

MATCHING OWNER-MANAGERS' COGNITIVE STYLE
AND ORGANIZATIONAL DEMANDS IN FAMILY FIRMS

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Abstract

Based on survey responses from 159 owners -managers in small, family firms, we examined the association between specific individual characteristics, firm characteristics, and the individual psychosocial outcomes of satisfaction, intentions to exit, and perceived fit. Hierarchical regression analyses indicated higher satisfaction, lower intentions to exit, and higher perceived fit for owner-managers whose dominant decision-making style complemented the levels of formalization in their firms. More specifically, the results suggested that owner -managers with intuitive decision-making styles were better fitted to the demands corresponding to less structured firm environments than their analytic counterparts. The theoretical and practical implications of these findings are discussed.

INTRODUCTION

According to the National Federation of Independent Business (NFIB), approximately 12 million businesses have owners whose principal occupation is operating and managing those businesses (Dennis, 2000). A significant number of those firms are family owned. Research by Shanker and Astrachan (2003) suggested that between 11 percent and 89 percent of all businesses in the United States are family businesses, depending on the strictness of the definition. Organizational research on life-cycle and growth stages suggests that the owner-managers of these family firms will likely face many different challenges as their firms mature and grow (e.g., Kazanjian, 1988; Hanks, Watson, Jansen & Chandler, 1994; Covin & Slevin, 1997) and it is rare to find an individual who possesses all the attributes necessary to successfully lead a business from creation to maturity (Stevenson & Jarillo, 1990). The value of founders to their organizations can diminish over time and as the businesses grow (Jayaraman, Khorana, Nelling, & Covin, 1997), and often these founders must be replaced by professional managers (Hanks et al. 1994). The underlying concept behind many of these arguments is one of fit and the inherent difficulty in both achieving and maintaining a good fit between owner-managers and their firms.

The importance of maintaining fit between the owner-manager and their firm may be of particular importance in the case of family businesses (In this study, we concentrate on firm owners that are actively managing the firm. For parsimony, in the rest of the paper we will refer to them as owners). Founders of family firms may stay with the firm to meet family obligations even when they feel uncomfortable with managing different stages of growth. Successors to family firms may feel a similar obligation to keep the business in the family resulting in managing a business in which they feel uncomfortable. Both founders and successors may find themselves managing businesses in which they do not feel a comfortable fit.

The concept of fit is central to numerous theories across management disciplines. In strategic management, competitive advantage may be achieved through properly aligning the firm with its environment (Chandler, 1962; Amit & Schoemaker, 1993). In organizational behavior, the focus is more on the implications of fit on individual rather than firm level outcomes. A large body of work in organizational behavior has focused on the concept of person-organization (P-O) fit which is based on the premise that attitudes, behaviors, and other individual-level outcomes are not results of either person or organizational factors alone, but rather, the interaction of these factors (Pervin, 1968, Lewin, 1935). However, despite the numerous studies across management disciplines having examined fit at different levels of analysis, there are surprisingly few that have empirically examined the relationship between the owner and his or her firm.

The question of fit between individual and organization has yet to be explored in the context of family businesses. Dyer (1994) has called for incorporating more organizational behavior variables into the study of the family firm. He argues convincingly that organizational behavior can add much to our understanding of the dynamics of family firms. Similarly, Morris, Williams, Allen, & Avila (1997) argue that to understand the succession process, greater attention should be given to the complex human interactions that occur within family businesses. Due to the unique context of the family firm, the examination of the P-O fit relationship might be particularly informing to the field. The current owner might be bounded in his context by decisions made by the early generation of owners, and the nature of family relationships might affect the organizational context of the owner.

In P-O fit studies, employee outcomes have included job satisfaction, stress, perceived fit intentions to exit/remain, and actual turnover (e.g., O'Reilly, Chatman & Caldwell, 1991; Chatman, 1991; Bretz & Judge, 1993; Edwards & Harrison, 1993) among others. In this study, we examined the contingency relationship of the owner in terms of the interaction of individual and firm variables (Drazin & Van de Ven, 1985). Specifically, we examined how the interaction between the preferred decision-making style of the owner and the level of formal structure in their firms was related with the individual outcomes of satisfaction, intent to exit, and perceived fit. Just as these outcomes are relevant for wage and salaried employees and the firms they work in, we argue that they are also relevant to the key individual in most small family businesses – the owner and the firms they control.

