

## RESEARCH NOTES AND COMMENTARIES

### THE IMPACT OF CEO CORE SELF-EVALUATION ON THE FIRM'S ENTREPRENEURIAL ORIENTATION

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*Although much has been attributed to a CEO's personality, one particularly intriguing, and as yet unexplored, investigation is its impact on the firm's entrepreneurial orientation. Additionally, despite calls from the upper-echelon literature, CEO personality research has been hobbled by the absence of a unifying construct that captures core dimensions of personality, and by the difficulty in obtaining such intimate assessments from executives. Building on recent advances in personality research, in particular the identification and validation of the core self-evaluation construct that captures the core facets of an executive's sense of self-potency, we develop and test a model of the impact of CEO core self-evaluation on entrepreneurial orientation. Then, consistent with upper echelons and personality theory, we specify the contingent role of environmental dynamism. Using multisource data from a sample of CEOs and their top management teams from 129 firms, including a time-lagged assessment of the firm's entrepreneurial orientation, we find evidence to suggest that CEOs whose personalities reflect higher core self-evaluations have a stronger positive influence on their firms' entrepreneurial orientation. In addition, we find that this influence is particularly strong in firms facing dynamic environments, but negligible in stable environments. Copyright © 2009 John Wiley & Sons, Ltd.*

## INTRODUCTION

Firms that tend to engage in greater innovation, undertake somewhat risky ventures, and proactively beat competitors are viewed as more entrepreneurially oriented (Covin and Slevin, 1986; Dess and Lumpkin, 2005; Miller, 1983). Given

that an entrepreneurial orientation has become central to a firm's ability to compete, adapt, and perform effectively in increasingly competitive environments, scholars have begun to show greater interest in its origins. Quite often a firm's entrepreneurial orientation is attributed to its chief executive officer's (CEO) persona on the premise that entrepreneurial choices, entailing great ambiguity and uncertainty, are particularly amenable to the influence of executive personality (Stevenson and Jarillo, 1986; Chatterjee and Hambrick, 2007; Simsek, 2007; Hiller and Hambrick, 2005). And

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yet, to date, researchers have not directly examined this premise, in large part because of the obstacles to studying executive personality.

While researchers have examined the organizational impact of several facets of CEO personality, notably self-esteem, locus of control, emotional stability, hubris, overconfidence, and narcissism (e.g., Miller, 1983; Miller and Toulouse, 1986; Hayward and Hambrick, 1997; Simon and Houghton, 2003; Chatterjee and Hambrick, 2007), often they have had to rely upon secondary data to infer these traits. Moreover, rarely have researchers studied facets of personality together, and even when they do, 'generally they are treated as entirely separate variables with no discussion of their interrelationships or possible common core' (Judge *et al.*, 2003 : 304). As a consequence, executive personality research has left us with an incomplete and 'fragmented understanding' (Hiller and Hambrick, 2005 : 297). Thus, beyond the difficulties of obtaining intimate, evaluative assessments of what CEOs believe about themselves, a major obstacle has been the absence of an overarching construct that unifies the core facets of an executive's sense of self-potency (Hiller and Hambrick, 2005).

To advance this line of research, we focus on a unifying construct, core self-evaluation, to capture CEO personality. As a broad personality trait this construct captures the common elements embedded in self-esteem, generalized self-efficacy, emotional adjustment, and locus of control (Judge, Locke, and Durham, 1997; Judge *et al.*, 2003). As an enduring assessment of worth and competence (Judge *et al.*, 1997) or self-potency, it is believed to hold great promise 'as a robust, well-validated umbrella construct for studying the impact of executive personality on strategic processes and choices' (Hiller and Hambrick, 2005 : 297).

