

## ENTREPRENEURS' ATTITUDES, STRATEGY CHOICES, AND FIRM

### PERFORMANCE

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### ABSTRACT

*This paper focuses on how attitudes affect an entrepreneur's strategy selection at the organizational level. It also attempts to discover if contingencies exist in this relationship that may account for differences in firm performance. The model developed, based on the existing literature, is tested using a sample of 60 wineries, still operated by their founding entrepreneurs. The results indicate that entrepreneurs used different approaches to impart their values and beliefs to their firms. While we show that this affects the eventual strategy choice, data indicates that firms can be equally profitable with multiple sets of attitude and strategy combinations.*

### INTRODUCTION

Entrepreneurship research has often taken constructs from strategic management, organizational behavior, and organizational theory to form its theoretical foundation. From strategic management, concepts of planning, scanning, and contingent strategic action have shown up in studies that focus on entrepreneurial decision choices, startups, and growth strategies. While these have been good attempts at understanding the dynamics of entrepreneurial strategies, they fall short of fully explaining the whole phenomenon because the entrepreneur is often omitted. Studies of small firm behaviors often use constructs from those of large firm studies, where issues of corporate structure, legal liability, and industry structure predominate. For example, popular theories

of the firm usually employ economic philosophies to explain production (Seth & Thomas, 1994; Tang & Thomas, 1994), whereas strategy in small firms is often confined to what goes on in the mind of the entrepreneur (Woo, Daellenbach, & Nicholls-Nixon, 1994). In the extreme, strategy may simply be a way the entrepreneur views his world, and therefore have little bearing on what is actually going on in the marketplace (Valentin, 1994). In order to truly understand strategic decision making in the entrepreneurial firm, we need to include the entrepreneur, which implies understanding his or her personal traits and attitudes toward the business, competitive environment, and opportunities (Schumpeter, 1934).

While the traits and personality characteristics of entrepreneurs have been extensively researched (Aram, 1989; Brockhaus & Horwitz, 1986; Gartner, 1989; Gasse, 1989), how their attitudes and beliefs impact their firms' strategies and performances has received less attention (Ginn & Sexton, 1990; Hoy & Hellriegel, 1982). The role played by entrepreneurs' attitudes and beliefs, and the fit between various attitude profiles and strategy choices, provides the primary focus for this study.

Here, we develop an exploratory model, which describes the links between attitudes and beliefs, strategy choice, and firm performance. Although the dyadic linkages in the model are well known in the organizational behavior and strategic management/entrepreneurship research literature, little has been done to describe how these individual components fit in an entrepreneurial context (Hoy & Hellriegel, 1982). In particular, our main contribution to this collection of studies is to reconstruct these dyadic relationships in a way that facilitates better understanding of strategic formulation in entrepreneurial firms. The model we propose is tested empirically using a sample of 60 founder-entrepreneurs in the wine industry.

### LITERATURE REVIEW

The link between work attitudes and work behaviors was first advanced by Brayfield and Crockett (1955), and later was empirically verified (Azjen & Fishbein, 1977). In related work, the link between attitudes and various organizational constructs, such as culture, and employee performance has also been extensively researched (Browner & Kubarski, 1991; Goldberg & Kirschenbaum, 1988; Lachman, 1988; Lachman & Nissim, 1986; Stevens, Philipson, & Diederiks, 1992). These studies showed that the personal characteristics and mental attributes of individuals have a significant impact on their work. Since the work of management is to make strategic resource allocation decisions for the firm (Kotter, 1982), the attitudes of management will have an important impact on strategy choice, and on firm performance. Empirically, this relationship has been difficult to verify for large firms and has yet to be theoretically explicated for entrepreneurial ones.

In smaller, entrepreneurial firms, the link between attitudes and strategy choice is more likely to be direct because these firms have not yet developed bureaucratic blockages that shield managerial personalities from organizational processes. Due to the fact that young organizations have yet to develop institutional constraints to change, founder-entrepreneurs are more readily able to instill their attitudes into the firm (Mueller, 1994; Ray & Turpin, 1990). However, whether an entrepreneur's ability to instill personal attitudes, and influence attitudes in employees and managers, is reflected in strategy choice is still unclear. This is especially true with respect to emergent strategies because the relationship between managerial attitudes and strategic action is indirect and hidden (Mintzberg, 1978). Furthermore, the research by Carland, Hoy, Boulton, & Carland (1984) suggests that the ability to separate one's attitudes from the firm is what distinguishes the entrepreneur from the business manager. This means that there will be some entrepreneurs who are actually proactively trying to ensure that their personal attitudes do not dominate the culture of their firms. However, there is little empirical evidence to support this notion, whereas there is evidence to suggest that managerial attitudes are often responsible for the ways a firm responds to competitive pressures, simply because these attitudes determine the way competitive information is interpreted (Gaertner, 1989; Shaver & Scott, 1991).

