the following hypothesis:

H2: *A firm's degree of CSR implementation mediates the positive relationship between SO and new venture growth.*

2.4 Moderating role financial slack resource

Financial resource slack reflects the discretionary fiscal/financial resources that can be diverted or deployed to ensure that an organization is able to achieve its goals (Arora & Dharwadkar, 2011; George, 2005; Shahzad et al., 2016). In the light of growing pressure from environmental activists, governments and policy makers have put an environmental agenda at the heart of their activities and strategies (see Doh & Guay, 2006; Boso et al., 2017). However, consumers in developing economies tend to rank economic concerns above sustainability (Sudarmadi et al., 2001). For this reason, managers leading firms in developing economies are less inclined to deploy non-slack resources for such sustainability activities.

The slack resource theory (Waddock & Graves, 1997) contends that greater financial slack offers superior financial backing for social and environmental sustainability pressures (Adams & Hardwick, 1998; Brammer & Millington, 2004; Xiao et al., 2018). Accordingly, we focus on financial slack as a moderator for three major reasons. First, the availability of financial slack resources induces firms to act confidently and competitively (Bourgeois, 1981; Nohria & Gulati, 1996; Chang et al., 2017). Second, the accumulation of financial slack resources facilitates a firm's experimentation with new strategies, via the adoption of new management practices, introduction of new products and entry into new markets (Xiao et al., 2018). Third, firms are not challenged to deploy financial slack because it is generic and unabsorbed. This suggests that managers have little motivation to deploy financial slack on sustainability activities that can enhance a firm's long-term reputation. When resources are unabsorbed, it suggests a lack of structural constraints; making resources readily allocated to a range of sustainability activities. Our contention is that having a lower level of financial slack is likely to put pressure on firms to conserve rather than deploy. This is because conservation of a lower level of slack will ensure its availability for other operational activities. In addition, low levels of slack may be considered as insufficient for successful

sustainability activities. In addition, when firms possess greater financial slack, it may incentivize them to deploy it towards environmental-oriented causes provided there are potential gains in the long term (Boso et al., 2017). Thus, we expect that higher financial slack will boost the indirect effect of sustainability orientation on venture growth. This leads to our next hypothesis as:

H3: *The effect of SO on new venture growth via CSR implementation is strengthened when financial slack resource increases in magnitude.*

2.5 Moderating role CEO power

The concept of CEO power focusses on the CEO's capacity to influence and implement his or her plan in the organization (Finkelstein, 1992). The CEO is commonly regarded as the most powerful member of an organization (Daily & Johnson, 1997; Pearce & Robinson, 1987). In his examination of top management teams, Finkelstein, (1992) identifies four power dimensions of the CEO, which he labels are structural, ownership, prestige, and expert power. Structural power is inherent in formal organisational hierarchy and structure. Consequently, CEOs are anticipated to have a great amount of structural power. Ownership power emanates from holding a substantial shareholding in the firm. Ownership power may also stem from establishing long-term relationships with major owners or founders of a firm. Thus, CEOs can leverage on ownership to control their actions. Prestige power emanates from the individual's status in the organisation. Therefore, the CEO's status makes it easier for him or her to implement their choices. Expert power involves showing a breadth of experience. Therefore, the CEO's experience enables him or her to better deal with key tasks (McNulty et al., 2011; Daily & Johnson, 1997; Finkelstein, 1992). Indeed, a CEO derives power from the fact that he or she is perceived to possess knowledge and have legitimate authority in shaping the direction and ethos of an organization (Daily & Johnson, 1997). Accordingly, the CEO's SO would permeate the structure and processes of the organization partly due to his or her

power and control of resources to carry out his or her plan (Chin et al., 2013; Lewis et al., 2014; Walls & Berrone, 2017).