Because stronger core self-evaluation CEOs have greater confidence in their ability to shape the firm's future and the strength of vision to see decisions through, we posit that they will be more apt to guide their firms toward entrepreneurially oriented choices and foster a climate that reinforces this proclivity. Then, we reason that the impact of core-self evaluation on entrepreneurial orientation will be stronger in dynamic environments because uncertainty predisposes top executives to rely more heavily upon their own frame of reference, which affords them greater discretion in

shaping strategic choices (Carpenter and Fredrickson, 2001; Finkelstein and Hambrick, 1996). We test these hypotheses using a multisource survey of CEOs and their top management teams (TMTs) in 129 firms, relying on a time-lagged assessment of the firm's entrepreneurial orientation.

## THEORETICAL BACKGROUND

Over a dozen studies have addressed the construct validity of core self-evaluation (Bono and Judge, 2003), providing strong and consistent evidence that it is a second-order latent construct that explains covariation among its first-order factors—self-esteem, locus of control, generalized self-efficacy, and emotional stability (Judge, Erez, and Bono, 1998; Erez and Judge, 2001). Research has also found strong correlations among these components, indicative of high convergent and low discriminant validity (Judge *et al.*, 2002; Bono and Judge, 2003; Judge, Van Vianen, and De Pater, 2004). Thus, Judge and colleagues conclude that 'core self-evaluation is a broad latent trait that is the common source of the four (and perhaps other) specific traits' (Judge *et al.*, 2003 : 304).

As a meta, latent construct, core self-evaluation has been empirically linked to numerous outcomes such as job satisfaction (Judge and Bono, 2001), performance (Erez and Judge, 2001; Judge and Bono, 2001) organizational commitment (Bono and Colbert, 2005), and motivation (Chen, Gully, and Eden, 2004). In addition, after first synthesizing prior research on related constructs (including narcissism, hubris, and overconfidence) in executive settings, Hiller and Hambrick (2005) proposed core self-evaluation as a unifying construct for studying the implications of executive self-concept and conceptually linked it to strategic processes and outcomes. Despite this, only one study has empirically explored this link. In a lab study, using hypothetical strategic decision scenarios, Halebian, Markoczy, and McNamara (2007) found that students enrolled in an executive master of business administration degree program who had higher core self-evaluations were more likely to choose riskier options such as deviating from industry norms or choosing large scale initiatives. While these findings are instructive, researchers have not demonstrated the direct influence of CEO core self-evaluation on organizational outcomes such as entrepreneurial orientation.

## HYPOTHESES

### CEO core self-evaluation and entrepreneurial orientation

Numerous strategy scholars have been interested in a firm's entrepreneurial orientation for some time. Early on, Mintzberg (1973) viewed this proclivity as an entrepreneurial strategy making mode, whereas Miles and Snow (1978) framed it as an 'entrepreneurial problem' or pivotal adaptive hurdle for organizations. Miller (1983) then empirically identified a pattern of strategic actions of entrepreneurially oriented firms, including innovativeness, risk taking, and proactiveness. In addition to delineating these actions, Lumpkin and Dess (1996) further clarified the construct of entrepreneurial orientation, defined as capturing the strength of a firm's 'impetus to innovate, take risks, and aggressively pursue new venture opportunities' (Dess and Lumpkin, 2005: 147).

Previous research has suggested that a firm's entrepreneurial orientation arises from the decision-making styles and practices of its senior executives, most prominently the CEO, who is in the strongest position to influence and shape the firm (Covin and Slevin, 1989; Dess and Lumpkin, 2005). Given that CEOs act on the basis of their personalized interpretations of the strategic situations they face (Hambrick and Mason, 1984; Hambrick, 2007), we posit that those with higher core self-evaluations are more apt to favor entrepreneurially oriented strategic choices.

Fundamentally, evidence indicates that individuals with a higher core self-evaluation tend to pursue self-concordant goals, that is, goals that are internally consistent with their personal interests, values, and aspirations (Judge *et al.*, 2005). Because higher core self-evaluation CEOs believe that they can master their environment and that the application of their abilities will result in positive outcomes, they should be more predisposed to selectively perceive the upside potential of entrepreneurial opportunities (Chatterjee and Hambrick, 2007) and pursue them, than CEOs with lower self-evaluations. Supporting this expectation, research suggests that self-confidence and perceptions of controllability are related to the pursuit of pioneering, forward-looking strategic initiatives (Boone, De Brabander, and Van Witteloostuijn, 1996; Simon and Houghton, 2003).