The relationship between beliefs and attitudes further complicates the linkage between attitudes and strategy choice, because two entrepreneurs may have the same belief about a similar business environment but may translate their beliefs into different attitudes, which results in their firms taking different actions. For example, two entrepreneurs may have the same belief about a particular business -- "it is unforgiving" -- but this may translate into totally different attitudes -- "running it will be personally challenging" or "running it will be personally unattractive." Thus, it is not enough to understand the beliefs of the entrepreneur to comprehend strategy choice, but it is also important to identify their attitudes towards the business environment, and how these attitudes systematically lead to strategy choice. From a practical standpoint, one might be tempted to conclude that it may be expedient to ignore the role of beliefs, since its linkage to strategy is tenuous and it is less easily measured, and simply concentrate on the linkage between attitudes and strategy. However, this would retard our theoretical understanding of the actual mechanism behind entrepreneurs and strategy choice.

In this paper, beliefs are incorporated into the research model by using a contingency theory perspective. Beliefs are presented as the implied constructs embedded within observed outcomes. This perspective suggests that within a particular context, social phenomena proceeds in a roughly predefined way. The relationships between each construct in the phenomenon interact within a specified range of values. This range of interactions or the 'fit' between constructs suggests that there exists a consistency between beliefs, attitudes, and strategy choice and this consistency helps to ensure positive outcomes. The basis for this consistency may be economic, personal values, or institutional constraint. This

contingency perspective implies that the entrepreneur is continually evaluating their environment and that discontinuities can be perceived as opportunities and exploited by making the appropriate strategy choices. However, whether discontinuities are perceived as opportunities or threats is not objectively determined but instead governed by the entrepreneur's paradigm. This notion is sharply at odds with that of the classical industry analysis perspective (e.g., Porter, 1980), which imputes a more objective nature to environmental analysis and opportunity identification.

Walsh and Fahey (1986) suggested that an organization's belief structure is "negotiated", implying that the consistency of the belief structure itself is an organization-wide phenomenon, and is important to the link between attitudes and strategy formulation. The consistency between beliefs, attitudes, strategy, and performance, which have been addressed conceptually at the corporate level (Fry & Killings, 1986), have received less attention in an entrepreneurial context.

Past research has shown a tendency for managerial attitudes to influence employee work attitudes and subsequent work performance (Jaccard, King, & Pomazal, 1977; Mannheim, 1984; Pasquale 1986). Workers' attitudes also affect a firm's performance (Fondas & Stewart, 1994; Pasquale, 1986), to the extent that the aggregation of worker attitudes forms the basis of an organization's culture. For example, related studies have shown that entrepreneur beliefs about the external environment, and attitudes towards the usefulness of marketing and general managerial concepts, systematically affect certain aspects of performance (Namiki, 1989; Norburn, Birley, & Dunn, 1988; Waddock & Isabella, 1989). The salient point here is that strong beliefs about the importance of an area are often reflected in the strategy choices made at the firm level (Hodgkinson & Johnson, 1994). Firms with managers, who have favorable perceptions and attitudes about exporting, tend to be more successful at exporting (Aaby & Slater, 1989).