Some researchers argue that corporate executives often lack the latitude to act, and their actions are often curtailed by organizational inertia and pressures to conform to local institutional demand to acquire legitimacy for the organization's survival (e.g., DiMaggio & Powell, 1983; Hannan & Freeman, 1977). It has also been suggested that in many organizations, the stakeholder holds considerable power in terms of their ability to act, and therefore there are different degrees of power which generate different outcomes for different organizations (Roberts, 1992). Thus, a powerful CEO's SO can strengthen the links between the organization and its ability to implement different CSR. The position of power can bestow on corporate executives the legitimacy and authority to make investment decisions (Walls & Berrone, 2017).

Organizations with less powerful CEOs tend to engage in wider debates, which allows more diverse perspectives to emerge (Zahra & Pearce, 1989). In contrast, more powerful executives can ensure that their preferences are taken up and implemented by the organization (Haynes & Hillman, 2010; Finkelstein, 1992). Therefore, the CEO's SO or preferences for environmental sustainability are more likely to prevail in an organization to ensure the implementation of sustainability practices initiatives. It does follow that, even in the wake of faltering sustainability initiatives, a powerful CEO would have the influence and control over resources to be able to generate a turnaround. By setting the agenda for the organization, the CEO would be able to embed their sustainability orientation in the venture. Although corporate leaders play an important role in developing and implementing social responsibility and environmental policies, much of the current literature has underexplored the effects of power dynamics (Walls & Berrone, 2017). Based on the above discussion, we propose the succeeding hypothesis:

H4*: The effect of SO on new venture growth via CSR implementation is strengthened when CEO power increases in magnitude*

3. Research method

3.1 Sampling and data collection

The sampling frame for this study was obtained from Ghana's Company Directory (available at the Registrar General's Department). We selected 850 independent firms that met the following criteria: (1) firms that were founded in 2007 or later; (2) firms that were not part of any company group; (3) firms employing a maximum of 250 full-time employees; (4) firms with constituted boards or sponsors; (5) firms that manufacture physical products or services providers. We selected firms with constituted boards to capture CEO duality. CEO duality captures the CEO structural power. To capture duality, we created a dummy variable (i.e., CEO also serves as a chairperson of the company board=1; otherwise=0. Researchers tend to disagree on what constitutes a new venture (Reynolds & Miller, 1992; Vesper, 1990). Some researchers have suggested that the first six years of a venture's existence are critical for its growth (Shrader et al., 2000). However, we selected ventures up to 10 years of age to capture firms that are at various growth trajectories (Cardon & Kirk, 2015). The age of the firms in our sample ranged from 4-10 years.

In 2016, we contacted all the 850 ventures with a questionnaire in person to capture sustainability orientation, CSR implementation, and CEO power. After sending two reminders, we received a total of 239 questionnaires. Those who did not respond to our questionnaire cited issues related to their inability to gain the required approval from company owners. To mitigate potential common variance influencing the integrity of the data (Podsakoff et al., 2003), the second wave of the data collection took place immediately after the first survey in 2016. This time, finance managers from the 239 firms were approached in person with another questionnaire to capture

venture growth, CSR implementation and financial slack measures. In all, 211 responses were obtained from the finance managers. The 28 firms that did not respond in the second survey had no finance managers or the CEOs were also the finance managers. Therefore, we used 211 matched responses from CEOs and finance managers for our analyses. This represents a 24.82% effective response rate (i.e., [211/850] x 100).

The sampled firms operate in multiple industries: engineering services (19%), food processing (33%), agro-processing (25%), textiles and garments (9%), security services (6%), and banking and financial services (8%). This indicates that of the 211 firms, 67% are manufacturers of physical goods whilst 33% are service providers.

On average, the firms are 8 years old, employ 15 full-time employees, and have an average annual turnover of US$125,500. We investigated the likelihood of non-response bias by comparing the respondents and non-respondents based on firm age, CEO age, education, industry, and firm size (Armstrong & Overton, 1977). The information on non-respondents were obtained from the Ghana Company Directory database. We found no significant differences between these two groups of respondents. Hence, our data is not influenced by non-response bias.