In addition, because CEOs with higher core self-evaluations are 'well adjusted, positive, self-confident, efficacious, and believe in their own agency' (Judge *et al.*, 2003: 304), we would also expect that their innate preferences and positive psychological frame would be more attentive toward and alert to potential entrepreneurial opportunities. In particular, since such pursuits, although inherently uncertain, offer challenges that are more apt to be more intrinsically stimulating to these CEOs, and given the potential of higher payoffs, they can serve to further reinforce their sense of self-potency. Conversely, CEOs with lower core self-evaluation are more apt to harbor self-doubt, have less confidence in their ability to influence the environment when faced with such uncertain challenges, have a greater propensity to avoid risk (Hiller and Hambrick, 2005), and therefore be less predisposed to favor entrepreneurial strategic choices. Thus, consistent with these predispositions, we would expect that:

*Hypothesis 1: CEO core self-evaluation is positively associated with the firm's entrepreneurial orientation.*

### Moderating role of environmental dynamism

In a dynamic environment 'there is rapid and discontinuous change in demand, competitors, technology, or regulation so that information is often inaccurate, unavailable, or obsolete' (Eisenhardt and Bourgeois, 1988: 738). In this context, because cause-effect relationships are generally indiscernible or simply unknown (Finkelstein and Hambrick, 1996), the resulting means-ends ambiguity in decision making affords CEOs even greater discretion and latitude of action (Hambrick and Finkelstein, 1987). Consequently, CEOs with higher core self-evaluations are more likely to rely upon their own internal compass by acting in accordance with their own behavioral inclinations (Waldman and Yammarino, 1999) and personalized construals (Carpenter and Fredrickson, 2001; Finkelstein and Hambrick, 1996).

Additionally, faced with numerous changing opportunities/threats and the attendant information, CEOs do not have the time, resources, or cognitive capacity to engage in analytical and comprehensive analyses (Eisenhardt, 1989; Hambrick, Finkelstein, and Mooney, 2005). Thus, CEOs are more apt to 'be drawn to what has worked for them

before, what they find familiar or comfortable, and what fits their cognitive schema' (Hambrick *et al.*, 2005:478). Given the generalized propensity of individuals to inject their personalized interpretations and psychological dispositions into their decisions when confronted with ambiguous situations (Mischel, 1977), we would expect this tendency to be particularly strong among higher core self-evaluation CEOs operating in dynamic environments. Hence, given their predilections toward the pursuit of entrepreneurial goals, these CEOs would be more inclined to respond to dynamic conditions by favoring among an array of fleeting options the pursuit of entrepreneurial opportunities, thus bolstering entrepreneurial orientation.

Conversely, in an environment of relatively stable demand and supply-side market forces (Finkelstein and Hambrick, 1996; Carpenter and Fredrickson, 2001), CEO discretion is reduced and the variety of strategic choices, or 'strategic degrees of freedom,' is significantly constrained (Hambrick and Finkelstein, 1987:381). Given greater stability and predictability, higher core self-evaluation CEOs are able to rely more confidently on the objective characteristics of the decision environment and engage in more comprehensive analysis (Miller, 2008) rather than rely upon their own idiosyncratic construal of the competitive landscape (Hambrick and Finkelstein, 1987). Consequently, when the environment is stable, the impact of CEO core self-evaluation on entrepreneurial orientation will be less pronounced. Formally stated:

*Hypothesis 2: Environmental dynamism positively moderates the association between CEO core self-evaluation and the firm's entrepreneurial orientation such that the association is stronger when dynamism is high and weaker when it is not.*

## METHODS

### Research design and data collection

Previous survey-based upper-echelon studies have typically suffered from small sample sizes, lack of temporal precedence, and single informants. To overcome these limitations, we surveyed a relatively large sample of TMTs at two points in time. Initially we sent a questionnaire to CEOs measuring their core self-evaluation and perceptions

of environmental dynamism. Then, one year later, we sent a questionnaire to the members of the TMTs to measure their perceptions of the firm's entrepreneurial orientation, as well as environmental dynamism.

