A Longitudinal Study of the Relation of Vision and Vision Communication to Venture Growth in Entrepreneurial Firms

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Abstract

The relationships among vision attributes, vision content, vision communication, and venture growth were explored in one industry using a longitudinal design. Charismatic leadership, entrepreneurship, and business strategy theory guided the formation of hypotheses that were tested with data collected from 183 entrepreneur/CEO and employee pairs. Visions were evaluated for 7 attributes that were derived from the literature and for content. Structural modeling confirmed that vision attributes and vision content affect subsequent venture growth, both directly and through verbal and written communication.

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A recent focus in the leadership literature has been on charismatic (alternatively called transformational, visionary, or inspirational) leadership. A review of seven leadership theories that address charisma in some form (Bass, 1985; Bennis & Nanus, 1985; Conger & Kanungo, 1987; House, 1977; Kouzes & Posner, 1987; Locke et al., 1991; Tichy & Devanna, 1986) reveals that there are three core components that are common across the theories: (a) communicating a vision, (b) possessing a charismatic (e.g., forceful, animated, confident) personality style, and (c) taking various actions intended to implement the vision (e.g., serving as a role model, intellectually stimulating followers, and building followers' confidence). Each theory makes similar predictions, namely, that a charismatic leader will have positive effects on both organizational and follower outcomes. Our review of the literature, however, found only two empirical studies which examined the effects of charismatic leadership on business unit performance (Barling, Weber, & Kelloway, 1996; Howell & Avolio, 1993). Both studies reported significant relationships between charismatic leadership and business-unit performance.

With respect to follower outcomes, Shamir, House, and Arthur (1993) reviewed more than 20 studies that found charismatic or transformational leadership to be positively associated with followers' performance, attitudes, and perceptions. Another set of 15 studies, reviewed by Bass and Avolio (1993), and a meta-analysis by Lowe, Kroeck, and Sivasubramaniam (1996) of 38 studies that used the Multifactor Leadership Questionnaire reported equally positive findings. Previous studies have typically examined charismatic leadership as a blend of various charismatic leadership components; however, an experimental laboratory study by Howell and Frost (1989) found that the combination of two components -- vision and charismatic personality -- had strong, positive effects on follower performance and attitudes. Following this, a laboratory study by Kirkpatrick and Locke (1996) empirically separated these two components, and found that vision was far more potent than charismatic personality in terms of its direct and indirect effects on follower performance and attitudes.

In the entrepreneurship and business strategy literatures, the importance of vision and its effects on organization level performance has also been stressed in theoretical discussions (e.g., Bird, 1992; Filion, 1988; Isenberg, 1987; Maccoby, 1981; Mendall & Gerguoy, 1984; Peters, 1988; Slater, 1993; Timmons, Smollen, & Dingee, 1990) and in empirical research (e.g., Filion, 1991; Kotter, 1990; Larwood, Falbe, Kriger, & Miesing, 1995; Westley & Mintzberg, 1989). For example, case studies by Westley and Mintzberg (1989) and Kotter (1990) suggest that vision is important for strategic change in mature organizations. Filion (1988) used interviews with entrepreneurs and found that new venture vision content included imagery about products, markets, and organization that were a function of the stage of venture development. He determined that vision process depended upon the entrepreneur's values and energy. Larwood et al., (1995) published the first large sample empirical study of vision content. They asked executives to describe their vision in one sentence and to evaluate them along 26 content dimensions. The executives' self-ratings formed seven independent factors, including vision formulation (strategic emphasis), implementation (successful communication), and innovative realism (responsiveness to change). Vision content ratings appeared in different clusters that associated with degree of

executive control, the rate of organizational change, and type of industry. Their study did not, however, relate the vision attributes to organizational effectiveness.

Given that: (a) vision is a core component across charismatic leadership theories, (b) empirical studies have confirmed that it has significant effects on follower outcomes, and (c) theory and research conducted in the entrepreneurship and business strategy literatures have found that vision may have an impact on organizational outcomes, the present study focused on the vision component in entrepreneurial firms. Furthermore, this is the first study to examine the effects of vision on the performance of the organization as a whole.

In addition to examining the direct effect of vision on organizational performance, the present study examined one process through which vision could affect organizational performance: vision communication. Some theorists further specify the process as one through which leaders link followers' self-concepts to the leader's vision or align followers' needs and values with a collective vision (Bass & Avolio, 1993; House & Shamir, 1993). However, charismatic leadership theories tend to focus on follower-level effects rather than organizational-level effects. In addition, they do not specify the role that communication plays (e.g., is it in the causal path or does it change the causal relationship between vision and performance?). However, all seven charismatic leadership theories emphasize the importance of communicating the vision. Accordingly, the role of vision communication in the vision-organizational performance relationship was examined.

