Influence of Founder–CEOs' Personal Values on Firm Performance: Moderating Effects of Firm Age and Size†

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The effects of two values held by founder–CEOs (collectivism and novelty) on companies' post–start-up performance are investigated. By integrating congruence and organizational lifecycle literatures, the authors hypothesized that the effects of both values are moderated by company age and size, such that collectivism exerts stronger beneficial effects in older and larger firms, whereas novelty exerts stronger beneficial effects in younger and smaller firms. Results based on 92 small- to medium-sized enterprises offer support for most predictions, thus demonstrating the influence of founders' values on new venture performance and highlighting the importance of considering organizational lifecycle for the understanding of this influence.

Keywords: *founder–CEO; personal value; congruence theory*

Do founder–chief executive officers' (CEO) personal values matter with respect to new venture performance? This question is an important one given the fact that many entrepreneurs assume roles in the upper echelon of their businesses after the start-up stage, serving, for example, as CEOs (Nelson, 2003). Congruence theory (Nightingale & Toulouse, 1977)

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suggests that business leaders should have an impact on firm performance because environmental factors, managerial values, structures, processes, and organizational reactions or adjustments are interdependent of each other and business leaders usually structure the firm and select strategic moves based on their personal preferences. Indeed, extant empirical studies that take organizational structure or organizational strategy as the critical dependent variable generally support the proposed importance of CEOs (including founder–CEOs) in firms (e.g., Andrews, 1971; Kimberly, 1979; Miller, De Vries, & Toulouse, 1982; Miller & Dröge, 1986). However, these studies' examinations of CEOs concentrate more on personalities than on personal values per se, and none of them have closely focused on firm performance as the organizational outcome of interest. Thus, although the impact of founder–CEOs' personal values on new venture performance could be theoretically predicted on the basis of congruence theory, direct supporting evidence for it is currently lacking.

To fill this void, and in an attempt to enrich the understanding regarding entrepreneurs' post–start-up influence, we set out to assess the potential impact on firm performance of two personal values held by founder–CEOs: *collectivism* and *novelty*. To do so, we draw on congruence theory and also attempt to advance this research stream, which currently tends to assume the same effects for all manager values at all times, by complementing it with a contingency view. This contingency view, in turn, derives from organizational lifecycle theory, which proposes that organizations move through different stages over time, with each stage posing unique challenges to the organization and requiring different management philosophy and approaches (Churchill & Lewis, 1983; Dodge, Fullerton, & Robbins, 1994). As such, although some factors fit the firm better at one stage, some others may fit better at other stages (Baron & Markman, 2005). We suggest that this may be true with respect to the impact of founder–CEOs' values and for many other variables. Following this logic, we reason that firm age and firm size, which reflect businesses' lifecycle stages (Jayaraman, Khorana, Nelling, & Covin, 2000; Mohan-Neill, 1995), may be important moderators of the influence of founder–CEOs' values. Specifically, we hypothesize that collectivism exerts stronger beneficial effects in older and larger firms, whereas novelty exerts stronger beneficial effects in younger and smaller firms. We employ survey data obtained from 92 small- to medium-sized enterprises (SMEs) to assess the accuracy of these proposals and our specific hypotheses.

Theoretical Background

Congruence Theory

As an effort to bridge the seemingly conflicting sociological and psychological approaches to understand complex organizations, Nightingale and Toulouse (1977) proposed an overall conceptualization of organization that integrates five important concepts from the two perspectives (i.e., environment, values, structure, process, and reaction or adjustment strategies) and predicted that in an organization these concepts are intercorrelated and must be in congruence for the organization to be effective. Among many specific predictions related to this general conceptualization, a critical one is that the value system of persons in positions of

authority and responsibility influences the structure and strategy of the organization. In other words, the key organizational leaders structure the firms and devise strategic plans in ways that are consistent with their personal values. Given the important implication of organizational structure and strategic choices for firms' growth and development, congruence researchers have expected that organizational leaders would have individual impacts on firm performance (Hatton & Raymond, 1994; Miller et al., 1982).

Although few in number, extant empirical studies generally support the proposed impact of firm leaders on organizational structure and/or strategy. For example, case studies have demonstrated that executives' values can affect the strategic choices they make for their businesses (Andrews, 1971). CEOs' need for achievement has been associated with organizational structure elements (Miller & Dröge, 1986). CEOs' locus of control has been identified as a significant predictor of organizational structure and strategy (Miller et al., 1982; Miller & Toulouse, 1986). Finally, Kimberly's (1979) qualitative study found that the ambition and vision of the founder (the first dean) had a strong influence on the particular shape a new medical school took and the directions it followed.

Although these results seem promising, there exist two major limitations in this line of research. First, despite the importance of managers' values in Nightingale and Toulouse's (1977) congruence model, most congruence researchers have chosen to focus on CEOs' personality variables (e.g., locus of control, need for achievement, etc.) rather than on their personal values (Miller et al., 1982; Miller & Toulouse, 1986). Although both key aspects of personality and central personal values are important individual characteristics of business leaders, they are distinctly different concepts. By definition, values refer to the "principles for ordering consequences or alternatives according to preferences" (Hambrick & Brandon, 1988: 4). More succinctly, values relate to views held by individuals concerning the "oughtness" of behaviors (Meglino & Ravlin, 1998). Personality, in contrast, more directly pertains to consistent patterns in individual behavior. The basic difference between these two constructs can be readily illustrated. For example, an individual can demonstrate the personality characteristic of introversion (being somewhat withdrawn and shy in social contexts) but at the same time hold a value suggesting that being friendly and sociable is highly desirable (a value). Furthermore, entrepreneurs' values and advocacies can be implanted into the organization's culture and influence the entire team of employees over many years, even after the founders' retirement or death, whereas entrepreneurs' personalities primarily influence their own behaviors and are less likely to be transmitted to other members (Baron & Shane, 2007). Given these and other differences, we believe that to develop a more complete and precise understanding of congruence theory, it is necessary to directly investigate firm leaders' personal values.

Second, in prior empirical studies regarding congruence hypotheses, the dependant variables were usually limited to organizational structures (e.g., centralization and formalization) and strategic choices (e.g., new product introduction). Previous research has not closely focused on firm performance as the organizational outcome of interest. Thus, although firm leaders' influence on organizational structure and strategies has been supported by evidence, whether this influence really contributes to the ultimate firm performance, as congruence theorists have proposed, is still empirically uncertain.