To develop our survey, we asked a panel of seven management scholars and three CEOs to review our survey and provide feedback. Based on their feedback, we modified the questionnaire, and then pretested it on 76 participants in an executive MBA class, which confirmed the reliability and factor structure of our measures. Using the online Kompass business directory ([www.kompass.com](http://www.kompass.com)), we identified 3,679 firms located in the Republic of Ireland. We first sent a questionnaire to the CEOs of each of these firms with a letter endorsed by the director and alumni officer of a nationally reputable university business school that endorsed the study, and promised an executive summary of the findings. After follow-up telephone calls, 504 CEOs agreed to participate, representing a response rate of 14 percent consistent with the 10–12 percent rate typical for mailed surveys to top executives (Hambrick, Geletkanycz, and Fredrickson, 1993). A t-test indicated no significant differences in firm size between firms that agreed to participate and those that did not, as well as between early and late respondents.

To ensure consistency across firms, and following the procedure suggested by Finkelstein and Hambrick (1996), the TMT members, defined as those persons typically involved in deciding the significant strategic issues facing the firm, were identified by the CEO. A year later, a letter was sent to each of the 504 CEOs thanking them for their participation, and inviting them to participate further by distributing a questionnaire to each member of their TMT. To ensure privacy and confidentiality of responses, we provided a return envelope for each member of the team, thus all responses were returned directly without CEO oversight. Overall, TMT members from 158 firms in our initial sample responded, representing an initial response rate of 31 percent. To ensure representativeness, we included only those firms where at least two members of the TMT (in addition to the CEO) responded. This resulted in a usable sample of 129 firms, representing an effective response rate of 26 percent. The TMTs in our sample ranged in size from two to 11 members, with an average of 6.5 members. An average of 4.5 TMT members responded from each firm, for an overall internal

response of 75 percent. On average, respondents were 42 years old and tenured in their position for seven years, their company for 11 years, and their industry for 16 years.

Given the attrition of firms in the second phase of our study, we compared firms that only responded in the first phase with those that responded to both and found no significant mean differences in core self-evaluation ( $t = -0.594$ ), entrepreneurial orientation ( $t = 0.130$ ), dynamism ( $t = -0.579$ ) and firm size ( $t = -1.609$ ), and only a marginally significant difference in firm age ( $t = -1.937$ ,  $p < 0.10$ ). We also regressed attrition (coded as 0/1) on these variables and found no significant effects. Taken together, these findings suggest no attrition bias and further substantiate the representativeness of our final sample.

## Variables and measurement

### Core self-evaluation

To assess the CEO's core self-evaluation, we used a *modified version* of the 12-item measure developed and validated by Judge and colleagues (2003). It has been suggested that, unlike the populations that have been studied to date with this instrument, an executive population is more apt to have a stronger predisposition toward the higher end of the measure such that it could be less sensitive due to range restriction. Consequently, in order to more precisely assess higher core self-evaluations, we followed Hiller and Hambrick's (2005) recommendation to use a seven-point scale ranging from 1 ('very strongly disagree') to 7 ('very strongly agree'). Example items include: 'I am confident I get the success I deserve in life,' 'when I try, I generally succeed,' 'sometimes when I fail I feel worthless,' 'I rarely have doubts about my competence,' 'overall I am satisfied with myself,' and 'I always feel in control of success in my career.' The final measure demonstrated acceptable internal consistency with a coefficient alpha of 0.80.

### Entrepreneurial orientation

We used a nine-item, semantic differential scale developed and validated by Covin and Slevin (1986) to measure a firm's entrepreneurial orientation. The scale demonstrated acceptable internal consistency with a coefficient alpha of 0.87.