Vision

House and Shamir (1993) define vision as an ideal that represents or reflects the shared values to which the organization should aspire. Similar definitions are found throughout the charismatic leadership literature. For example, Bennis and Nanus (1985) define it as the projected mental image of the products, services, and organization that a business leader wants to achieve; and Kouzes and Posner (1987) define it as "an ideal and unique image of the future." In this study we examined vision as the leader defined it, because it was the leader's actual vision which guided their choices and actions. However, as explained below we used theoretically derived attributes for measuring vision.

Vision Attributes

Two foci of the present study are "Does vision significantly affect organizational performance, and if so, what are the attributes of an effective vision?". A comprehensive review of leadership, business strategy, and entrepreneurship theories identified seven attributes that are said to be necessary for a vision to be effective (that is, to significantly affect organizational performance): (a) brevity (Locke et al., 1991), (b) clarity (Jacobs & Jaques, 1990; Nanus, 1992), (c) abstractness (Locke et al., 1991), (d) challenge (Nanus, 1992; Sashkin, 1988; Sims & Lorenzi, 1992), (e) future-orientation (Collins & Lazier, 1992: Jacobs & Jaques, 1990), (f) stability (Locke et al., 1991), and (g) desirability or ability to inspire (Sashkin, 1988; Sims & Lorenzi, 1992). Despite the focus in the literature on attributes of an effective vision, there is no empirical research which relates any of these attributes to outcomes. The present study examined the predictive validity of these attributes. (As explained in the Method section below, the present study examined venture growth as the indicator of organizational performance.)

Hypothesis 1: The vision attributes of brevity, clarity, abstractness, challenge, future-orientation, stability, and desirability will be significantly related to subsequent venture growth.

Vision Content

A second aspect of vision is the actual content. For example, the content of one vision could be concerned with market share while another vision could be concerned with producing quality products. To properly test for the effects of vision on organizational performance, there should be correspondence between the focus of the vision content and the dependent measure of interest.

We chose growth as the dependent measure in this study because growth is a key focus of entrepreneurial firms (Bird, 1992; Carriere, 1989; Gartner, Bird, & Starr, 1992; Hood & Young, 1993; Kirzner, 1985; Timmons et al., 1990). Indeed, entrepreneurship researchers focus on business growth because of the entrepreneur's leading role in job creation and product market growth (Kuratko & Welsch, 1994; Timmons, Smollen, & Dingee, 1990).

Thus, we predict that organizations will grow faster when the leader's (who, in this study, were entrepreneurs) vision is focused on growth.

Hypothesis 2: Vision growth imagery will be significantly associated with subsequent venture growth.

Vision Communication

Each of the seven charismatic leadership theories stressed the importance of communicating the vision. House (1977) notes that leaders who communicate their vision affect follower outcomes. Bennis and Nanus (1985) discuss the importance of getting the organization to accept and support the vision by communicating it in a variety of ways, both in writing and orally. Bass (1985) and Tichy and Devanna (1986) refer to the importance of the leader's inspiring followers through speeches and pep talks that get them to work toward the vision. Kouzes and Posner (1987) state that the vision must be communicated to others, both through written statements as well as through personal communication, in order to convince them to support it. Conger and Kanungo (1987), as well as Locke et al. (1991), propose that leaders must use their personal communication skills, including speaking as well as listening skills, to articulate the vision to followers.

Strategic management researchers, drawing upon case studies, find that top managers can inspire workers with communicated vision (Westley & Mintzberg, 1989). Furthermore, entrepreneurship theorists point to the importance of communication of the entrepreneur's vision to new venture teams and, ultimately, to the management team that supervises venture growth (Bird, 1989). Thus, the importance of vision communication must be empirically tested rather than taken for granted; we predict that:

Hypothesis 3: The vision-venture growth relationship will show indirect effects through vision communication.

Method

Research Model and Controls

The three hypotheses are the basis for the research model depicted in Figure 1. Causal paths are shown from vision attributes and vision content directly to venture growth (H1 and H2) and indirectly to venture growth through vision communication (H3). Industry effects were controlled by studying a single industry. Three additional control variables were measured: (a) organization size, (b) organization age, and (c) past venture growth. Although Larwood et al. (1995) found no organization size effects in their analysis of vision content, organization size and age were controlled because researchers report strong relationships between these variables and organization process and performance (Pugh, Hickson, Hinings, & Turner, 1968; Quinn, 1980). Past venture growth was controlled to provide a baseline for analysis of the effects upon the performance variable.