3.2 Measure of constructs

New venture growth. Venture growth can be captured in several ways (Delmar et al., 2003). In this study, we measured venture growth as the change in the number of employees from 2014 to 2016. We calculated venture growth rate by following previous studies (e.g., Brouwer et al., 1993; Robson & Obeng, 2008). Though we could have employed other measures of growth (e.g., revenue productivity and profitability), our respondents were unwilling to provide information on these variables.

CSR implementation. We followed previous studies to capture firms' expenditure on CSR activities (e.g., Boso et al., 2017; Julian & Ofori-Dankwa, 2013). Specifically, we asked finance managers during the second wave of the data collection process to indicate the percentage of (1) return on investment, (2) total annual profits, and (3) annual sales spent on CSR activities.

Sustainability orientation. We measured sustainability orientation with five items adapted from Kuckertz & Wagner (2010). These items were measured on a seven-point Likert scale ranging from 1=not at all accurate to 7=very accurate (Cronbach alpha=.88).

CEO power. CEO power constitutes various sources of executive power including structural, ownership, expert and prestige power (Finkelstein, 1992; Combs et al., 2007). We defined CEO power as a composite measure entailing ownership power (CEO founder status), structural power (CEO duality) and expert power (CEO tenure) (Sariol & Abebe, 2017; Tang et al., 2011). CEO founder status was coded as a binary variable (1=if the CEO is a founder or co-founder of the firm; 0= otherwise). We did not capture CEO prestige power because the firms in our sample were SMEs and could adequately measure this type of power in small firms. CEO duality was also included as a binary variable (1=if the CEO also serves as a chairperson of the company board; 0= otherwise). We captured CEO tenure as the number of years the CEO has spent in his/her current position. Each dimension was standardized and summed to form the variable score (Sariol, & Abebe, 2017).

Financial slack. We followed Voss et al. (2008) by using the venture's cash reserves at the end of previous financial year to measure financial slack.

Control variables. We included five control variables to account for their influence on our research model. *Firm size* was measured as the logarithm transformation of number of full-time employees, while *firm age* was captured as the logarithm transformation of number of years the business has operated since its first sales. *Industry* was measured with a dummy variable with "0"

indicating manufacturing industry and "1" indicating services (Boso, Story & Cadogan, 2013; Wang, 2008). Finally, we controlled *founder/CEO age* and *education* ("1" = "high school", "2" = "associate degree", "3" = "bachelor's degree", "4" = "master's degree" and "5" = "doctoral degree").

3.3 Common method variance, validity and reliability assessment

Though we obtained information on the variables from multiple informants and at different points in time, which could mitigate potential common method variance concerns, further tests were conducted to establish whether common method variance influenced our findings. Specifically, we utilized Lindell & Whitney's (2001) test for common method variance. Accordingly, we identified a marker item which is one not conceptually related to any construct in our model. Thus, we used "There is a high level of knowledge sharing between my colleagues and myself" as a marker item which is a measure of knowledge sharing. In this study, knowledge sharing, and other constructs had a non-significant correlation ranging from –.01 to .04. Results also show that partial correlations between constructs were as hypothesized and were significant after the common method bias effect was taken out. We used a 95% sensitivity analysis to verify this conclusion. Overall, it is concluded that issues related to common method variance have been materially reduced.

Next, we examined the reliability and validity of our multi-item constructs by performing an exploratory factor analysis and refined the items in confirmatory factor analysis (CFA) using LISREL 9.30. We obtained adequate fit for the data: χ^2 (degree of freedom [d.f.]) = 994.08 (584); $p < .00$; RMSEA = .04; NFI = .97; CFI= .98; GFI=.99). Factor loadings for each of the multi-item constructs were significant at 1%, which supports the convergent validity of the measures (Bagozzi & Yi, 1988). We inspected composite reliability values that exceeded the

suggested threshold value of .70, confirming reliability of the multi-item constructs (Fornell & Larcker, 1981). Utilizing the approach advanced by Fornell & Larcker (1981), we investigated the discriminant validity of our measures. We compared the average variance extracted (AVE) for each construct and the highest shared variance (HSV) of each pair of constructs. The results show that discriminant validity was achieved given that AVE for each construct was greater than the HSV between each pair of constructs.