Because we measured entrepreneurial orientation using the responses of members of the TMT, we used James, Demaree, and Wolf's (1984) agreement index ( $Rwg(j)$ ) to justify aggregating the responses of individual members to the team level. Median  $Rwg$  values higher than 0.70 are generally considered sufficient evidence of agreement to support aggregation (Chan, 1998). The median  $Rwg$  value for entrepreneurial orientation is 0.93, which warrants the aggregation of team members' responses. We also calculated the scale intraclass correlations ICC (1) and ICC (2). ICC (1) indexes the reliability of individual ratings, and ICC (2) represents the reliability of a group average rating (Bliese, 2000; Chen, Mathieu, and Bliese, 2004). The intraclass correlations suggested acceptable reliability (ICC1 = 0.30; ICC2 = 0.66;  $F(128) = 2.286$ ,  $p < 0.001$ ). We also calculated the team-level scale internal consistency using the average item response per team as input. This strategy aligned the measurement reliability information with the level of analysis used in the substantive tests. The aggregate-level coefficient alpha for this scale is 0.87 consistent with the individual alpha.

### Environmental dynamism

We assessed environmental dynamism using Miller and Friesen's (1983) six-item measure. Using a scale ranging from 1 ('not at all') to 7 ('a great extent'), both CEOs and TMT members were asked to assess the extent to which changes occurred in various aspects of their primary industry. An acceptable level of agreement among CEOs and top managers warranted aggregating responses to the TMT level ( $Rwg = 0.85$ ; ICC (1) = 0.13, ICC (2) = 0.39;  $F(128) = 1.648$ ,  $p < 0.001$ ). The aggregate-level coefficient alpha for the environmental dynamism scale is 0.76.

### Covariates

Consistent with previous theory, we controlled for firm age, firm size, ownership structure, growth, CEO tenure, TMT size, TMT positional tenure, and environmental complexity. *Firm size* was measured as the number of full-time employees, which was then log-transformed because the distribution departed from normality. *Firm age* was the log-transformed number of years since a firm's

founding. *Family ownership* was assessed by asking respondents to indicate whether or not their business was family owned. For *firm growth* we followed the convention (Simsek *et al.*, 2005) of asking TMT members to compare their firm's growth with that of major competitors in terms of sales, market share, number of employees, and ability to find growth from profits, using a scale ranging from 1 ('much worse') to 5 ('much better'). An acceptable level of agreement among top managers warranted aggregating top managers responses on the growth items to the team level ( $Rwg = 0.92$ ;  $ICC(1) = 0.32$ ;  $ICC(2) = 0.68$ ;  $F = 3.125$ ,  $p < 0.001$ ), with the aggregated scale's coefficient alpha of 0.76. We measured CEO's tenure as the number of years the CEO has been in office. Consistent with previous research, we also controlled for salient TMT variables, notably size and average positional tenure (Ling *et al.*, 2008) and environmental complexity (e.g., Barringer and Bluedorn, 1999). Complexity was assessed using a four-item measure adapted from Miller and Friesen (1983) that, given an acceptable level of agreement among CEOs and TMT members ( $Rwg = 0.88$ ;  $ICC(1) = 0.10$ ;  $ICC(2) = 0.33$ ;  $F(128) = 1.5$ ,  $p < 0.005$ ), was aggregated to the team level. The aggregated scale's coefficient alpha was 0.72.

## ANALYSES AND RESULTS

Table 1 presents means, standard deviations, and correlations for each of the measures. Given that no interfactor correlation is above the recommended level of 0.70 (Tabachnick and Fidell, 1996), multicollinearity and, hence, problems created by a lack of discriminant validity are not likely to bias our data. Nonetheless, we examined the variance inflation factors (VIF) of each individual predictor in our model. The VIFs for our individual predictors were all less than 10, indicating the absence of multicollinearity (Neter *et al.*, 1996). We further examined the discriminant validity of the constructs by performing a series of confirmatory factor analyses (CFAs) to compare our constructs to one, two, three, and four-factor model structures. We used the chi-square difference test in comparing these models as suggested by Kline (1998), and in all cases, there were significant differences, providing evidence of discriminant validity (Bagozzi, Yi, and Phillips, 1991).