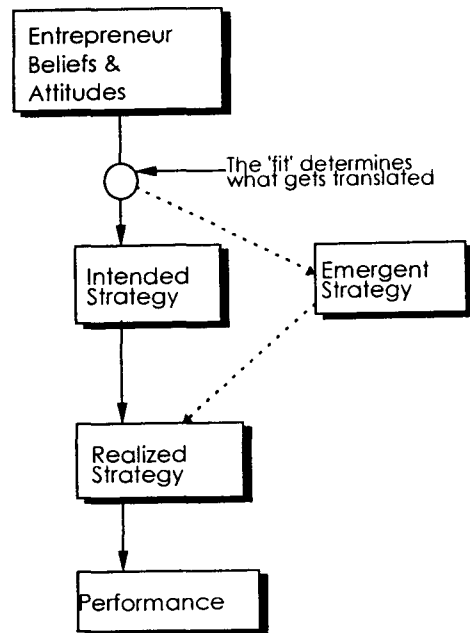
The level in the organization that the manager occupies will also have an impact on the extent to which his or her beliefs and attitudes can influence action. For instance, Munro and Noori (1985) found that the attitudes of senior management toward information technology were the primary determinant in the decision on whether or not the firm automated. Since owner-entrepreneurs tend to have a sort of "super" managerial status, their attitudes would also have a more direct impact. More formally, Pasquale (1986) suggested that organizational cultures are created beginning with the leader's core beliefs and attitudes, which permeate the organization to influence worker attitudes. Mannheim (1984) empirically tested the linkage between managerial beliefs and employees' attitudes toward their jobs and found a significant correlation.

## RESEARCH MODEL

Attitudes dispose the entrepreneur to act in a certain manner, but the translation into actions is not inevitable. The strategic form action takes is also variable and may not be exclusively reflected in either an intended or emergent

strategy. The intent of the managers is to rationalize the decision making process so that intended strategies are translated into realized strategies (Mintzberg, 1978). Therefore, it is reasonable to posit that managerial attitudes will be consistent with the realized strategy, which, in turn will be consistent with the entrepreneur's perception of what constitutes an opportunity set in their task environment.

**Figure 1. The Influence of Attitudes and Beliefs on Strategy Formulation**



In the entrepreneurial context, realized strategy is action. Thus, a belief-attitudes-action model, commonly enunciated at the individual level of analysis (Ajzen & Fishbein, 1977), can be translated into an organizational context by linking attitudes to realized strategy. This linkage is depicted in Figure 1. An essential ingredient in determining if an entrepreneur's attitudes have a positive impact on performance is whether they are reflected in the firm's intended strategy, or in its culture, in ways that help produce an effective emergent strategy (Mintzberg, 1978).

The interaction between attitudes and beliefs results in an "arch-type" profile (Gartner, 1982). This may explain why some entrepreneurs want to see their beliefs reflected in intended strategies while other use them to develop a culture that reflects their beliefs and produces emergent strategies (Ray & Turpin, 1990). The realized strategy directly incorporates entrepreneurs' attitudes and beliefs, while the emergent strategy component is a reflection of these values, in the sense that it is influenced through organizational structure.

Figure 1 says that entrepreneur attitudes, by virtue of their impact on the organization, determine strategy choice, which is revealed in realized strategy, with a resultant impact on firm performance. Entrepreneurs' attitudes also help us understand the process by which they develop solutions to strategy problems (Gunz & Whitley, 1985). Since new firms may face institutional blockages, entrepreneurs' attitudes toward them will have a major impact on strategy formulation. In fact, their attitude toward institutional blockages is one of the factors that differentiate founders of faster growing firms (Ginn & Sexton, 1990; Hoy & Hellriegel, 1982). Since it is impossible to specify, by observation, what are intended and emergent strategies, our study focuses on the linkage between attitudes and realized strategy.

Performance is the final link in the research model, and represents the distinguishing factor between what are strategic and non-strategic issues (Capon, Farley, & Hulbert, 1994). The generalization of performance measures, such as ROI or market share, poses special problems for the entrepreneur. For example, entrepreneurs who have formulated a strategy that emphasizes cash flow may pay little attention to an accounting measure such as ROI, or a marketing measure such as market share. A variety of performance indicators or a composite index of performance, with individually weighted measures, is one way to capture the multidimensionality with which entrepreneurs, as a collective, view this subject.

In sum, the research model suggests an attitudinal influence on strategy. It also suggests that the strategy formulated will affect outcomes, including performance. Although the exact nature and direction of these linkage consequences have not been empirically confirmed, the research discussed earlier and the model suggests two broad propositions.

**Proposition 1:** Differences in firms' strategies are directly related to the belief-attitude profiles of their owner-entrepreneurs

Proposition 1 tests the notion of a correlation between strategies and entrepreneurial attitudes. Using a contingency perspective, we suggest that in order for strategies to be sustained over time, and consistently executed, they must reflect the belief and attitude structure of the entrepreneurs who formulate them, or they will not be translated into action and realized.