4. Results

We utilized a path analysis format (Preacher, Zyphur & Zhang, 2010) using Mplus statistical software package (Muthén & Muthén, 1998–2010) and tested our mediation model through the test of the statistical significance of the indirect effect and its associated confidence interval (MacKinnon, 2008). Before performing our analysis, the relevance of the proposed relationships was assessed using effect size estimates and prognostic tests. We assessed changes in effect sizes because the removal of a direct and moderation effect may help highlight the relative significance of individual effects (Fritz et al., 2012; Preacher & Kelley, 2011; Wales et al., 2013). The effect size f^2 indicates whether an exogenous latent variable makes a large ($f^2 >= .35$), medium ($.35 < f^2 =< .15$) or weak ($.02 < f^2 < .15$) contribution towards explaining the variance of an endogenous variable – venture growth. In this study, the direct and moderation effects revealed medium (lowest effect size=.22) to large effect sizes (highest effect size=.43). This suggests that the effects are critical in the overall model. In addition, we calculated effect sizes utilizing prognostic relevance in Stone-Geisser's *Q2* to establish predictive criteria. Specifically, we calculated the Stone-Geisser test using a blindfolding algorithm, which revealed a change in Stone-Geisser *Q2* when a latent exogenous variable is removed from the model (Geisser, 1975; Stone, 1974; Götz et al., 2010). We found that the inferences were identical to Cohen's effect size (*f 2*). To attenuate the potential

multicollinearity in testing moderating hypotheses, all the variables involved in the interaction were mean-centered (Aiken & West, 1991). We found no threat of multicollinearity given that the highest variance inflation factor (VIF) was 3.11, which is well below the recommended threshold value of 10 (Neter, Wasserman & Kutner, 1990).

Insert Table 1 about here

We report the descriptive statistics and correlations in Table 1. The results of our hypotheses are presented in Table 3. We stated in Hypothesis 1 that a CEO's SO will be positively related to new venture growth. Hypothesis 1 was supported ($\gamma = .14$, $p<.04$, Model 3). However, hypothesis 1 is only a baseline path estimated in the study.

Hypothesis 2 stated that the degree of CSR implementation mediates the effect of SO on new venture growth, which is a competing hypothesis to Hypothesis 1. As Model 4 (Table 2) shows, the SO → venture growth linkage becomes nonsignificant in Model 4 ($\gamma = .04$; n.s), while the SO → CSR implementation relationship ($\gamma = .17$; $p< .05$), and the SO → venture growth relationships ($\gamma = .15$; $p< .01$) are significant. Thus, we reject Hypothesis 1 in favor of Hypothesis 2. This suggests that the mediating hypothesis is supported. Further investigation using the bootstrapping approach indicates that none of the confidence intervals contained zero (estimate [ab] = .14, $p < .10$; 95% CI [.10, .29]). This further confirms Hypothesis 2. Thus, we reject hypothesis 1 in favor of hypothesis 2.

Hypothesis 3 argued that the effect of a CEO's SO on venture growth via CSR implementation is strengthened when financial slack resources increases in magnitude. As we

show in Model 6, the indirect effect of a CEO's SO on venture growth via CSR implementation becomes nonsignificant ($\gamma = .04$, n.s). Hence, we reject Hypothesis 3.

Hypothesis 4 predicted that CEO power will have a positive moderating influence on the indirect effect a CEO's SO on venture growth. We found support for Hypothesis 3 ($\gamma = .38$, $p<.01$).