Given the above reasoning, in this article we choose to examine founder–CEOs' personal values and directly assess the impact of these values on the measures of firm performance. Hambrick and Brandon (1988) argued that classic models of personal values such as Rokeach's (1973) and Allport, Vernon, and Lindzey's (1960) were too general and did not fit in organizational settings. They proposed that in organizations executives' values can be classified as relating to six primary dimensions: collectivism, novelty, duty, rationality, materialism, and power. So far, however, there has been very little empirical investigation of this model. Because of the limited scope of a single article, we do not attempt, in this study, to exhaustively examine all six dimensions. Rather, we focus on the founder–CEOs' collectivism and novelty, two values that, for reasons noted below, we believe to be most central.

First, these values have been the most widely studied in management contexts in past research (e.g., Morris, Avila, & Allen, 1993; Ostroff, Shin, & Kinichi, 2005; Simsek, Veiga, Lubatkin, & Dino, 2005). Second, previous empirical studies have supported the view that these two values play crucial roles in individuals' behaviors (e.g., J. N. Choi & Price, 2005; Morris & Davis, 1994). Finally, both values are especially relevant to the process of new venture management, which requires substantial creativity and cooperation with others (Lipparini & Sobrero, 1994; Morris et al., 1993; Shane & Venkataraman, 2000).

Organizational Lifecycle Theory

As a refinement of Nightingale and Toulouse's (1977) original congruence model that recognized the importance of firm leadership in an organization, later congruence researchers (e.g., Hatton & Raymond, 1994; Miller & Dröge, 1986) further proposed that the impact of firm leaders may not remain constant over time; rather, the impact should be stronger when the firm is small and/or young because of the greater managerial discretion the leaders possess at this stage. Based on this view, it seems logical to reason that the two founder–CEO values we focus on—collectivism and novelty—should both have stronger association with firm performance in smaller and/or younger firms than in larger and/or older firms. In light of the organizational lifecycle theory, however, we argue that this reasoning may overlook the dynamic nature of the challenges confronting a firm throughout its growth process and thus may be invalid under some circumstances.

Specifically, values and value-guided managerial behaviors are relatively stable across time (Hambrick & Brandon, 1988; Simsek, et al., 2005). According to organizational lifecycle theory, however, the challenges founder–CEOs face are not stable (Dodge et al., 1994). Although there is no consensus on the exact order or number of stages through which firms pass as they grow and develop (Stubbart & Smalley, 1999), it is commonly accepted that the dominant problems confronting ventures, and the sophistication needed to deal with these problems, vary as the ventures mature (Churchill & Lewis, 1983). For example, Kazanjian's (1988) study of technology in new ventures' four lifecycle stages (i.e., conception and development, commercialization, growth, and stability) found differences in the types of major issues across these stages. Using a different research method (open-ended classification rather than forced-choice), Terpstra and Olson (1993) identified 10 different types of problems encountered by new firms during two stages (start-up and

growth). Likewise, Dodge et al.'s (1994) study of 645 small businesses recognized that problems faced by firms varied as the firm progressed from early stages to late stages.

Considering the dynamics in a firm's challenges throughout the growth process and the fact that different values encourage firm leaders to structure the firm and make strategic choices in different ways (Hambrick & Brandon, 1988), we reason that unlike prior congruence researchers' assumptions, different managerial values may matter at different times; although some values facilitate firm performance at one stage, others may be more important in this respect at other stages. Specifically, as we will explain in detail in the next section, we argue that although founder–CEOs' value of collectivism has greater beneficial influence in older and larger firms, their value of novelty has greater beneficial influence in younger and smaller firms. Hence, in addition to the aforementioned empirical test of the association between firm leaders' personal values and firm performance, another goal of this study is to theoretically advance extant congruence research by explicitly incorporating organizational lifecycle into consideration.

Hypotheses

Founder–CEOs' Personal Value of Collectivism

At the individual level, collectivism is the orientation that "involves the subordination of personal interests to the goals of the larger work group, an emphasis on sharing, cooperation, and group harmony, a concern with group welfare, and hostility toward out-group members" (Morris & Davis, 1994: 598). Research suggests that firm leaders who value collectivism tend to consult other top managers or key organizational members before making an important decision concerning the firm because of their greater receptivity and willingness to rely on collective decision making (Kirkman & Shapiro, 2001). Also, it has been found that guided by their value, collectivistic CEOs stress collaboration and sharing among their followers (Simsek et al., 2005). It follows from these notions that founder–CEOs with high levels of collectivism are likely to run the firm with an "integrative" structure that makes great use of coordinative devices (e.g., committees, task forces, etc.) and involves substantial joint decision making (Miller & Friesen, 1984; Mintzberg, 1979). In our opinion, such a structure may contribute to the superior performance of new ventures because it can improve both the firms' quality of decision making and the implementation of selected strategies.

With respect to decision-making quality, the information exchange and consultative behaviors involved in the joint decision-making process should provide the firm more complete information, assist the evaluation of possible alternatives, and enhance its capacity to discover opportunities, uncover problems, and identify the need for changes (Hyatt & Rudy, 1997). These benefits may contribute in a positive manner to the venture's success and to its ability to outperform its competitors. With respect to implementation of strategies, the intensive coordination associated with the "integrative" structure should help prevent the occurrence of tactical impediments (e.g., unrealized economies of scope, poor coordination between departments, and the like), which can impair the firm's capability to transform decisions into actual firm behaviors (Stopford & Baden-Fuller, 1994). Furthermore, the unity of

effort and involvement in decision making have been linked by researchers (e.g., Black & Gregersen, 1997) to firm members' increased commitment to the agreed-on decision and their promoted motivation for implementing it. This should help facilitate the transformation of strategic ideas into actionable outcomes for the firm (Stevenson & Jarillo, 1990), thus enabling the firm to achieve superior performance.

That noted, however, we believe that there might also be some downsides associated with the "integrative" organizational structure embraced by collectivistic founder–CEOs. A typical problem is that making collective decisions and reaching consensus take time and therefore are likely to slow the decision-making process. Such delays could be especially detrimental to young firms. According to organizational lifecycle literature, an emerging firm faces many threats and uncertainties. It must quickly respond in recognizing entrepreneurial opportunities and exploiting them (Y. R. Choi & Shepherd, 2004). However, because of personal differences that could lead to individuals' differing judgments of an entrepreneurial opportunity (Baron, 2006; Keh, Foo, & Lim, 2002), sometimes it will be very difficult to convince all top managers and obtain consensus about the opportunity in a timely manner. Considering that opportunity recognition and subsequent exploitation are the dominant problems in young businesses (Baron & Markman, 2005), we expect that slower decision making will offset the advantages of collective decision making for this type of business, so that the positive effects of founder–CEOs' collectivism will be less pronounced in younger firms.