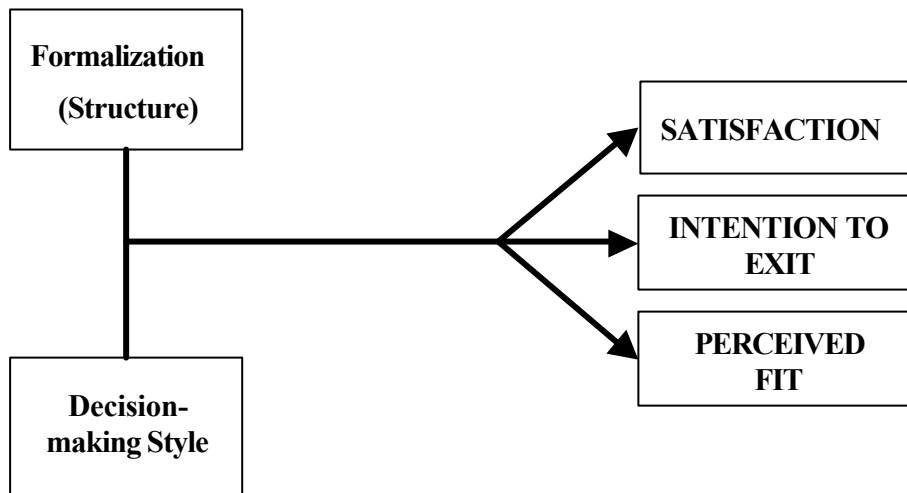
There has been considerable recent interest in the cognition of entrepreneurs (Alvarez and Busenitz, 2001; Mitchell, Busenitz, Lant, & McDougall, 2002; Katz & Shepherd, 2003) and recently research has begun to focus more on models and measures of cognitive style (Brigham & DeCastro, 2003; Ucbasaran, Wright, Westhead, & Busenitz, 2003). Cognitive style refers to the characteristic way people process and organize information and arrive at judgments or conclusions (Hunt, Krystofiak, Meindl & Yousry, 1989). These styles are viewed as relatively stable dispositions, which lead to differences in behavior in the decision-making process (Riding & Rayner, 1998). Cognitive style has gained prominence in the organizational behavior literature as researchers have used it as a basis to examine decision-making behavior, conflict, strategy development, and group processes (Leonard, Scholl & Kowalski, 1999). Our investigation of the interaction of the cognitive style of owners of family firms with the work environment of their organizations complements this recent interest in the cognitive processes of entrepreneurs, i.e., it provides an explanation, in part, for how distinct cognitive approaches of owners of family firms may lead to positive or negative outcomes given the nature of their environments.

CONCEPTUAL BACKGROUND AND MODEL

The basic premise of the P-O fit approach is that greater congruence between the attributes of the person and the organization, the more positive the outcomes. In the extant literature, personal attributes have included personality traits, decision-making style, beliefs, skills, values, interests, creativity, goals and preferences; whereas organizational or work context attributes have included climate, norms, culture, values, strategic needs, expectations, and demands (Bowen, Ledford, & Nathan, 1991; Bretz, Ash, & Dreher, 1989; O'Reilly et al., 1991; Chan, 1996; Kristoff, 1996; Edwards, 1996; Shalley, Gilson & Blum, 2000). P-O fit studies have consistently demonstrated significant relationships between many of these dimensions of fit, psychosocial outcomes, and behaviors such as satisfaction, intentions to exit, actual turnover, commitment, and stress (e.g., Edwards, 1996; O'Reilly et al., 1991). A number of the outcomes previously examined in P-O fit studies appear to be relevant for the study of owner-managers. Specifically, we chose to examine the outcomes of satisfaction, intentions to exit, and perceived fit. To investigate these outcomes, our first step was to identify both an individual and a work context variable that would interact to affect these outcomes and be particularly relevant to owners of family firms. We follow Chan (1996), who was the first to demonstrate that the interaction of the work context style demands (related to structure) and individual decision-making style was a viable facet of P-O fit. Chan (1996) called the incongruence on these variables "cognitive misfit" and found that employees who had greater incongruence on this dimension were more likely to leave the organization. More recently, Brigham & De Castro (2003) reported significant associations between cognitive misfit and the