We established the direction of the moderation by plotting the slopes for the two relevant conditions (high/low CEO power) (Figure 2) and examined the resulting plots by conducting a slope difference test (Dawson & Richter, 2006). Findings indicate that there are significant differences between the slopes of "high CEO power/ high SO" and "low CEO/low SO " ($p < .05$). Data points for plotting the figures were computed using +/- 1SD for a CEO SO, CEO power, and degree of CSR implementation. As shown in Figure 2, the relationship between CEOs' SO and venture growth is stronger for CEOs with greater levels of power. Simple slope analyses reveal that the relationship between a CEO's SO and degree of venture growth is significant when CEO power is high ($t = 2.27$, $p < .01$) but not when it is low ($t = .43$, *ns*). Therefore, the results support H3.

Insert Table 2 about here

Insert Figure 2 about here

4.1 Supplementary analyses

To provide further insight into the robustness of our findings, we performed additional analyses. First, we used financial resource availability as a proxy for financial slack. This information was provided by the finance managers of the firms in T2. We operationalized financial resource

availability in terms of ease of accessing financial capital (e.g., Cooper et al., 1994; Wiklund & Shepherd, 2005). The results indicate that the indirect effect of SO on new venture growth via CSR implementation becomes nonsignificant (γ = .02, *n.s*). Hence, we provide further evidence for Hypothesis 2. Second, we estimated a SEM model using profitability as an alternative dependent variable. We observed that our results remain largely the same. Third, we used PROCESS, a SPSS-based program (Hayes, 2013), to test the effect of a CEO sustainability orientation (dependent variable) and degree of CSR implementation (mediator) on new venture growth. The total effects model without the mediating variable recorded a positive relationship between CEO sustainability orientation and venture growth (B= .14, t = 4.71, p < .05). In support of Hypothesis 1, the results show a positive relationship between CEO sustainability orientation and degree of CSR implementation (B= .32, t = 7.88, p < .05), and a significant interaction between CEO SO and CEO power (B = .05, t = 3.00, p > .05), indicating that as CEO power increases, the association between CEO SO and degree of CSR implementation strengthens. H4. Finally, we tested an alternative model by adding additional control variables including environmental dynamism and environmental munificence. Substantially, the results were in line with our initial findings. This indicates that the results presented in this paper are robust to alternative explanations (Stam, 2010).

5. Discussion and Conclusion

Drawing on the upper echelon theory and sustainability orientation literature, we sought to examine mediating role of CSR implementation in the relationship between CEOs' SO and venture growth. We also examined two internal contingency factors (i.e., CEO power and financial slack) on this association. Regarding our hypotheses, we found that the association between a CEO's SO and venture growth is mediated by a firm's degree of CSR implementation. We also established that CEO power strengthens the indirect positive association between CEO's SO and new venture

growth. However, we find that the effect of financial slack resources on the relationship between CSR implementation and venture growth is nonsignificant. These findings underscore the theoretical and practical contention that CEO power plays an important role in influencing organizational success and outcomes.

These findings offer three main contributions to environmental sustainability literatures. First, our study builds on prior scholarly works on environmental sustainability (Kuckertz & Wagner, 2010; Kraus et al., 2018; Svensson & Wagner, 2012; Fobbe, & Hilletofth, 2021) by articulating how a key managerial characteristic (i.e., CEOs' SO) influences venture growth through CSR implementation. Even though, previous research (Danso, et al., 2019; Roxas, Ashill, & Chadee, 2017) considered the broad linkage between SO on venture performance, these studies did not indirectly capture the influence of individual level SO on performance of developing economy SMEs. In addition, these studies did not capture the possible role of CEO power in the hypothesized relationship. Given that developing market operations are complex and risky, especially, for SMEs, the current research findings shed more light on the SO—firm performance nexus in this less-researched environment.