Likewise, we argue that smaller firms, compared to larger ones, will be less likely to enjoy the positive effects of founder–CEOs' collectivism. When the firm is small and within the span of the founder-CEO's control, extensive coordination may add unnecessary administration costs and make systematic vision harder to form (Miller & Friesen, 1984). As firms grow in size, however, tasks and operations become more and more complicated (Jayaraman et al., 2000). Ultimately, organizational complexity may gradually come to exceed the founder–CEO's capacity, and effective management will become the dominant problem for the business (Rutherford, Butler, & McMullen, 2003). Firms typically respond to these problems by adding more functional specialists. Accordingly, specialization among top managers is consciously created or otherwise emerges (Blau & Scott, 1962), making the coordination and integration at the top management level a must (Miller & Dröge, 1986; Mintzberg, 1979). This reasoning suggests that firm structures stressing coordination and sharing, which could be fostered by founder–CEOs' value of collectivism, may bring greater advantages when firms are larger in size and have higher levels of operation complexity and task specialization. Hence, we offer the following hypotheses:

Hypothesis 1: The impact of founder–CEOs' collectivism on firm performance is moderated by firm age, such that the beneficial effects of collectivism are greater in older than in younger firms.

Hypothesis 2: The impact of founder–CEOs' collectivism on firm performance is moderated by firm size, such that the beneficial effects of collectivism are greater in larger than in smaller firms.

Founder–CEOs' Personal Value of Novelty

Hambrick and Brandon (1988) defined novelty as individuals' tendency to value change, the new, and the different. Research findings suggest that managers who possess this value tend to have high enthusiasm for innovation and to be creative in their managerial decision making (Ford & Gioia, 2000). According to Schumpeter (1934), entrepreneurs are agents of "creative destruction" through innovation and combination of products and services. Thus, by definition, founders, as initial organizational architects, should value novelty. Research suggests that after the business creation, founders' novelty value will continue to benefit the firm if they assume the role of CEO. That is, based on congruence researchers' assertion that firm leaders' strategic choices are guided by their personal values, we can expect that founder–CEOs who have high levels of novelty value will tend to formulate strategies that help their firms to differentiate the products from competitors' and innovatively extend and transform markets (Finkelstein & Hambrick, 1996). This, in turn, should contribute to the firm's performance. At the same time, through the interaction with firm members at different levels and the possible role-modeling effects embedded in the leader–member relationship (Waldman & Yammarino, 1999), founder–CEOs' personal value for novelty might also cascade downward, promoting overall enthusiasm for creative undertakings and, ultimately, contributing to the firm's superior performance.

Nevertheless, some findings suggest that, as was true for the value of collectivism, the effects of founder–CEOs' novelty may vary depending on firms' age. For example, Ciavarella, Bucholtz, Riordan, Gatewood, and Stokes (2004) note that founders' creative mind-set can help young businesses, for which substantial creativity is required to set the business apart from the crowd and establish its viability. Other studies (e.g., Hrebiniak & Joyce, 1985), however, suggest the creative mind-set may interfere with the performance of older businesses because the competitive environments in which they operate are usually neither highly threatening nor constraining. Typically, the focus for older firms shifts from growth to stability (i.e., stabilizing the firm's market position and making adjustments for earlier inadequacies in organizational structure and marketing strategy; Dodge et al., 1994), and the changes required are usually incremental in nature (Baron, 2006). Given this situation, the value of novelty is likely to stimulate firm leaders to spread limited firm resources to exploit too many opportunities—more, potentially, than the firm needs—and so dilute its attention on the refining of the existing directions and strategies. This will result in the firm's misfit with the external environment and make the firm vulnerable to the risk of being mediocre in every market niche in which they compete (Ghemawat & Costa, 1993).

Similarly, founder–CEOs' novelty may have less favorable effects in larger businesses. For these firms, routines, systems, and standard operating procedures have been created to help cope with increasing operational complexity (Jayaraman et al., 2000). These mechanisms more or less constrain the firms' flexibility to deal with radical changes and associated risks. In such an organizational context, the frequent strategic redirection initiated by founder–CEOs high in novelty value (Ford & Gioia, 2000) could interfere with such routines to the point that operation costs become substantially increased; this in turn can significantly interfere with firms' performance (Miller & Friesen, 1982).

Based on the above considerations, it seems reasonable to suggest that the effects of founder–CEOs' novelty value on strategic choices will be more beneficial for younger and smaller firms than for older and larger ones. Stated formally,

Hypothesis 3: The impact of founder–CEOs' novelty on firm performance is moderated by firm age, such that the beneficial effects of novelty are greater in younger than in older firms.

Hypothesis 4: The impact of founder–CEOs' novelty on firm performance is moderated by firm size, such that the beneficial effects of novelty are greater in smaller than in larger firms.

Method

Data Collection and Sample

The data for this study were collected as part of a larger research project regarding CEOs at SMEs. Using Dun and Bradstreet's Million Dollar Database, which provides the information about approximately 1.6 million U.S. and Canadian leading public and private businesses, we identified 795 SMEs (i.e., employing no more than 500 individuals) in one region of New England in 2004. Letters, endorsed by the director of the local Small Business Development Center, were sent to the CEOs of these firms. These letters explained the research project, encouraged participation, promised that each participating firm would receive an executive summary of the findings when the study was completed, and indicated that we would follow up by phone. We then began contacting CEOs by phone to request participation in the survey and, if they agreed, to schedule an on-site meeting. A total of 193 CEOs agreed. During the on-site meeting, each CEO was given a survey to complete, which included all the core constructs of this study. Then, following procedures used in prior studies (e.g., Smith, Collins, and Clark, 2005; Smith et al., 1994), we asked these CEOs to identify all the members of their top management team (TMT) and to send each TMT member a memo encouraging participation, along with a survey and a postage-paid return envelope. Two questions in the TMT member survey—TMT tenure and environmental uncertainty—served as control variables in our current study. After excluding incomplete surveys, we received useable responses from 158 CEOs and 416 of their TMT members (or 20% of the original sampling frame of 795 firms).