Insert Figure 1 about here

Pilot Study

Thirty-one (31) structured interviews were conducted with practicing business founders and buyers (entrepreneur/CEOs) who intended to grow their businesses. The purpose of the interviews was to: (a) determine whether they were aware of what a vision is, (b) evaluate whether they could write their vision in an open-ended questionnaire, and (c) discover vision attributes that had not been mentioned by leadership theorists. Twenty-two (22) of the 31 interviewees were entrepreneur/CEOs from the architectural woodwork industry, which provided the population for this study (The other interviewees were entrepreneur/CEOs from York County, PA. manufacturing companies).

The questions about vision included: "Do you have a vision for your firm? Can you summarize it? Do you tell your employees about it? Does it matter for firm performance? What are the attributes of a good vision?" Twenty-two participants (71%) were able to summarize their vision. Nineteen (61%) said that they had communicated their vision to employees, and eleven (35%) said that visions were part of their firm's formal motivation program.

The interviews exposed a high level of awareness of the advertised value of vision-setting. Although a few participants expressed the view that formal vision-setting programs were "just another management fad", nearly all of the entrepreneurs felt that it was useful to hold a personal mental picture of what they want their company to be. Over 90% (28 of 31) of the interviewees felt that most businesses benefit from having a clear, well communicated vision. Among the array of concepts that were discussed, participants considered it second in importance only to self-efficacy as a cause of high venture performance. None of the interviewees added to, or disagreed with, the list of seven attributes that were previously identified by leadership theorists (brevity, clarity, abstractness, challenge, future-orientation, stability, and desirability or ability to inspire).

Population and Respondents

A questionnaire was constructed to gather data for statistical analysis of the research model. The survey population was the 849 architectural woodwork industry companies in the United States. The population was identified in member lists from the Architectural Woodwork Institute, Centreville, Va., and customer lists from three major suppliers of raw material to the industry. The industry manufactures high-end custom wood products (stairs, moldings, entries, and cabinets) for residential, commercial, and industrial buildings. A letter to each CEO, an advertisement in a trade journal, and a presentation at an architectural woodwork industry convention introduced the study. Each communication stressed that the questionnaire responses, which included performance data, would be mailed to, summarized by, and kept confidential by an independent data service which produces annual cost comparisons for industry members. Members were guaranteed that the authors could not link responses with specific companies. CEOs were asked to return a response card if they were willing to participate and they were asked to identify a subordinate, with whom they worked directly, who may also be willing to participate. We mailed questionnaires to the CEO and employee-participant (EP) separately.

To be consistent with the practice of entrepreneurship researchers (Carland & Carland, 1993; Gartner et al., 1992), participation in the study was constrained to include owner/founders and owner/buyers who had actively managed their businesses (CEOs) for fewer than 12 years and who reported that they had intended to grow their businesses beyond "income substitution" levels when they founded or purchased. Responses from companies with fewer than 5 employees were excluded, as were responses from companies with an EP who had worked with the entrepreneur/CEO for fewer than 2 years. The CEO's vision and reports from EPs about vision communication, demographic information about the entrepreneur/CEOs and EPs, organization size and age, and 1991 and 1992 performance data (sales, employment, profits, and net worth) were collected in 1993. Performance data for 1994 (sales, employment, and profits) were collected in 1995 utilizing the same data collection practices that were used in 1993.

Three-hundred seventy-four (374) entrepreneur/CEOs (44% of the population of organizations) and 183 EPs (21% of the population) met the criteria for our sample, including complete vision and complete 1991 and 1992 performance data. Since we used a dual source methodology (each observation required information from both the entrepreneur/CEO and the EP) our sample size was limited by the number of qualified EPs to 183. Among the 183 paired entrepreneur/CEOs and EPs, visions were reported by 127 entrepreneur/CEOs.

The average qualified entrepreneur/CEO respondent had 25 employees and $2.3M sales in 1992. The typical EP was a manager of sales, production, or administration; all EPs reported directly to the entrepreneur/CEO. The average EP had 14 years experience in the industry and had worked for the entrepreneur/CEO for 7 years.