Second, we extend previous research on emerging market (e.g., Julian & Ofori-Dankwa, 2013) that claims that higher firm profitability (i.e., greater levels of financial resource slack) is negatively associated with CSR performance in less developed countries. Our study suggests that financial resource slack attenuates the positive relationship between CSR implementation and venture growth. This finding is crucial given that previous research in developing economies that suggests that increases in financial resource slack is associated with decreases in corporate social performance (See Boso, et al., 2017; Julian & Ofori-Dankwa, 2013). Third, this paper is an extension to previous research that shows that an SO positively relates to venture performance. This study shows that CEO power plays significant roles in the indirect relationship between SO

and venture. Thus, by extension, this finding suggests that the indirect effect of SO on venture growth may be more positive when the CEO is more powerful. This outcome contributes further to the ESO literature by shedding light on the specific internal conditions in which a CEO's SO is more likely to indirectly lead to higher venture growth. This extension is important because although, there is general view that ESO can drive venture performance, this relationship is more nuanced, and it is contingent on various internal situations.

Finally, we extend Kuckertz and Wagner's (2010) study by explaining how an individual's SO relates to actual behaviour (CSR implementation). We find that greater levels of CEOs' SO leads to greater CSR implementation. This is because, when CEOs' SO is greater, it encourages environmentally friendly practices in decision-making, which are likely to make boost CSR implementation in the organization. This finding contributes further to the CSR literature by answering the question relating to which individual is ideal to boost CSR implementation in organizations.

Beyond the theoretical implications, this study offers some practical implications. First, by providing new insights on effects of CSR implementation exerting on the relationship between CEOs' SO and venture growth, our analysis encourages CEOs to voluntarily adopt sustainability initiatives as robust pathway for growth and long-term success. Our analysis also reinforces the contention that CEOs have a major impact in amplifying the effects of sustainability orientation and facilitating CSR implementation. From a policy standpoint, there is a need for government to create forums where CEOs exchange best knowledge and practice about CSR implementation and sustainability. Such approach would go a long way in incentivising other firms.

6. Limitations and directions for future research

There are a few limitations worth noting. First, our study is based on single country' Ghana – an emerging economy in the sub-Saharan region. Although Ghana shares some characteristics with other emerging economies, this is insufficient to provide a basis for the generalization of our findings to other developing and Western contexts. Second, we constrained our managerial emphasis to only CEOs rather than other executives and ignored the examination of the time perspective effect (e.g., Berends & Antonacopoulou, 2014; Kunisch et al., 2017)Thus, future studies could focus on other executives in such organizations.

Third, in measuring CEOs' SO, our study did not capture issues related to social element, community involvement and human rights. Doing so could provide a more nuanced understanding of individuals' concerns about sustainability orientation. We recommend that future research includes these issues in measuring CEOs' sustainability orientation. Fourth, CEO power was captured with three indicators (founder status, duality, and tenure). We suggest that future studies capture two additional indicators, namely ownership stake and CEOs' previous entrepreneurial experience. Given that financial capital is critical in the early stage of the business development/growth, CEOs' with a high ownership stake may exert greater power over the CSR implementation process.

Fifth, the Finkelstein typology of CEO power include ownership, structural, expert and prestige power. However, in the operationalisation of this variable, prestige power was omitted because the firms in our sample were SMEs and could adequately measure this type of power in small firms. We recommend that future research capture prestige power in the operationlisation of CEO power.

Finally, the cross-sectional nature of our study makes impossible to make causal claims. Thus, we encourage future studies to make use of longitudinal data to the identification of the underlying directions of causality between the constructs of interest. We hope that this study helps

to trigger new streams of research on CEOs' sustainability orientation, CSR implementation and venture growth in an emerging market context.