In addition, we sent a follow-up survey to the 158 firms' CEOs 1 year after our first survey to assess firm performance, and 90% responded (142 firms). As suggested by Podsakoff, MacKenzie, Lee, and Podsakoff (2003), the use of such temporally separated measures (i.e., a time lag in gathering data from the same source) by first gathering information on the predictor variables and then subsequently gathering information on the criterion variables can help minimize common method variance.

Among the 142 firms that responded in both rounds, 92 firms' CEOs indicated that they were the founder of their business. As such, our final sample comprised 92 SMEs. These firms averaged 62 employees, had average sales of $4.6 million, and had been in existence for an average of 16 years. And their TMTs averaged 4.4 members (including the CEO). Among the CEOs in the final sample, more than 90% were males and older than 40, and

more than 80% had college or graduate education. Based on the first two digits of the North American Industry Classification System (NAICS), the firms primarily represented three industries: manufacturing (49%), scientific and technical services (20%), and construction (16%). The remaining firms were spread out over several different industries. A paired comparison test indicated no significant differences in firm age, size, or industry between firms that agreed to participate in our study and those that did not.

Measures

Independent variables. Founder–CEOs' personal value on collectivism was assessed using the six contextual scenario items developed and validated by Simsek et al. (2005). This measure was based on the observation that collectivism has been primarily assessed as a country-level concept and that there is a lack of an appropriate measure at the individual level. Simsek et al.'s measure of individual-level collectivistic value presents respondents with six contextual situations and asks them to assess the degree of appropriateness of the behavior described in these situations using a 5-point scale ranging from 1 (*very inappropriate*) to 5 (*very appropriate*). Two example items were "All the members of a successful acquisition team agreed to equally share a large bonus, even though some members only played a marginal role" and "Because one member of the team did not do an equal share of the work, the team requested that this member receive a smaller share of the annual bonus" (reverse scored). This scale was completed by founder–CEOs of participating firms. The reliability of the measure was .77. We averaged ratings of the six items for a single score. A higher score indicated a stronger value on collectivism. The confirmatory factor analysis for this and all the other constructs in our study is in the appendix.

The measure of novelty was developed by the same group of researchers as Simsek et al. (2005) for a similar purpose. As we did with the measure of CEO collectivism, we assessed, at the individual level, founder–CEOs' personal value on novelty by presenting founder–CEOs with five contextual scenarios and asking them to assess the degree of appropriateness of the behavior using a 5-point scale ranging from 1 (*very inappropriate*) to 5 (*very appropriate*). Two example items were "Rather than continuing using the current transportation firm, the transport and distribution manager decided to try a new, potentially lower cost transportation firm" and "Rather than continuing using the current vendor, the plant manager decided to experiment with a new, potentially lower cost supplier." The overall novelty measure had a reliability of .75. Again, we averaged ratings on the five items, and a higher score indicated a higher value on novelty.

Moderating variables. Firm age (the number of years since the company was legally formed) and firm size (the number of employees) were assessed based on the data from Dun and Bradstreet's Million Dollar Database. Firm age ranged from 1 to 39, with a mean of 16. Firm size ranged from 10 to 310, with a mean of 62 employees. The skewness and kurtosis for firm age were 1.54 and 5.79, respectively, and those for firm size were 2.30 and 6.69. Because the distribution departed from normality, we transformed both variables by taking their square root.

Dependent variables. We gathered time-lagged performance data 1 year after surveying information on the predictor variables by asking founder–CEOs to compare their firm's performance with that of other major competitors on profitability and growth, using an eight-item scale developed by Gupta and Govindarajan (1986) and subsequently used by several other researchers (e.g., Covin, Prescott, & Slevin, 1990). The measure included items such as growth in sales, growth in market share, return on equity, and return on total assets. Founder–CEOs provided ratings from 1 (*much worse*) to 5 (*much better*) with respect to competitors. The measure demonstrated good reliability ($\alpha = .91$).

We used the founder–CEOs' self-reported evaluation of firm performance because of the unavailability of objective financial data (because many SMEs are not required by law to publish such data). Founder–CEOs are usually knowledgeable informants with regard to their firm's financial performance, and there has been evidence that CEO self-reports of performance significantly correlate with some objective measures of firm performance (Dess & Davis, 1984; Robinson & Pearce, 1988). To be cautious, however, we decided to further test the accuracy of our subjective measure. We obtained from Dun and Bradstreet's Million Dollar Database an objective measure of one component of our subjective performance measure—sales growth (the only performance measure listed in this database)—for 71 of our sample firms, computed over the same time frame as our subjective performance measure. To enhance comparability with the subjective scale, which is calibrated relative to competitors' performance, we adjusted the objective measure by subtracting the NAICS industry average sales growth rate, which was obtained from Standard & Poor's Market Insight Database, from the firm growth rate. Finally, we correlated this objective industry-adjusted measure with our self-reported performance and found a positive and significant association ($r = .38$, $p < .01$). This finding provides evidence of the convergent validity of the self-report performance measure that we used.

Control variables. To reduce the variance caused by other factors that are extraneous to the research question, we controlled for TMT size (the total number of individuals in a company's TMT, as reported by the founder–CEO) and TMT tenure (the average tenure that TMT members have in the team), for both have been linked to firm outcomes (Haleblian & Finkelstein, 1993). The skewness and kurtosis for TMT size were 1.44 and 1.76, respectively, and those for TMT tenure were 1.90 and 7.21. We transformed TMT size and TMT tenure by taking the square root to achieve normality.

In addition, type of industry and environmental uncertainty were controlled to rule out the potential effects of external environment on firm performance (Waldman, Ramirez, House, & Puranam, 2001; Zahra, 1996). Based on the first two digits of NAICS code, the firms in our sample were categorized into four industries—manufacturing, scientific and technical services, construction, and others—and were then dummy coded. Following existing studies (e.g., Li & Atuahene-Gima, 2001; Singh, 1986; Waldman et al., 2001), we measured environmental uncertainty based on the average of all TMT members' perception. Specifically, this construct was measured using two items from the scale developed by Waldman et al. (2001). The average intragroup reliability (r_{wg}) is .79.