Table 1. Means, standard deviations, and correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Entrepreneurial orientation	3.99	0.82	1									
2. Core self-evaluation (CEO)	5.36	0.78	0.18*	1								
3. Environmental dynamism	4.19	0.65	0.35**	0.06	1							
4. Firm age (natural logarithm)	1.44	0.40	-0.05	0.01	0.03	1						
5. Firm size (natural logarithm)	2.28	0.54	0.13	0.09	0.05	0.22*	1					
6. Family ownership	.25	0.43	-0.07	0.09	0.12	-0.07	-0.34**	1				
7. Growth	3.53	0.55	0.24**	0.05	0.07	0.02	-0.06	0.03	1			
8. TMT tenure	7.04	4.57	0.07	-0.10	-0.04	0.09	-0.08	0.03	0.24**	1		
9. TMT size	6.50	1.67	0.03	-0.15	0.05	0.02	0.29**	-0.22*	-0.02	0.04	1	
10. Environmental complexity	3.80	0.75	0.24**	-0.01	0.58**	-0.04	0.04	0.10	-0.02	-0.04	-0.07	1
11. CEO tenure	10.86	8.36	-0.16	-0.01	0.00	-0.05	-0.41**	-0.51**	0.12	0.12	-0.12	-0.11

N = 129; \*  $p < 0.05$ ; \*\*  $p < 0.01$

To test our hypotheses, we used moderated hierarchical regression analysis. All variables were centered prior to conducting regression analyses (Cohen *et al.*, 2003). We entered our variables in four steps. In step 1 we regressed entrepreneurial orientation onto each of our eight control variables, in step 2 we entered CEO core self-evaluation, in step 3 we entered environmental dynamism, and in step 4 we entered the cross-product interaction term of core self-evaluation and dynamism. The changes in R-squared ( $\Delta R^2$ ) at each step and standardized coefficients are presented in Table 2.

As shown in Table 2, Hypothesis 1, which predicted a positive relationship between CEO core self-evaluation and entrepreneurial orientation, was supported ( $\beta = 0.25$ ,  $p < 0.01$ ). With respect to Hypothesis 2, our prediction that environmental dynamism would positively moderate that relationship between CEO core self-evaluation and entrepreneurial orientation was also supported ( $\beta = 0.18$ ,  $p < 0.05$ ). To further interpret the interaction effect, we followed the procedure recommended by Cohen and colleagues (2003), by creating two simple regressions of core self-evaluation on entrepreneurial orientation, given conditional values of environmental dynamism (mean  $\pm 1$ -

SD). As shown in Figure 1, the impact of CEO core self-evaluation on entrepreneurial orientation is more pronounced when the environment is perceived as being highly dynamic. By contrast, core self-evaluation has a negligible impact on entrepreneurial orientation when environmental dynamism is lower.

## DISCUSSION AND CONCLUSIONS

We proposed and tested a model examining the impact of CEO core self-evaluation on the entrepreneurial orientation of 129 firms using lagged, multisource data. Our study is the first to examine the broad personality trait of core self-evaluation among a sample of CEOs and link it to a firm's entrepreneurial orientation. Supporting our core thesis that CEOs with higher core self-evaluations positively shape their firms' entrepreneurially oriented strategic choices over time, we found that CEO core self-evaluation is positively associated with the firm's subsequent entrepreneurial orientation one year later.

We also examined the moderating impact of environmental dynamism, in an effort to enrich previous research on core self-evaluation. In particular, we expected that association between CEO core self-evaluation and entrepreneurial orientation would be even more pronounced when dynamism is high. Owing to the increased means-ends ambiguity associated with greater dynamism and the resulting increase in CEO discretion, we reasoned that CEO core self-evaluation would play an even greater role in molding the firm's entrepreneurial orientation in dynamic environments. Consistent with this reasoning, we found that environmental dynamism positively moderates the relationship between core self-evaluation and entrepreneurial orientation, such that the relationship is most pronounced at higher levels of dynamism. This finding suggests that CEOs with higher core self-evaluations are most apt to influence their firm's entrepreneurial orientation when the environment is in a state of flux, whereas when the environment is relatively stable their influence is negligible. Thus, while dynamic environments are more likely to provide higher core self-evaluation CEOs with a particularly amenable context in which to shape their firms future entrepreneurial orientation, stable environments do not appear to, even at the margin.