To test whether the sample of 183 qualifying companies was representative of the population of 849 companies, and to determine whether the sample had significant statistical bias, we compared the population and sample means with respect to three known characteristics. There were no significant differences between: (a) mean employment levels ($z = .32$; $p < .38$), (b) percent distribution of companies by U.S. region (Northeast, $z = .89$, $p < .19$; S, $z = .47$, $p < .32$; Central,

z = .49, p <.31; and West, z = .89, p < .19); and (c) proportion of industry trade association members (z = 1.4; p < .09).

Measures

Vision Attributes. The questionnaire asked participants if they had a company vision (Yes / No) and, if so, whether it was written and/or spoken. If the participants did not have, or did not know about, a company vision they were instructed to leave the open-ended vision item blank. If a company vision existed in any format, the respondent was asked to write it down or enclose a copy; these visions were the basis for analysis. While some of the reported visions may not qualify as visions under some definitions of "vision" (they may be missions, strategies, or goals; or, they may be unintelligible), we treated all responses as worthy of study because this study's purpose was to determine whether venture growth could be affected by whatever CEOs identified as their operative vision. Further, our acceptance of whatever was reported as a vision was intended to produce sufficient variability in the vision measure to test the hypotheses.

The first author and a research assistant rated visions according to the seven attributes that had been extracted from the review of leadership theory (a) brevity, (b) clarity, (c) abstractness, (d) challenge, (e) future-orientation, (f) stability, and (g) desirability or ability to inspire. Each rater practiced rating seven vision prototypes that contained extremes of each attribute (Collins & Lazier, 1992; Collins & Porras, 1991; Locke et al., 1991) and referred to the prototypes during the rating of the actual visions. Each dimension was scored along a ten-point scale from 0 to 10. For example, 0 was used when the attribute was absent, 5 when the attribute was present at a moderate level, and 10 when the attribute was present at a high level. If the participant indicated that they had no company vision, vision attributes were scored as "0" and included in the test data. Appendix A includes typical visions and their ratings.

A principal-components factor analysis of the average scores of the two raters yielded only one factor with an eigenvalue larger than 1.00 (E = 5.18); all loadings exceeded .64, and seventy-four per cent (74.1 %) of the variance was explained. Thus, we formed a single "vision attributes" score for each respondent (for each rater) by summing the seven attribute scores. Rater reliability for the total scores was shown by a correlation between raters of r = .78 (p<.001), and Table 1 shows that the composite reliability ("overall R2") for the vision attributes was .96, which exceeds guidelines for good reliability (> .80; Fornell & Larcker, 1981).

Vision Content. The entrepreneur/CEO visions were coded blind for growth imagery by two authors using an eleven-point scale. Visions that referred directly to high growth of profits, sales, employment, facilities, market share, financial strength, or product offerings were rated as "8", "9", or "10" (For example, see Appendix A, vision statement #3.). Visions with implications of growth or references to moderate growth were given mid-range ratings of "4", "5", "6", or "7" (For example, see Appendix A, vision statements #1, #2, and #4.). Low ratings ("0", "1", "2", or "3") were given for visions with no implications of, or references to, growth (For example, see Appendix A, vision statement #5.) The correlation between the two raters was r = .77 (p<.001), and the composite reliability for the "vision content" latent variable was .88 as shown on Table 1; thus, the latent variable was indicated reliably.

TABLE 1
Measurement Model Reliabilities

Latent Variable	Measure	Parameter Coefficient (LAMBDA)[a]	Reliability (Squared Mult. Corr.)[b]	Composite[c] Reliability
Vision Attributes				.96
	Vision Attributes Rater 1	.99*	.98	
	Vision Attributes Rater 2	.92*.	.85	
Vision Content				.88
	Vision Content Rater 1	99*	.98	
	Vision Content Rater 2	.77*	.59	
Vision Communication				.81
	Written Vision	.78*	.61	
	Explained Vision	.88*	.77	
Venture Growth				.85
	Sales Growth	1.00*	1.00	
	Employment Growth	.88*	.77	
	Profit Growth	.53*	.28	
Organization Size				1.00
Organization Age				1.00
Past Venture Growth				.88
	Sales Growth	.96*	.92	
	Employment Growth	.92*	.85	
	Profit Growth	.61*	.37	

a The parameter coefficient, LAMBDA, indicates the strength of the reflection of the latent variable in the measure.
b The squared multiple correlation coefficient is the item reliability.
c Composite reliability, an indication of internal consistency, is the sum of the square roots of the item squared multiple correlations, squared, and divided by the same quantity plus the sum of the error variances (Werts, Linn, & Joreskog, 1974)
* Parameter estimate/standard error >2.0

Vision Communication. Vision communication was measured with EPs' responses to two items: (a) Does your company have a written vision? and (b) Has your CEO talked about a vision for the company (yes = 1; no = 0)? As shown in Table 1, the vision communication items had a composite reliability of .81.