Table 1
Means, Standard Deviations, and Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. CEO collectivism	3.16	0.70										
2. CEO novelty	3.71	0.57	.03									
3. Firm performance	3.37	0.64	.12	.16								
4. Firm age	15.59	10.59	.15	–.13	–.10							
5. Firm size	62.03	51.89	–.14	.13	.05	.16						
6. TMT size	4.37	1.60	–.03	–.23*	.07	–.13	.08					
7. TMT tenure	10.36	5.62	.01	.07	.14	.56***	.05	–.18†				
8. Service industry	0.20	0.40	.01	–.13	–.09	–.11	–.19†	.02	–.15			
9. Construction industry	0.16	0.37	–.15	–.21†	–.01	–.03	.12	–.08	.04	–.22*		
10. Manufacturing industry	0.49	0.50	.01	.28*	.05	–.03	.19†	–.10	.02	–.48***	–.43***	
11. Environmental uncertainty	2.96	0.76	–.03	.11	–.22*	–.02	.15	–.11	.18†	–.12	.22*	.06

Note: $N = 92$. TMT = top management team.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

Results

The means, standard deviations, and correlations for all of the variables are presented in Table 1. The table provides initial evidence of discriminant validity. Specifically, given that no interfactor correlation is above the threshold level of .65 (Tabachnick & Fidell, 1996: 86), multicollinearity and the problems created by a lack of discriminant validity do not appear to be serious sources of potential bias in our data.

To test the hypotheses, we conducted hierarchical regression analyses. The variables used as components of interaction terms were centered to minimize the problem of multicollinearity between interaction terms and their components (Aiken & West, 1991). The variance inflation factor for each independent variable was lower than the suggested threshold of 4.0, which further verifies the absence of multicollinearity.

Table 2 shows the results of the moderation analyses. Control variables were entered in the first step. Founder–CEOs' personal values on collectivism and novelty and the moderators were entered into the regression in the second step. The cross-products were entered in the last step. Model 1 shows that the only control variable with a significant effect on firm performance is environment uncertainty ($p < .01$). Model 2 reveals that after controlling covariates and moderators, the two personal values, in combination, produce significant increments in the multiple squared correlation coefficient ($\Delta R^2 = .12$, $p < .01$). However, although founder–CEOs' novelty has a main effect on firm performance ($p < .01$), founder–CEOs' personal value on collectivism does not.

Founder–CEOs' Value of Collectivism (Hypotheses 1 to 2)

In Model 3, as expected, the increment in the multiple squared correlation coefficient associated with the set of interaction variables involving the value of collectivism is significant

Table 2
Results of Hierarchical Regression Analysis for Firm Performance

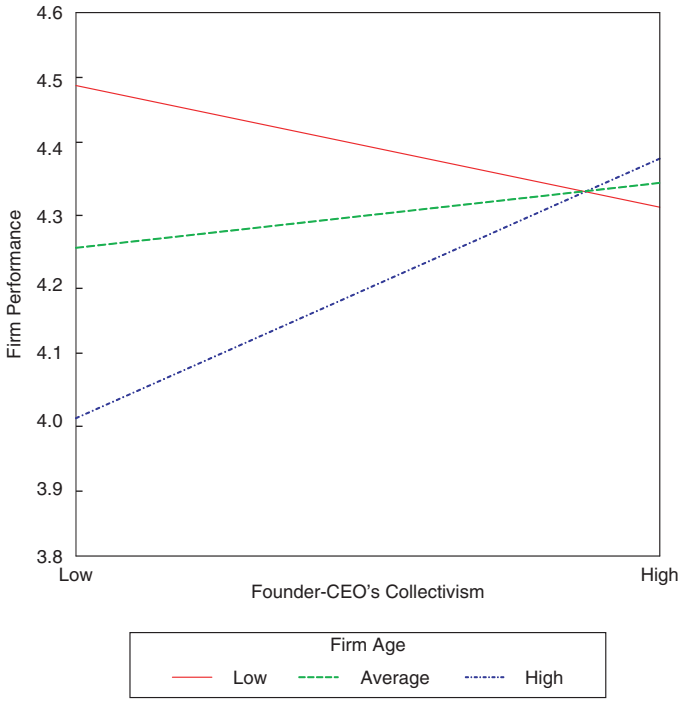
Variables	Model 1	Model 2	Model 3	Model 4
Controls				
TMT size	.06	.05	.07	.08
TMT tenure	.21	.23†	.22†	.23†
Service	–.08	–.09	–.09	–.11
Construction	.07	.10	.14	.04
Manufacturing	.03	–.04	.01	–.03
Environmental uncertainty	–.31**	–.44***	–.48***	–.37**
Moderators				
Firm age		–.13	–.20	–.10
Firm size		.07	.02	.09
Independents				
Collectivism		.15	.06	.18
Novelty		.35**	.24*	.25*
Interaction terms				
Collectivism × Firm Age			.30*	
Collectivism × Firm Size			.28*	
Novelty × Firm Age				–.27*
Novelty × Firm Size				–.13
R^2	.17	.29	.38	.36
Adjusted R^2	.05	.19	.27	.23
F	1.64	2.20*	2.65**	2.38*
ΔR^2		.12**	.09*	.07*

Note: $N = 92$. TMT = top management team. Standard beta weights are reported for the final step in each model.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

($\Delta R^2 = .09$, $p < .05$). Hypothesis 1, regarding the moderating effect of firm age on the collectivism–firm performance relationship, is supported by the data ($p < .05$). Figure 1 displays the nature of the interaction. Values representing plus and minus one standard deviation from the mean were used to split the graphs and to generate the plotted regression lines (J. Cohen, Cohen, West, & Aiken, 2003). Thus, in the figure, the low level, average level, and high level of firm age refer to 6, 14, and 25 years, respectively. Using effects tests suggested by J. Cohen et al. (2003), we found that founder–CEOs' collectivism was positively related to firm performance among older firms ($p < .01$) and negatively related among younger firms ($p < .05$); these findings are consistent with Hypothesis 1. The fact that founder–CEOs' collectivism value was positively related to firm performance among older firms but negatively related to performance among younger firms helps explain the absence of a main effect for the value of collectivism.