Table 2. Results of hierarchical regression analysis

Variables	Entrepreneurial orientation	
	$\beta$	$\Delta R^2$
<i>Step 1: Controls</i>		0.17*
Firm age (natural logarithm)	-0.19*	
Firm size (natural logarithm)	0.16	
Family ownership	0.03	
Firm growth	0.23*	
TMT tenure	0.05	
TMT size	0.01	
Environmental complexity	0.19*	
CEO tenure	-0.10	
<i>Step 2: Main effect</i>		0.06**
Core self-evaluation	0.25**	
<i>Step 3: Moderator</i>		0.05*
Environmental dynamism	0.29*	
<i>Step 4: Two-way interaction</i>		0.03*
Core self-evaluation $\times$ environmental dynamism	0.18*	
<b>R<sup>2</sup></b>		0.31
<b>Adjusted R<sup>2</sup></b>		0.23
<b>F</b>		3.91***

N = 129; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

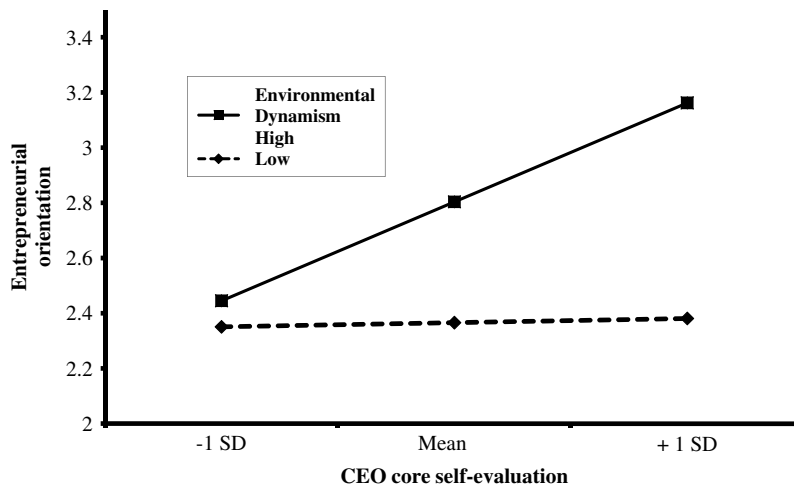


Figure 1. Moderating role of environmental dynamism

Our theory and findings have several implications. First, our study clarifies and theoretically articulates the relationship between CEO core self-evaluation and entrepreneurial orientation, and in so doing more broadly establishes the direct influence of CEO personality on a firm's entrepreneurial proclivity over time. Second, our study presents a more nuanced understanding of when CEO personality plays this role by articulating and demonstrating the contingent impact of environmental dynamism.

We designed our study in a way to avoid the threats to validity associated with previous research of this nature. Nonetheless, our study has some limitations. Our findings may need to be tempered because we utilized a sample of CEOs in the Irish Republic. Indeed, without comparative data from other countries, we cannot rule out this limiting factor to generalizing our results. However, we believe this economic context provided us with a greater range of responses with which to test our model than what might be found in less dynamic and vibrant economies. Indeed, the Irish economy outperformed all other European economies in the last decade recording a growth rate throughout the period of three times the European Union average. Thus, while it may be useful for other researchers to gather data from other countries to validate the generalizability of our findings, we believe the findings would be at most a matter of degree, and not significantly different in direction.

In concluding, while this study is only a first step toward understanding the impact of CEO core self-evaluation on the entrepreneurial orientation

of the firm, it represents an essential fulcrum from which we believe additional important research can be leveraged. In the end, we hope that we have begun to pave the way for a more complete understanding of the role of executive personality in entrepreneurial firms.

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