Venture Growth. Three measures of venture growth were developed. Sales growth was measured as the difference between 1992 and 1994 sales, divided by 2, to equal average annual sales growth for the period. Similar calculations produced the second and third measures: average annual employment growth and average annual profit growth. Similarly, the "past venture growth"

control variable was measured with the difference between 1991 and 1992 (a) sales, (b) employment, and (c) profits.

Five (5) companies had closed by 1994 for unknown reasons. Companies could have been bankrupt or could have been liquidated for a gain. Although it is unlikely that successful firms were liquidated, we adopted a conservative approach. Analysis of the research model was conducted with alternative assumptions about the appropriate value for 1994 performance for closed companies: (a) the five cases with missing 1994 performance data were deleted (thus, n = 178 for this alternative solution), (b) zero percent (0%) was assigned, and (c) minus one-hundred percent (-100%) was assigned. Results were robust across all of these assumptions. Accepting the notion that the closing of a company was a performance result worthy of inclusion in the study, we included these five closed companies in the analysis. We took the least extreme alternative and reported results herein using zero percent (0%) as the average annual venture growth from 1992 to 1994 for closed companies.

The reliability of the raw performance data reported in the questionnaire was evaluated by checking the agreement of a random sample of 30 of the entrepreneur/CEO responses with Dun and Bradstreet, Inc. (D &B) (1993) reports. We were able to find D& B information for 26 of the 30 cases. Results of the correlation and t-tests are shown in Table 2.

TABLE 2

Performance Data Reliability

(Correlation and Means Difference t-tests of Company-reported and Credit Service-reported Data for 26 Randomly Selected Companies)

Measure	Correlation	"t" of Means Difference	D.F.	Significance
PERFORMANCE:				
1992 Sales	.99	58	24	p<.57
1992 Employment	.94	65	24	p<.52
1992 Profit	.97	1.14	24	p<.26
1992 Net Worth	.94	2.60	24	p<.02

The correlations among the self-reported and D&B performance measures were high and significant in all cases. The accuracy of the absolute level of the data was checked with t-tests of means. While the self-reports about sales, employment, and profits were not significantly different than the D&B reports, the net worth data were significantly different (for 1992, $t(24) = 2.60$, $p < .02$). Thus, net worth data were deleted as a measure. It may be that owners of small closely-held companies treat company resources as if they were personal resources. Thus, equity may not be a good basis for indicating performance; accordingly, net worth data were not collected in 1995. As shown in Table 1, the three indicators of venture growth (sales growth, employment growth, and profit growth) developed composite reliability of .85; this is sufficient (> .80) to support the

position that the three growth measures reflect the underlying latent variable reliably (Fornell & Larcker, 1981). We also found that the mean reported sales, employment, and profit growth for the sample companies was 3% per year during the 1991 control year and 10% per year during the 1992 and 1993 study period; these results are consistent with industry reports that 1992 and 1993 were years of "recovery".

Controls. Organization size was indicated by the number of employees. Log transformation was not used because the size range was not large and the distribution was not highly skewed. Organization age was measured as the number of years since founding or transfer of ownership to the entrepreneur/CEO. Past venture growth was measured as the difference between 1991 and 1992 sales, employment, and profit.

In summary, the measurement model exhibited reliable measurement of the latent variables (all composite reliabilities > .80). As shown in Figure 2 below, all of the measure coefficients (LAMBDAs) were significant ($t > 2.0$; $p < .05$); thus, the measurement model had convergent validity. Discriminant validity was verified by determining for each latent variable that the average variance extracted by the latent variable's measures was larger than the latent variable's shared variance with any other latent variable (Fornell & Larcker, 1981). Thus, each latent variable had more in common with its measures than with other latent variables.

Results

Descriptive Statistics

The means and standard deviations of the study variables and the correlations between them are shown in Table 3. The means are the average of the multiple measures and pooled standard deviations are reported.