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Table 1: Descriptive statistics and correlations

	Variable	1	2	3	4	5	6	7	8	9	10
1.	Venture size (employees)										
2.	Venture age	.08									
3.	Industry	-.06	-.11								
4.	CEO age	-.09	.04	.00							
5.	Education	.05	.03	.02	.06						
6.	Financial resource slack	.11	-.12	.14*	.08	.11					
7.	CEO power	.03	-.09	.01	.12	.23**	.21**				
8.	CSR implementation	.10	-.06	.22**	.23**	.10	-.11	.09			
9.	Sustainability orientation	.03	.08	.05	.16*	.18**	-.15*	.04	.18**		
10.	Venture growth (2014-2016)	-.04	-.13*	.04	.09	.09	.08	.05	.22**	.12	
	Mean	15.64	8.72	.83	51.82	2.96	17.70	.19	5.76%	5.68	6.56
	Standard deviation	3.88	6.76	.38	9.14	1.18	43.19	2.58	6.11%	0.75	23.07

*p <.05; **p <.01

Table 2: Results of Structural Model Estimation (N = 211)

Independent Variables	Dependent Variables						
	CSR implementation			**New Venture Growth**			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Control Paths							
Venture Size	.11*	.08*	.14†	.15*	.12*	.12*	.11*
Venture Age	-.08*	-.09***	-.13	-.11	-.10	-.11	-.12*
Industry	.20 ***	.21***	.19***	.17***	.18***	.17***	.19***
CEO age	.14**	.14**	.13**	.17***	.19*	.13**	.14**
Education	.05	.04	.11*	.12*	.11*	.10*	.10*
Direct Effect Paths							
H1: Sustainability orientation (SO)		.17***	.17***	.04	.15***	.23***	.22***
CSR implementation				0.25***	.20**	.24**	.24***
Financial slack resource (FSR)					.09*	.10	
CEO power					.11*	.12*	
Moderating Effect Paths							
H3: CSR implementation x FSR						.04	
H4: CSR x CEO power							.38***
Goodness of Fit Statistics:							
R^2	.32	.33	.19	.21	.22	.25	.28
ΔR^2	-	.01*	-	.02**	.01*	.00	
χ^2/D.F.	115.23/57	111.23/59	113.09/69	119.22/65	115.12/64	113.14/57	112/59
RMSEA	.03	.03	.03	.03	.04	.03	0.4
SRMR	.05	.05	.04	.03	.04	.06	0.05
NNFI	.97	.96	.96	.96	.97	.95	.95
CFI	.97	.98	.98	.98	.99	.99	.99
Indirect effect path							
						95% Confidence interval	
					Estimate	CI Lower end	CI upper end
H2: SO→ New venture growth (via CSR implementation)					.14**	.10	.29

* $p < 0.10$.; ** $p < 0.05$; *** $p < 0.01$. [a] Log transformation of original values. Standardized coefficients are shown. The model was estimated simultaneously. CI=confidence interval.