**Proposition 2:** The consistency between the belief-attitude profiles of owner-entrepreneurs and strategy choice are determinants of firm performance.

Proposition 2 tests the notion that a consistency or fit between beliefs, attitudes, and strategy results in superior performance. Superior performance is achieved with an alignment between goals and means. An entrepreneur's beliefs and attitudes toward their business and its competitive environment afford the means to interpret information and deploy resources consistent with this interpretation. The correct deployment of resources, in a focused and

concentrated manner, results in higher performance because the sheer concentration of resources brought to bear on a strategic problem will exceed that of a competitor who is less focused.

## METHODS

### Sample and Data

A stratified random sample was used to select entrepreneur-owned wineries from the U.S. population. These wineries tended to be small and owner-operated family businesses. This insured that the organizational structures chosen for the study were simple, so that complexity in organizational design did not pose a significant confound in the linkages we were trying to test. The above considerations were important to fulfill the internal and external environmental conditions suggested by Mintzberg (1978), for a convergence between intended and realized strategy. Criteria for selection were developed to insure entrepreneurial ownership, homogeneity in size, and sufficient geographic dispersion to overcome regional effects. The study was confined to a single industry to eliminate systematic industry-related confounds, which may pose a problem in multiple industry contexts. In addition, provisions were made in the questionnaire to ensure that only the owner-entrepreneurs responded to the survey because we are trying to test the linkage at the strategic level.

A mail questionnaire was used to collect the data. Non-respondents were sent reminder post cards. Those who still failed to respond received a second mailing of the questionnaire (Dillman 1978). The response rate was 63%, but 3 surveys were deleted because of missing data. Tests of the sample vs. population distributions also revealed no statistically significant firm or regional differences, suggesting that our sample was representative of the population from which it was drawn.

### Measures

The research model suggests three broad constructs associated with attitude, strategy, and outcome. The variables selected for the study were determined to be either key success factors, key strategy factors, or key attitudinal factors. Twelve items, used by LaFuente and Salas (1989), were used to measure the work attitudes of entrepreneurs. These items assessed entrepreneurs' views on the importance of career development, self-actualization, and recognition. A Likert scale was used to measure the importance of the item to the entrepreneur.

Five items were used to measure intended strategy. These can be classified as attempts to either focus or diversify, diversification being a natural outcome of an entrepreneur-owner's risk preferences (Fox & Hamilton, 1994). The elements were pricing, distribution, product mix, and innovation policies. Using a Likert scale, entrepreneurs indicated their intended strategic positions with respect to level of competitiveness on price, product breadth, scope of distribution channels, product development, and the development of new production techniques. Realized strategy was measured with six items that

assessed achieved relative price levels, area of distribution, number of distribution outlets, brand recognition, quality and media attention.

Objective measures of performance were used to assess outcomes. These measures included total sales, production, production capacity, and number of tasting competition awards. The data were culled from an industry guidebook and randomly checked with a sample of the listed wineries. Likert scale measures of the degree of achieved profitability, achieved distribution area, and sales growth were used as subjective performance measures.

### Data Analysis

Following the methodology used by LaFuente and Salas (1989), the data analysis proceeded in four stages. The first consisted of a reliability analysis of the attitude scales. Factors were derived using confirmatory factor analysis to confirm the underlying belief dimensions that make up the attitude measure. Factor analysis was also useful for data reduction, which simplified the interpretation of results, and permitted the identification of attitudes that were important to entrepreneurial strategy. Finally, the composition and reliability of the factors were examined to confirm face validity.

Next, the firms were clustered using the attitudes of their owner-entrepreneurs. Reliable factors, composed of linear combinations of the individual attitude variables, were used in a Wards' method linkage algorithm to cluster cases. Wards' method linkage was selected because it generates spherical clusters, which facilitates the interpretation of the cluster profiles. Cluster analysis allows important systematic differences in the attitudes held by entrepreneurs to be highlighted. This is an important step because the research model here suggests that these differences lead entrepreneurs to different strategies.