Hypothesis 2, regarding the moderating effect of firm size on the collectivism–firm performance relationship, is also supported by the data ($p < .05$). The moderating effect is illustrated in Figure 2 in which the low level, average level, and high level of firm size refer to 21, 54, and 103 employees, respectively. Consistent with Hypothesis 2, the positive regression coefficient of the cross-product term implies that the beneficial impact of founder–CEOs'

Figure 1
Moderating Effect of Firm Age on the Relationship Between Founder–CEOs' Collectivism and Firm Performance

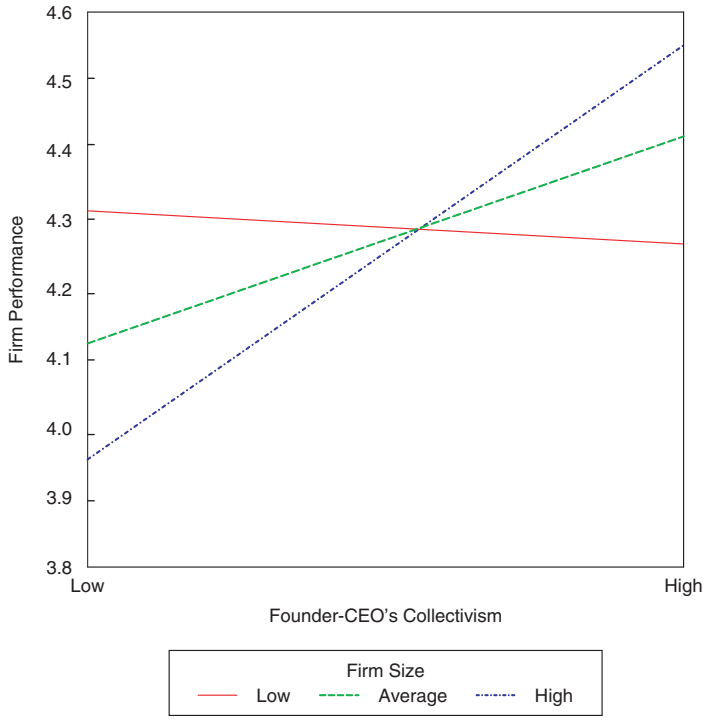


collectivism on firm performance is stronger in larger firms than in smaller firms. Specifically, the effects tests (J. Cohen et al., 2003) showed that the relationship between founder–CEOs' collectivism and firm performance was not significant in small firms but was significantly positive in large firms ($p < .01$).

Founder–CEOs' Value of Novelty (Hypotheses 3 to 4)

In Model 4, the increment in the multiple squared correlation coefficient associated with the interaction variables involving the value of novelty is significant ($\Delta R^2 = .07$, $p < .05$). Specifically, the cross-product of founder–CEOs' novelty and firm age is significant, and the sign of the cross-product term is negative, as anticipated. This indicates that the beneficial effects of founder–CEOs' novelty on firm performance are indeed greater in younger than in older firms, as predicted by Hypothesis 3 ($p < .05$). Figure 3 depicts the nature of the interaction. Again, in the figure, the low level, average level, and high level of firm age refer to 6, 14, and 25 years, respectively. The effects tests (J. Cohen et al., 2003) showed that the relationship between founder–CEOs' novelty and firm performance was not significant in old firms but was significantly positive in young firms ($p < .01$).

Figure 2
Moderating Effect of Firm Size on the Relationship Between Founder–CEOs' Collectivism and Firm Performance

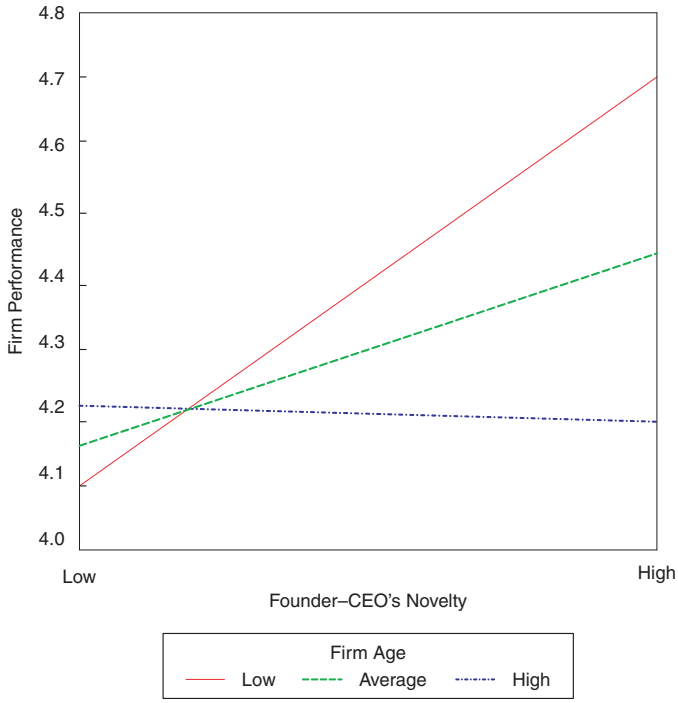


Model 4 reveals no support for Hypothesis 4, which suggests that the beneficial effects of founder–CEOs' novelty value on firm performance will be stronger in smaller than in larger firms. Although the direction of the coefficient for the cross-product of founder–CEOs' novelty and firm size is in the predicted direction (negative), the size of the moderation effect is not statistically significant. Potential explanations for these negative findings are offered in the discussion section.

Post Hoc Analyses

To test whether there are alternative interpretations of our data, we conducted a series of post hoc analyses.[1] First, we reran the hierarchical regression analyses by simultaneously entering all four cross-products. The same pattern of significant results was found. Specifically, the increment in the multiple squared correlation coefficient associated with the set of interaction variables is significant ($\Delta R^2 = .13$, $p < .01$). Furthermore, the moderating effects of firm age and firm size on the collectivism–firm performance relationship are both

Figure 3
Moderating Effect of Firm Age on the Relationship Between Founder–CEOs' Novelty and Firm Performance



positive ($p < .05$). Although the moderating effect of firm age on the novelty–firm performance relationship is found to be negative ($p < .05$), the moderating effect of firm size on this relationship is insignificant.

Second, we tested for possible curvilinear relationships between founder–CEOs' values and firm performance by entering the squared terms for collectivism and novelty into the multiple regression after controlling covariates, moderators, and the main effects of the two personal values. We found no significant effects for the squared terms.

Third, we assessed possible three-way interactions. In particular, we entered collectivism's three-way interaction with firm age and firm size into the regression and found no significant effects. We did the same for novelty's three-way interaction with firm age and firm size; no significant effects were found.