outcomes of satisfaction and intentions to exit for a sample of high technology entrepreneurs. Below, we discuss the component parts of our model shown in Figure 1 and why the proposed relationships may be particularly salient with respect to the study of owner in family firms.

FIGURE 1
Model of an Entrepreneur's Cognitive Fit/Misfit



Work context style demands

As organizations age, systems, routines, and standardized operating procedures increase (Blau & Scott, 1962). As firms grow, the entrepreneurial demands associated with firm survival and viability decrease in importance while administrative demands associated with managing more complex organizational systems increase in importance (Virany, Tushman & Romanelli, 1992). Furthermore, many founders who are well suited to deal with the challenges associated with early stages are poorly suited to be effective managers and deal with the challenges characteristic in a large organizational context (Willard, Krueger & Feeser, 1992). In their review of the life-cycle construct, Hanks et al. (1994) concluded that certain key dimensions of organizations change with respect to age and size. More specifically, many structural aspects of the firm (including formalization, specialization, and vertical differentiation) will tend to increase as firms mature. In the context of the family firm, the structure and organization of the firm might be bounded by family constraints, constraints that an entrepreneur starting a de novo firm might not have to face. Along with these structural changes across stages come corresponding changes in the types of issues and dominant problems typically faced by the owner (e.g., Kazanjian, 1988).

Individual decision-making style

Individual decision-making style falls within the broad grouping of models and measures known as

cognitive style. Decision-making style refers to an individual's preferred and habitual approach to organizing, representing, and processing information (Streufer & Nogami, 1989; see also Riding & Rayner, 1998). The model and subsequent measure of decision-making style we employ in this study is classified under the Holistic-Analytic family of styles (Sadler-Smith & Badger, 1998). Recent comprehensive reviews of the Holistic-Analytic decision-making models within the cognitive style paradigm (Hayes & Allinson, 1994; Rayner, 2000; Rayner & Riding, 1997; Riding & Rayner, 1998; Sadler-Smith & Badger, 1998) suggest that 1) there are a number of psychometrically sound measures of decision-making style (for example, Allinson & Hayes, 1996; Kirton, 1976; Riding, 1994); 2) there is empirical evidence demonstrating that the dimensions measured by these models are stable over time and independent of intelligence; and 3) these dimensions interact with external factors affecting individual outcomes and behavior.

The relationship between individual decision-making style and structure

The measure used in this study, the Cognitive Style Index (CSI) (Allinson and Hayes, 1996), places individuals on a continuum, ranging from those possessing *intuitive styles* at one extreme to those with *analytic styles* on the other extreme. Intuitivists tend to be relatively nonconformist, prefer an open-ended approach to problem-solving, rely on random methods of exploration, and work best with ideas requiring a broad perspective. Analysts tend to be more compliant, favor a more structured approach to problem-solving, prefer systematic methods of investigation, and are especially comfortable with ideas requiring sequential analysis (Allinson & Hayes, 1996). Individuals possessing an analytic style prefer work settings that are oriented towards careful routines, governed by logic, and very highly structured and organized. Conversely, individuals with a dominant intuitive style prefer work settings that are activity-oriented, offer new experiences, and are flexible and open to change (Allinson & Hayes, 1996). If individuals do have preferences for different work environments based on either a dominant analytic or intuitive orientation, then we would expect to find these individuals in occupations that match their dominant style.

Research supports this connection (Allinson & Hayes, 1996; Sadler-Smith, Spicer, & Tsang, 2000). Individuals in "more structured" professions possess significantly more analytic dominant styles, and individuals in "less structured" professions possess significantly more intuitive styles. Allinson & Haynes (1996) presented additional comparative studies with the CSI supporting the prediction that the higher the analysis orientation, the greater their predilection for a structured, ordered, and impersonal work environment.