For the solution, several criteria were used to determine the ideal number of clusters. First, Klastorin's (1982) expected distinctiveness measure was used. It was calculated by taking the sum of the number of units in each group multiplied by the distinctiveness of those groups to suggest an appropriate range of cluster candidates. Next, an iterative procedure, based on face validity of each cluster solution, was used to select the final grouping. Each of the cluster solutions was then used in a stepwise discriminant analysis, and their profiles examined to assess if there were significant differences in the characteristics. Selection of the final cluster solution was based on the ability of the discriminant analysis to classify correctly the cases.

An intermediate step was taken to compute the correlation between intended and realized strategies. If attitudes are postulated to affect strategic action, then it necessarily means that intended and realized strategies must correlate. We recognized that many intervening factors work to dilute the relationship between the two. Thus, significant, rather than high, correlations are the focus of this step. This allows the direction of the relationship to be confirmed and also validates the linkage between intended and realized strategy.

Finally, to determine if clusters of owner-entrepreneurs adopted the same strategies and if these are consistent with their attitudes toward work, the statistically significant discriminant variables were examined. The discriminant equation, coupled with the structure matrix of the variable loadings allowed us to determine how each strategy variable systematically discriminates between the two groups of firms. Finally, the means of each group's performance were examined to determine if significant differences existed.

### RESULTS AND DISCUSSION

Reliability analysis suggested that three of the twelve items in the attitude scale be eliminated. Three factors with eigenvalues greater than one were then extracted (Table 1). We confirmed that the entrepreneur's work attitude consists of three distinct beliefs about career development, self-actualization, and recognition. The reliability alphas of the factors suggested that the last factor (recognition) be omitted from further analysis.

Career development measures the extent to which the entrepreneur considers factors such as job security, opportunity for self-development, opportunity to be creative, and opportunity to prove oneself as important characteristics of the ideal work situation. Self-actualization refers to the extent to which the entrepreneur feels that the opportunity to be in a leadership position, the degree of challenge in the job, and the degree of variety and adventure were important. The confirmatory factor and reliability analyses allow us to conclude that the scale has face and construct validity.

**Table 1. Factor Analysis of Entrepreneur Work Attitude Scale**

Item Need for/to:	Career development	Self- actualization	Recognition
Job security	0.77		
Prove oneself	0.69		
Develop oneself	0.68		
Job creativity	0.62		
Leadership		0.79	
Challenge		0.74	
Variety & Adventure		0.63	
Prestige			0.90
High earnings			0.70
Standardized $\alpha$	0.71	0.70	0.62
Eigenvalue	3.45	1.18	1.14

During the cluster analysis stage, we determined that a three-cluster solution produced profiles that were similar to the two-cluster solution. In the interest of parsimony, the two-cluster solution, which was qualitatively distinct from the one-cluster solution, was selected. Discriminant analysis later confirmed that the two-cluster, rather than three-cluster, solution was superior because it had a higher ratio of correct classifications.

T-tests of the means confirmed that the clusters were statistically significant from each other on all nine attitude-scale items. As a group, the entrepreneurs in this sample viewed self-actualization as more important than career development. However, members of the first cluster consistently scored higher than the second on all aspects of the attitude scale, suggesting that cluster one members generally had a more aggressive attitude towards their work. In terms of relative importance, the self-actualization items dominated cluster two members. Accordingly, cluster one members, because they were attitudinally more aggressive overall, were designated "Driven". Cluster two entrepreneurs, because their attitudes suggested self-actualization as more important, were designated "Self-Actualizers."

**Table 2. Discriminant Analysis of Groups**

Step 1 -- Discriminant Function:

	Unstandardized Coefficients	Structure Loading	Matrix
Product Breadth	1.07	0.48	
Process R&D	1.05	-0.40	
Pricing	-0.83	0.22	
Constant	-3.94		
Chi-square (3 df)	9.09*		

\*p<.05

Step 2 -- Classification:

	Predicted Membership		Hit Rate		Actual	Chance
	Group Centers	Group Size	Driven	Self- Actualizers		
Driven	0.22	47	46 97.9%	1 2.1%	83.3%	66.1%
Self-Actualizers	-0.78	13	9 69.2%	4 30.8%		

Results of the discriminant analysis indicate that the introduction of new methods, number of labels marketed and market price were the variables with the greatest discriminating power. This suggests that process innovation, distribution, and pricing were important components in strategies formulated by these entrepreneurs. The face validity of these findings is supported by previous field research of this industry (Butler & Hansen, 1989). Promotion and advertising are minimal, generally reserved for wine-related products, such as wine coolers. Competition is usually based on differences in product image, as defined by price, and variety.