Figure 2. **Interaction effect of SO with CEO power on venture growth**

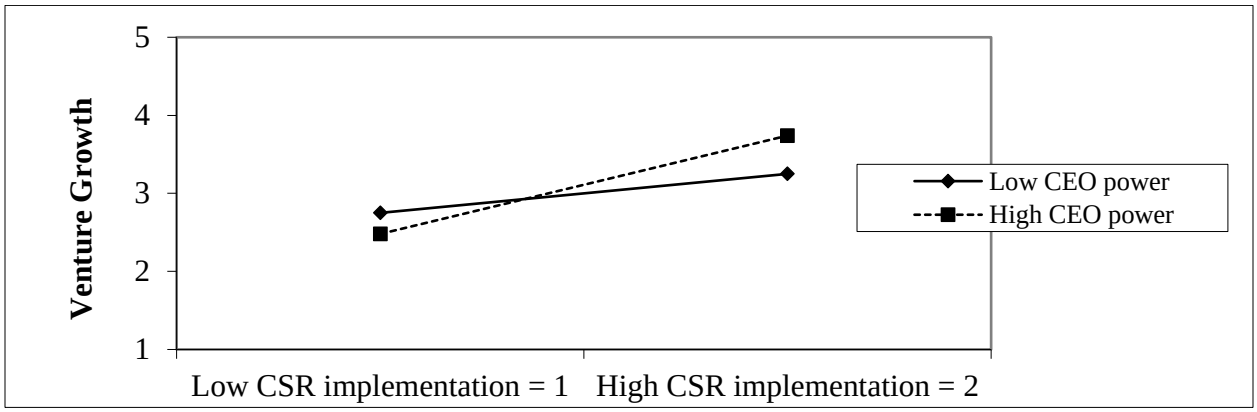
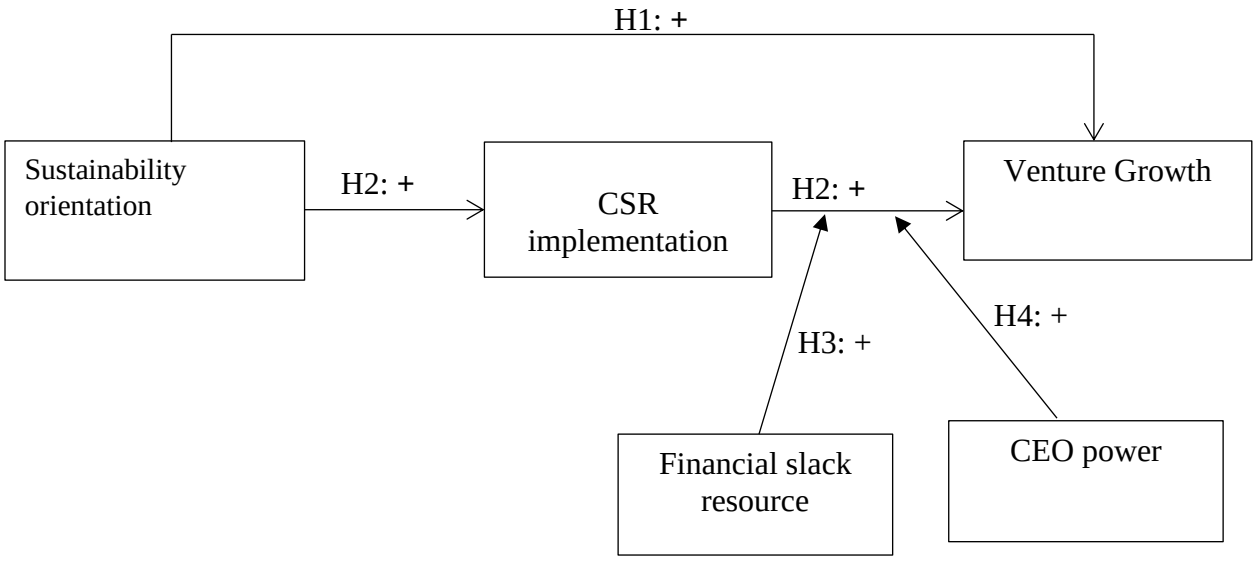


Figure 1. Conceptual model of the study



Appendix 1. Measurement items

Item description	Loadings (t-values)
Sustainability orientation (α=0.88; CR=0.89; AVE=0.62; HSV=0.13)	
Ghanaian firms should take an internationally leading role in the field of environmental protection	0.79 (1.00)
The environmental performance of a company will in future be considered more and more by financial institutions	0.75 (11.08)
Firms that are environmentally oriented have advantages in recruiting and retaining qualified employees	0.90 (18.66)
I think that environmental problems are one of the biggest challenges for our society	0.83 (13.50)
I think that CEOs and companies need to take on a larger environmental responsibility	0.78 (12.45)
CSR implementation (α=0.92; CR=0.93; AVE=0.57; HSV=0.10)	
Percentage of return on investment spent on CSR activities	0.88(1.00)
Percentage of total annual profits spent on CSR activities	0.88 (11.27)
Percentage of annual sales spent on social on CSR activities	0.79 (12.83)

Note: t-values are in parenthesis