Other Analyses

To better put our findings regarding the effects of founder–CEOs' values into the context of actual firm performance and thus improve the current study's usefulness for practitioners,

we performed a comparison analysis for the actual financial performance of the 71 firms whose objective data of sales growth are available from the Dun and Bradstreet's Million Dollar Database. Specifically, we first did a cluster analysis based on firm age and firm size. Following the K-means algorithm (Hartigan & Wong, 1979), a two-group model in which one group has higher age ($M = 18$) and larger size ($M = 99$) and the other group has lower age ($M = 11$) and smaller size ($M = 54$), provides the best fit. Accordingly, we considered the 28 firms in the former group as relatively mature firms and the 43 firms in the latter group as relatively immature firms. Then, we compared the objective measure of sales growth between the firms headed by founder–CEOs with higher-than-average collectivism and the firms headed by founder–CEOs with lower-than-average collectivism. For this comparison, we considered only the relatively mature companies because it was in these companies that founder collectivism exerted its strongest effects. Results indicated that the firms headed by founder–CEOs high in collectivism had average sales growth of 37%, whereas the firms headed by founder–CEOs low in collectivism had average sales growth of 8%.

Similarly, we compared the sales growth of the firms headed by founder–CEOs high in novelty with that of firms headed by founder–CEOs relatively low in novelty. For this comparison, we considered only the relatively immature companies, where founders' novelty exerted the strongest effects. Results indicated that the firms headed by founder–CEOs high in novelty had average sales growth of 39%, whereas the firms headed by founder–CEOs low in novelty had average sales growth of 14%.

The comparison analysis represents a different way to validate our findings. We found that founder–CEOs' value of collectivism and novelty did affect firm performance at different points in the organizational lifecycle, even when the objective sales growth data were used as indicator of performance.

Discussion

Although founder–CEOs' influence on organizational structure and strategies has been documented, their impact on firm performance—a crucial and, in some ways, the ultimate organizational outcome—has received little empirical attention. Furthermore, compared to the substantial body of research focusing on various aspects of entrepreneurs' personalities, a much smaller volume of research has investigated the potential effects of entrepreneurs' personal values, despite the fact that values are, in a sense, a more pervasive factor than personality with respect to managers' judgments and behaviors. The main purpose of this study was to fill the gap by examining potential links between founder–CEOs' personal values (i.e., collectivism and novelty) and their new ventures' performance. In addition, it sought to advance congruence theory by introducing a contingency view into this context. Consistent with our predictions—and with a contingency perspective—founder–CEOs' values concerning collectivism exerted stronger beneficial effects in older and larger firms, whereas their values concerning novelty exerted stronger beneficial effects in younger firms. We believe these findings have important theoretical and practical implications.

Theoretical Implications

First, our findings provide direct support for the suggestion, directly derived from congruence theory, that firm leaders' values really do matter to their organizations. Moreover, our findings, by focusing on collectivism and novelty, suggest that future congruence studies, in particular those specifying founders' post–start-up influence, could prove especially revealing. For instance, it would be interesting—and perhaps quite illuminating—to explore other salient personal values that might underlie firm leader impact. Some examples include duty, rationality, materialism, and power as specified in the model of Hambrick and Brandon (1988).

Second, given that one of our most important findings is that the effects of different founder–CEOs' values are moderated by company age and size in different ways, the study also refines the prediction derived from congruence theory that all manager values should exert stronger effects on organizational performance in younger and/or smaller companies. Specifically, we found that the value of collectivism exerts stronger beneficial effects in older and larger firms, whereas the value of novelty exerts stronger beneficial effects in younger firms. The results suggest that we should not always expect to find the same effects for all firm leader values at all times; although some values may matter more when a firm is small and new, others may have greater impact when a business is larger and more mature. To take account of these findings, future efforts to explicate the potential role of firm leaders' values on firm performance should take careful note of the firms' development stages because these appear to be important moderators of the impact of leaders' values.

Similarly, the findings of the present research also suggest that we should not be surprised to observe inconsistent findings for the impact of a particular value across different cross-sectional studies. Specifically, a given value might be positively related to firm performance at some points in time (and during some phases of firm growth and development) but unrelated or even negatively related at other times. Hence, the best way to interpret relationships between personal values and firm performance across studies is to systematically take organizational lifecycle into account.

Third, this study also provides new insight in understanding the impact of entrepreneurs' personal characteristics. We agree with other researchers that the "people side" of entrepreneurship is important and more complicated than what was formerly assumed (Mitchell et al., 2002). This fact is illustrated by the present results, which suggest that entrepreneurs' values can—and do—exert contrasting effects in small and large, young and mature firms. For example, founder–CEOs' collectivism had no effect on firms' performance in smaller firms and actually had a negative effect in younger firms. Past research has not specifically examined the potential negative effects of top executives' collectivism, and it will be important to explore the mechanisms that generate this relationship. When developing the hypothesis concerning entrepreneurs' collectivism, we primarily proceeded from an information processing perspective and suggested that the downside of founder–CEOs' collectivism could be because of the slower speed of decision making involved in the integrative structure they set up for the task. However, alternative explanations may also exist. For example, from a justice perspective, collectivism may induce these founder–CEOs to allocate firm resources based on organizational members' needs or a basic rule of equality ("everyone gets

an equal share") rather than on an equity justice rule in which members' compensation is based on the magnitude of their contribution (R. L. Cohen, 1987; Greenberg, 1990). The "overgenerosity" of the equality rule may waste a new venture's limited resources and, perhaps even more important, may reduce the motivation and commitment of high-performing employees. Directly testing these alternative possibilities was beyond the scope of the present study, but they pose interesting questions to be explored in future investigations. Moreover, such future investigations would serve to connect research in the field of entrepreneurship more closely with large and well-established literatures in the fields of organizational behavior (e.g., justice theory, leadership theory). Many researchers have recommended such integration as a basis for advancing progress in both fields (e.g., Baron, 2002; Zhao, Seibert, & Hills, 2005).

It is noteworthy that although the main effect of the value of collectivism on firm performance was not significant, the main effect of novelty value was found to be significant and, in fact, positive in nature. In addition, although firm age slightly diminished novelty's positive impact, firm size did not. This result suggests that, compared to the possible downside of collectivism, the potential downside of novelty may be less salient or may not occur until the firm has reached a very large size (e.g., more than 200 employees). Given that the firms in our study had, on average, 62 employees, and only 5% of them had 150 employees or more, our sample may not be able to fully capture the negative impact of novelty value. Future research is indeed needed to more precisely understand the effect of the value of novelty and the moderating role of firm size.