The structure matrix loading reported in Table 2 indicates that "Driven" entrepreneurs tend to adopt a strategy that calls for higher prices, more variety and lower levels of process innovation. "Self-Actualizers", on the other hand, prefer to control cost by investing in process R&D. They tend to price their products lower and make do with less variety in their product line, concentrating on a low cost-low price product strategy.

Validity of the conclusions was checked by examining the relevant statistics. The chi-square statistic indicated that the overall discriminant function is statistically significant. The Box's M test failed to reject the null hypothesis that the group covariance matrices are equal, which is a critical assumption for discriminant analysis. Classification of the sample returned an 88.3% hit rate, significantly higher than the chance hit rate of 66%, which was computed using Bayesian analysis by taking into account the different sizes of the starting clusters.

As stated in Proposition 1, the results show that differences in entrepreneurs' attitudes towards their work do lead to systematic differences in the strategies employed for their firms. This is particularly true for entrepreneurs who had more aggressive attitudes. Entrepreneurs scoring high on all items of the attitude scale had firms that were more aggressive with respect to their product line variety. Entrepreneurs to whom intrinsic factors were more important created strategies that concentrated on lower price strategies with more emphasis on process R&D.

The correlation tests between intended and realized strategies showed a number of statistically significant correlations. Intended pricing strategies were significantly and positively correlated with realized relative prices ( $r = .39$ ). It was also found that achieved prices fell as the number of labels marketed increased ( $r = -.24$ ). This is consistent with a market-share growth strategy. The planned availability of a product is also positively related to the achieved size of the distribution area ( $r = .46$ ) and the number of distribution outlets ( $r = .50$ ). In addition, the planned availability of a product is also positively related with the degree of brand recognition ( $r = .21$ ), which indicates that wide distribution appeared to increase product recognition. Finally, product R&D had a significant correlation with media attention ( $r = .27$ ) and process R&D had a significant correlation with media attention ( $r = .22$ ) and product quality ( $r = .19$ ). Again, logic suggests that greater amounts of innovation lead to quality, which in turn generates more media exposure. Thus, Mintzberg's (1978) proposition that intended strategy is correlated with realized strategy seems to be supported.

Table 3 reports the t-tests of the group means with respect to the objective performance variables and firm size. While "self-actualizers" tend to be associated with larger firms, the groups did not differ significantly in terms of capacity or actual production (in gallons). Thus, differences in attitudes and strategies are not specific to size or activity level. Number of tasting awards is often used by winemakers as a measure of the success of their winery. Although the group means differences were not statistically significant, "driven" entrepreneurs reported higher numbers of awards. This might mean that these firms enter more competitions because their owner-entrepreneur placed a higher value on external validation.

**Table 3. Means of Performance (Objective measures)**

	Driven	Self-Actualizers	T-value (2-tail)
Production (gal)	48740	61998	-.40
Sales (case)	18167	26902	-1.00
Capacity(gal)	72284	80613	-.23
State Award	9.2	7.5	.42
National Awards	5.3	3.0	.76
International Awards	1.2	1.5	-.27
Sales (% production)	.88	.99	-.75
Production (% capacity)	.65	.76	-1.14
Relative Profitability	2.99	2.31	2.17*
Relative Sales Growth	2.83	3.00	-.52

\* $p < .10$

We were not surprised by this relationship when we compared number of tasting awards won by this group with the attitude elements that entrepreneurs rated as being important, which is "prove oneself, lead, challenge". In total, these results seem to suggest that there is little linkage between the number of awards won and the financial performance of a winery, which was confirmed by the unsolicited statements made by survey respondents.

The difference in the group means for the relative performance measures are reported at the bottom of Table 3. Notice that "self-actualizers" reported lower levels of relative profitability than "driven" entrepreneurs, although growth in sales was not statistically different between groups. This seems to be consistent with what we know about the wine industry. Growth, as an objective of strategy, was not important to many of the wineries surveyed. Those wineries tended to be family owned enterprises that were often started as a result of retirement or as a hobby.