TABLE 3

Means, Standard Deviations, and Correlations

	Measure	Mean	s.d.	1	2	3	4	5	6
1	Vision Attributes	23.77	21.22						
2	Vision Content	3.44	3.10	.16*					
3	Communication	.41	.47	.36***	.25**				
4	Venture Growth	.10	.29	.37***	.30***	.33***			
5	Organization Size	25.00	14.09	.11	.06	-.10	-.06		
6	Organization Age	8.45	2.55	.06	.11	.04	.07	.07	
7	Past Venture Growth	.03	.33	.05	.05	.04	.12	-.03	-.01

N = 183

* $p < .05$

** $p < .01$

*** $p < .001$

Analytical Design

The relationship among the independent and dependent variables was explored with solutions of an array of structural equation models that were alternative configurations of this study's research model. The initial path model, a direct effects model, had paths to venture growth from vision attributes (VA), vision content (CNT), vision communication (COM), and the three control variables. An indirect effects model was configured with additional paths from VA and CNT through COM to venture growth.

Direct Effects Model

Figure 2 shows the direct effects model for vision attributes, vision content, and communication to venture growth. Both vision attributes and vision content had significant paths to venture growth which supports hypotheses 1 and 2. Additionally, vision communication

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Insert Figure 2 about here

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had a significant relationship with venture growth; the control variable coefficients were not significant. We used the following indices and interpretations to indicate structural equation "fit" (Breckler, 1990; Browne and Cudeck, 1993; Joreskog & Sorbom, 1993; Wheaton, 1987): (a) Although it is highly sensitive to sample size, the 2 probability should be larger than <.05 for a model to be identified as a "good fit"; (b) The goodness of fit index (GFI) and adjusted goodness of fit index (AGFI) should be near or better than .90; (c) The parsimony normed fit index (PNFI) should be greater than .50; (d) The root mean square residual (RMR) should be less than .100; and (e) the root mean square error of approximation (RMSEA) should be less than .080. The fit index results for the direct effects model were: 2 (36) = 72.44, p <.00; GFI= .92; AGFI = .87; PNFI= .43; RMR = .041; and RMSEA = .054. Thus, 2 for the structural equation model was significant, which is not unusual for confirming models with more than 100 cases. GFI, RMR, and RMSEA indicate that the model is a good fit of the data; however, AGFI and PNFI are not good.

Indirect Effects Model

Figure 3 shows the results of the solution using an indirect effects model. Vision attributes affect venture growth indirectly through their effect upon vision communication. Similarly, vision content significantly affects venture growth indirectly through vision communication, although significant direct effects persist for both vision variables. Utilizing standardized data, the indirect effects model had a higher coefficient for the indirect path through vision communication (.30) than for the direct paths (.18 and .19). The indirect effects model showed significant improvements in all fit statistics compared with the direct effects model. Indeed, all fit statistics were good: 2 (23) = 65.87, p <.00; GFI= .95; AGFI = .90; PNFI= .47; RMR = .040; and RMSEA = .054. The overall coefficient of determination was .30. These results partly support Hypothesis 3. In summary, vision attributes and vision content were

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Insert Figure 3 about here

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directly related to venture growth, but they were also strongly related to venture growth through their effect on vision communication.

Alternative Scoring of Vision

Thirty-one percent (31%) of the entrepreneur/CEOs reported that they did not have a vision, and in these cases we assigned 0 as the score for vision attributes, vision content, and vision communication. It could be argued that reported relationships among the independent variables and their measures may be inflated with the full data set (n = 183) as compared to the data set that included only those cases which reported a vision (n = 127). However, since this study focused on the effects of vision upon venture growth, the absence of a vision may have an important effect on the dependent variable. If vision matters for venture growth, one would expect the "no vision" companies to have lower growth than the companies with vision, and therefore the "no vision" companies should be included. The average growth of those 127 companies with a vision (12.4%) was significantly higher than those 56 companies reporting no vision (5.5%), t = 2.37, p<.02.

However, we also performed a more conservative test, where we deleted the "no vision" cases and repeated the structural equation tests of the indirect effects model in Figure 3. The fit of the model to the data was slightly lower but still "good": 2 (23) = 72.08, p <.00; GFI= .92; AGFI = .89; PNFI= .46; RMR = .042; and RMSEA = .054. The significance of the path coefficients still supported our finding that vision attributes (VA) and vision content (VC) are significantly associated with venture growth (VG) and that vision communication is in a significant indirect path between VA and VG and between VC and VG.