Practical Implications

Our results indicate that superior firm performance can be achieved when founder–CEOs' personal values are well aligned with the demands of their firm contexts, in this case defined in terms of requirements imposed by the firm's age and size. In the leadership field, contingency leadership theory (e.g., Ayman, Chemers, & Fiedler, 1995) proposes that there is no single best leadership style. The performance of a unit depends on appropriateness of the leader's style for the situation. We adopt similar reasoning and suggest, correspondingly, that there is no best "profile" of personal values for founder–CEOs. Rather, what is crucial, we believe, is the appropriateness of the founder–CEOs' values for the specific challenges and situations their ventures face. The higher this appropriateness, the greater success the ventures will achieve (all other factors being equal). And conversely, should this appropriateness decline—perhaps because founders' values remain stable even in the face of major changes in the firm's circumstances or environment—adverse effects on firm performance may follow.

All of this suggests that founders should create and grow their businesses with the expectation in mind that some day they may find it necessary to step down from their leadership positions for the good of their company. Past research that studied the motivation of entrepreneurs has found that they often break away from wage employment to start their own businesses to seek independence or autonomy (Brandstaetter, 1997; Johnson, 1990) and creative destruction (Rauch & Frese, 2000). Such motivation by definition suggests that business founders may possess lower levels of collectivism and higher levels of novelty than the

general population. To the extent that the findings of this study can be generalized to the entire entrepreneurial population, it is likely that at some point most entrepreneurs will experience frustration with their business.

Rokeach and Ball-Rokeach (1989) suggested that it was possible to adjust the fit between the leader and the firm by modifying the leader's values via specific interventions. However, this is a long and difficult process, and founder–CEOs with deep-rooted values might be consciously or unconsciously resistant to such external attempts. If a founder–CEO cannot successfully modify his or her values and behaviors, then it may be necessary for him or her to consider withdrawing from the managerial role he or she has been filling and hiring professional managers whose values match the requirements of the environment and conditions faced by the organization. Such recommendations echo previous observations that small businesses will fail when owners or managers are reluctant to delegate to others as the firms grow and develop (Churchill & Lewis, 1983). This may be—and in fact often is—a hard lesson for founders with strong emotional attachments to the firms they built to implement, but it may be necessary for the continued growth and success of their companies. On the other hand, the present results suggest that to the extent that founder–CEOs successfully develop the ability to adjust their personal values—and the management approach and strategies these values suggest—this individual adaptability may well confer a competitive advantage for their companies.

Limitations

We believe our findings are robust in that we have taken a number of steps to ameliorate concerns over nonresponse bias, common method variance, and measurement error. We were also able to rule out the possibility of curvilinear relationships and three-way interactions. That said, the findings and implications of this research should still be considered in light of its limitations. First, the data in this study are entirely cross-sectional in nature. Although in the analyses we controlled a number of variables (e.g., environmental uncertainty and industry) that might be alternative reasons for the effects, it will be enlightening for future studies to employ a longitudinal design and examine whether the effects of founder–CEOs' personal values change across time in the same organization.

The major problem with the cross-sectional design is that the firms included in our sample have already survived to their current age and size. Some firms may have failed before they could be identified and included into our study, probably because of their founder–CEOs' possession of certain values. For example, a founder–CEO who is highly collectivistic may waste so much time trying to resolve disagreements among his or her colleagues that the firm fails in a few months after the launch. This possibility creates a potential range restriction problem (Hunter & Schmidt, 2004: 213), which usually leads to a lower estimation of the true effect size and thus made our findings more conservative. Nevertheless, we encourage future studies to explore the more accurate effect sizes by including nascent entrepreneurs and applying a longitudinal design.

Second, the focus of our sample was SMEs; it remains an open question as to whether or not our findings would be observed in large, mature ventures (e.g., more than 500 employees). Compared to large firms, there are fewer intervening levels of management in SMEs

that can dilute the influence of the CEO on firm-level outcomes. Moreover, SMEs are less constrained than large public firms by extraneous influences, such as those coming from a powerful board of outside directors, capital markets, and the strategic and administrative challenges of competing with multiple divisions. Thus, although our findings offer a reasonable point of departure to examine founder–CEOs' impact on large firms, future research is needed to examine the veracity of our findings in that context.

Third, our measure of firm performance was subjective in nature (i.e., it was based on CEO reports). Although the correlation between this self-reported measure of performance and the objective sales growth rates available from Dun and Bradstreet's Million Dollar Database is positive and significant, we cannot rule out the possibility that the results based on objective measure of firm performance would differ from what we have found. Future studies using more objective, precise measures of firm performance are needed to complement our study and verify our findings.

In conclusion, our study adds to the current understanding of entrepreneurs' post–start-up influence and also augments previous congruence research by linking founder–CEOs' personal values to their new ventures' performance and examining this association from a contingency perspective. In short, our findings demonstrated that the values of individual entrepreneurs do indeed matter, but to fully understand *why* and *how* they influence firm performance, we must consider their effects against a backdrop of contextual factors reflecting the ever-changing array of tasks and challenges faced by entrepreneurs and the ventures they launch.

Appendix
Confirmatory Factor Analysis for Measures

		Factor		
Constructs and Items	α	1	2	3
Collectivism	.77			
All the members of a successful acquisition team agreed to equally share a large bonus even though some members only played a marginal role.		.69		
Because one member of the team did not do an equal share of the work, the team requested that this member receive a smaller share of the annual bonus.[a]		-.62		
A team decided to share its bonus equally, although not all members did the same amount of work on the project.		.71		
Although some team members contributed substantially more to completing the team project, the team felt all members should be equally recognized for a job well done.		.75		
Although a team member had missed several team meetings, the team decided to share ownership of its final report by including the member's name on the report.		.70		
Because one team member contributed less to the completion of the project, the team decided to request that this member be given a smaller share of any team rewards.[a]		-.60		
Novelty	.75			
Rather than continuing using the current transportation firm, the transport and distribution manager decided to try a new, potentially lower cost transportation firm.			.62	

Rather than continuing using the current vendor, the plant manager decided to experiment with a new, potentially lower cost supplier.		.74	
Although a consultant had developed a good working relationship with the training department, the training director chose to hire a new, potentially less expensive consultant.		.57	
Rather than choosing an existing manager of the company to be the new plant manager, the CEO decided to search outside the company.		.73	
Rather than maintaining the current work assignment, the director of legal affairs decided to change it, in an attempt to reduce the imbalance in the current work loads of the legal staff.		.61	
Firm performance	.91		
Growth in sales			.69
Growth in market share			.60
Growth in number of employees			.58
Ability to fund growth from profits			.77
Return on equity			.89
Return on total assets			.82
Profit margin on sales			.86
Growth in profitability			.90

a. These items are reverse scored.

Note

1. The detailed results of these tests are available from the first author on request.

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