The results suggest that there are little objective performance differences between the two groups of entrepreneurs. Both types of strategies are viable in this industry, with similar performance. Objective measures of sales, and the percentage of production sold indicated no statistically significant differences between the groups. Only one of the two relative performance measures indicated a difference, suggesting that differences in strategies caused by attitudes did not result in performance variation. Thus, Proposition 2 was not supported.

There are a number of methodological caveats that we need to raise before we can conclude this study. Our study is vulnerable to all of the standard criticisms leveled at studies that use survey data. We tried to be as careful as possible in the construction of the survey, consulting with entrepreneurs in the wine making industry in a pre-survey clinical study, and pilot testing the survey on a limited sample before settling on a final design. Moreover, as reported earlier, we conducted all of the standard tests for non-response bias and reliability. However, our theoretical model confined us to gathering data with a survey, and while we recognized its limitations and took steps to overcome them, we have to acknowledge that there continues to exist the possibility of bias, which may affect the generalizability of our findings.

## CONCLUSIONS

This study demonstrates a link between entrepreneurs' attitudes towards their work and the strategies they employ for their firms. This is an important contribution because it suggests that beyond organizational and environmental factors, the staples of strategic management research, entrepreneurs' attitudes and beliefs constitute an important driver of strategy. Further, this study demonstrates that performance must be taken in the context of the industry. We found, non-traditional measures of performance, such as the number of wine-tasting awards won, more significant than traditional measures of growth and financial performance. Previous clinical studies have shown that such traditional measures as financial returns and efficiency seem to be less important in this industry, confirming what we found (Butler & Hansen, 1989). It highlights the problem of using objective categorizations of performance standards when examining a sample of entrepreneurs. From a practical standpoint, the results suggest that for entrepreneurs, an expanded environmental scanning effort is needed to understand the competitive dynamics of their industry. Thus, these results suggest extreme caution concerning the treatment of entrepreneurs as homogenous. It also suggests that when standard formulae fail to yield fruitful results, then the variables considered relevant to strategy formulation should be expanded.

Taking this research as an example, the primary methodological issue we are trying to highlight is that strategy studies employing entrepreneurial contexts must deal with how to select the best measures; independent of the strength of any summary statistics produced by multivariate analysis. Standardized financial and marketing goals, appropriate for the corporate setting, may not reflect the target

goals of entrepreneurs. For researchers, this means a greater use of multiple methodological approaches, in particular, context-oriented approaches to measuring performance. Hence, researchers need to reduce the debate about method choice and begin to match method variety to the complexity of the research question. For instance, attitudinal research and scale construction could be enhanced if preceded by an in-depth clinical study, which would make pilot tests more efficient, and also give researchers the type of industry and firm specific knowledge to make scale construction and modification appropriate to the target audience. For example, the clinical studies revealed that entering and winning wine tasting competitions was a significant performance goal for many entrepreneurs in this industry.

From a theory building standpoint, we need to acknowledge that the strategy decision mechanism we are suggesting is a rational one. That is, given the context of a belief system and a set of attitudes, we are positing that entrepreneurs actively seek and interpret information in order to act strategically. Theoretical deconstructionists may contend that such a mechanism is too simple and that entrepreneurial strategies may be less ordered and rational than we suggest. While our study does not allow us to refute this criticism, our response is that theoretical models are inherently based on assumptions that need to be internally consistent in order to be empirically testable. Thus, even non-rational models, if they exist, have to be based on a set of internally consistent assumptions. We simply chose to use those assumptions that are well accepted in the economics and psychology literature and to build upon those in order to advance our understanding of an important entrepreneurial activity.

For practicing entrepreneurs, the research suggests an elongation of the strategy formulation process. While large firms have to rely on standard formulae such as SWOT or portfolio planning, entrepreneurs are often more able to assess the attitudes and competitive psyches of their competitors simply because they are closer to them. In this study, two attitudinal categories of entrepreneurs emerged by formal analysis. Practicing entrepreneurs will normally have to mentally group their competitors. Insofar as these attitudes predict firm strategy, entrepreneurs should recognize the value of their intuition and incorporate this information into their decision making frameworks. In addition, our finding of a lack of objective performance variation suggests that beyond any consideration of personal preferences in strategy choice, the competitive product market exerts a systematic influence to ensure that all viable strategies are consistent with achieving some acceptable level of performance. Thus, while attitudes may serve to explain a portion of strategy choice, competition determines the viable range of these choices.

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