Moderator Analysis and Sole-source Data Analysis

Although it was not predicted, we considered the possibility that vision communication might moderate the effects of vision on growth. We conducted structural equation and regression tests of moderation models and found no evidence of any moderator effects. We also conducted structural equation tests of the indirect effects model with data from CEOs alone. That is, we substituted vision communication responses from CEOs for the EP responses that we report in this study; the results were not significantly different. However, we believe that the "mixed" (CEO and EP) model is the most logical since EP reports should reflect whether any CEO communications were actually received.

Discussion

This quantitative, longitudinal field study was the first to find vision and vision communication to have positive effects upon organization-level as opposed to unit-level or individual-level performance. Significant direct effects were found for vision as well as indirect effects through vision communication.

This study lends support for the seven charismatic leadership theories which propose that vision is a core antecedent of organizational performance. Like the laboratory studies of Howell and Frost (1989) and Kirkpatrick and Locke (1996) and the study of presidential personality and charisma by House, Spangler, and Woycke (1991), the present longitudinal study was able to provide evidence of the causal direction between vision and outcome measures. Many previous charismatic leadership studies could not because they used concurrent designs (e.g. Avolio, Waldman, & Einstein, 1988; Podsakoff, MacKenzie, Morrman, & Fetter, 1990; Seltzer & Bass, 1990). Although one cannot take for granted that business and presidential performance are affected by the same factors, our results plus those of House et al. (1991) suggest that vision is important in both realms.

It is encouraging that significant effects were found despite the brief two-year interval of this study. While substantive causal theory and structural equation interpretations of causal models can be supported to a degree even with concurrent data (Breckler, 1990; Hayduk, 1989), the full effect of vision-setting and communication may not be experienced in so short a time. In addition, some visions may have been in place for years before the 1992 venture growth control period. In these cases, the actual effects may have been conservatively estimated by our methods.

Different causal relationships may exist between vision characteristics and performance than those that were studied here. High organizational performance itself may cause vision-setting which, in turn, may affect organization performance, and so on. Nevertheless, the directional effects found in this study suggest that vision is causal in its own right.

Our results suggest that both vision attributes and vision content are important. Recall that visions were scored in two different ways: (a) in terms of possessing attributes that were recommended in the leadership literature and supported by practitioners and (b) in terms of having content pertaining to the desire to grow. The attributes measure of vision could be regarded as a measure of vision quality or clarity, whereas the growth measure focused on quantity or challenge (degree of emphasis on growth). The two scores were significantly correlated (Table 3) but not very highly ($r = .16$, $p < .05$). Thus, they seemed to be getting at different aspects or dimensions of vision, as intended. Our results confirmed the finding of Larwood et al. (1995) that there are distinct attributes of vision that can be reliably isolated and quantified.

Some visions were high in both attributes and content. One high growth company (which also had a high attribute score) reported that it wanted "to grow rapidly to become a company that is known nationally as the manufacturer of leading edge, highly technical, and deeply designed artistic architectural woodwork." One CEO's vision of his high growth company indicated that he wanted it to become one that Chicago contractors, architects, and customers automatically think of when they require the highest quality architectural woodwork. The vision statement elaborated, "We will achieve this by rapidly expanding our market and products, continuously improving our process, training our people, and developing long-term relationships with those we serve and who serve us."

The visions supplied by many entrepreneur/CEOs incorporated various mixtures of mission, strategy, values, and goals. Indeed, the concept of vision may be useful because it is a way that organization leaders integrate all these elements into a form which guides future action.

Some reported visions were personal goals, such as: "I want to pay off my debt." or "I want to pay my workers well, and sell out at a profit." It might be asked what the relationship is between vision and goals. Kirkpatrick and Locke (1996) argued that a vision was akin to a general goal and found that in their laboratory simulation it motivated the setting of task specific goals (Locke & Latham, 1990) which, in turn, affected performance. However, in small firms the two types of goals may merge together in the CEO's vision; results-focused company goals may become the equivalent of task specific goals (e.g., "We want to double our sales in 2 years" -- see Appendix A, #3). The amount of growth imagery may reflect goal difficulty and the goal attribute score may reflect, at least in part, goal clarity.

While two-thirds of the visions received a score of 7 (out of 10) or higher for brevity, clarity, and desirability, only one-third received these high scores for abstractness, challenge, or future orientation. It would be interesting to determine what effect leadership training would have on the ability of CEOs to formulate effective visions and on their subsequent performance (e.g., see Barling et al., 1996). Furthermore, some CEOs may have visions which they find hard to articulate; thus, future studies may enhance leadership theory by trying to find out what implicit definitions and attributes leaders use.

Although, we rated vision statements for growth imagery, the statements may include other imagery that relates to performance. For example, McClelland's (1961) need for achievement syndrome (n ach: improvement focus, future time perspective, assumption of personal responsibility, initiative, acceptance of moderate risk, etc.) has been claimed to show a significant positive relation with entrepreneurial success (McClelland & Winter, 1969). Indeed, definition of the motive was derived from observation of entrepreneurship situations (Miner, 1980), which involve anticipation of future possibilities (McClelland, 1961). Thus, it might be useful in future studies to also code written vision statements in other ways, including scoring for achievement imagery.

Our model showing indirect effects of vision through vision communication explained our data best. While there was a significant direct effect of vision on venture growth, the indirect effects through vision communication were more important. In other words, while a vision affects performance directly, it is more likely to impact performance if employees know about it and understand it (Locke et al., 1991). This is not to say that simply having and communicating a well-formulated vision is enough to guarantee results; many leaders and many companies fail to "walk the talk."

The persistence of direct effects in the indirect model suggests, however, that vision does not axiomatically work only through verbal and/or written communication. This result supports theorists who suggest that leaders can also reinforce the values inherent in the vision nonverbally, such as through dramatic gestures, role modeling, and the way they select, train, and reward employees (Bandura, 1986; Locke, et al., 1991; Kouzes & Posner, 1987). Implementation behaviors such as structuring the organization, setting the organizations agenda (Conger & Kanungo, 1987; House, 1977; Locke et al., 1991), and feedback and information management (Bass, 1985) may also appear in indirect paths between vision and performance. Furthermore, employee responses, such as changes in self-concepts and alignment of personal goals with organization goals may be indirect determinants of performance (House & Shamir, 1993). Thus, future studies may want to explore the non-verbal mechanisms and implementation behaviors through which leader visions affect organization performance.

The finding that direct effects between vision and venture growth exist whether or not the vision is verbally communicated may be limited to companies that enjoy a high degree of direct CEO control. That is, in entrepreneurial companies, such as the ones in this sample, the link between vision and growth may be more direct than in other organizations due to: (a) fewer layers of authority, (b) one-on-one contact between the entrepreneur/CEO and customers, employees, and suppliers, and (c) the relative ease with which the entrepreneur/CEO can directly execute strategies, monitor events and control outcomes on a daily basis. Indeed, Larwood et al. (1995) found that executives who had high control in their organizations reported that their vision was better understood than executives with low control. It should be noted that it was control, not organization size, that made a difference in the Larwood et al. (1995) study. Similarly, we did not find organization size effects in our sample; however, future studies may yet reveal size effects, because both studies sampled within a narrow range of sizes.

We found significant direct and indirect effects on performance whether those who did not have a company vision were included or not. However, CEOs with no vision performed significantly worse than those with visions. Thus, not only are the attributes and content of the vision important,

but having a vision as opposed to no vision is important. Of course some leaders may hold their visions implicitly (subconsciously) which could make it hard to communicate to others and this may reduce their effectiveness.

In conclusion, we found that vision significantly affects organization-level performance, and vision affects performance directly, as well as indirectly through vision communication. These results support charismatic leadership theorists who consider vision as a key element of charismatic leadership theory (House & Shamir, 1993). Furthermore, we found that entrepreneur/CEOs are able to report their vision, and that theoretically-based attributes can be used to obtain a quantitative measure of vision. Hopefully, these findings will encourage further research about vision.

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APPENDIX A
Typical Visions from
Architectural Woodwork Entrepreneur/CEOs

A research assistant's vision attributes total score (VA) and an author's vision content score (VC) are shown in parentheses for each typical vision. The VA score is the sum of the individual ratings (1 to 10) for each of 7 vision attributes (brief, clear, abstract, challenging, future-oriented, stable, and desirable). The VC score is the growth content rating (0 is low growth imagery; 5 is moderate, and 10 is high).

1) I want _____ Architectural Millwork, Inc. to be recognized before the new century for high craftsmanship in headlines in the "business section" of The Washington Post for completion of woodwork in a nationally famous building. (VA = 68; VC = 4).
2) To be one of the top 5 premium grade architectural woodwork companies in the United States for overall performance, price, and quality. (VA = 59; VC = 6)
3) We want to double our sales in 2 years. (VA = 49; VC = 9.
4) To become the authority on architectural woodwork in central Iowa. You already know about our competition, you should know more about theirs. (VA = 42; VC = 5).
5) To provide fine quality millwork and make a living at it. (VA = 21, VC = 0)

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