We would expect low congruence when an analytic owner is faced with organizational demands that are consistent with low formalization and structure. On the other hand, an individual with a dominant intuitive style would be better matched to this less formal type of work context than her/his more analytic counterpart. The key point is that analytic or intuitive styles will be more congruent, or better fitted, to different organizational work contexts and that individuals with more congruence will also experience better individual outcomes.

Coping with cognitive misfit

Decision-making style theory predicts that when individuals experience cognitive misfit, they will

employ certain specific coping behaviors to handle the conflict between their preferred decision-making style and the conflicting style demands being placed upon them. However, these coping behaviors are not sustainable, and there is a marked tendency for individuals to return to their preferred decision-making style (Kirton 1976). Exhibiting coping behavior is a source of great stress and, according to Kirton (1976), individuals required to sustain high levels of coping behavior (exhibiting behaviors associated with the non-preferred style) will eventually either 1) change the circumstances to suit their preferred, dominant style or, 2) form a team whose combined preferences cover expected problem situations.

In 1983, Vesper (p.40) introduced the idea that entrepreneurship can be viewed, in part, as a "path for pursuit for occupational happiness." Cooper and Artz (1995) have also suggested that the entrepreneur's level of satisfaction should be viewed as a basic measure of entrepreneurial performance. We argue that the same should be true for owners of family firms, that is, the satisfaction of the owner should be viewed as one (among many others) measure of performance. Examining the relationship between cognitive misfit and owners' satisfaction would appear to be extremely relevant to the study of family firms. In Person-Organization Fit studies, the outcome variable of overall (global) job satisfaction is also commonly employed. Several studies have demonstrated significant empirical relationships between different facets of P-O fit and job satisfaction (Cable & Judge, 1996; O'Reilly et al., 1991; Sims & Kroeck, 1994) with greater degrees of misfit being associated with lower levels of individual satisfaction. Thus, we offer the following hypothesis

Hypothesis 1. The interaction between individual decision-making style and firm formalization will be significantly associated with satisfaction. For less formal work environments, intuitive owners will experience higher satisfaction than those who are analytic; but for more formal work environments, intuitive owners will experience lower satisfaction than those who are analytic.

Another commonly studied outcome in the P-O fit literature is turnover. Chan (1996) found that cognitive misfit was a valid predictor of actual turnover. Where longitudinal data on actual turnover was unavailable, researchers have used intentions to leave as a proxy for turnover (Cable & Judge, 1996; O'Reilly et al., 1991). Both of these studies found that P-O fit was a significant predictor of higher expressed intentions to leave. Research has demonstrated that intentions are a reliable predictor of actual behavior in a variety of situations and are considered by many to be the most effective predictor of behavior (Ajzen, 1991; Ajzen & Fishbein, 1980; Bird, 1992). Owners that are required to sustain high levels of coping behavior over time may eventually change the circumstances to suit their preferred, dominant style (Kirton, 1989). One form of changing the circumstances would be to exit the organization.

Hypothesis 2. The interaction between individual decision-making style and firm formalization will be significantly associated with intention to exit. For less formal work environments, intuitive owners will express lower intent to exit than those who are analytic; but for more formal work environments, intuitive owners will express greater intent to exit than those who are analytic.

As designed in this study, the interaction term between decision-making style and formalization is an objective measure of fit. When an individual is in cognitive misfit, their perceived fit with the organization on relevant variables should also decrease. We would expect this to hold true especially on the perception of how well the owner's skills and abilities match the demands of the organization.

Hypothesis 3. The interaction between individual decision-making style and firm formalization will be significantly associated with perceived fit on skills and abilities. For less formal work environments, intuitive owners will express greater fit on skills and abilities than those who are analytic; but for more formal work environments, intuitive owners will express lower fit on skills and abilities than those who are analytic.

METHODS

Sample

Researchers at a large southwestern university collected the initial data used in this study between 1997 and 1999. Data were gathered in two ways. First, using the Internet, Chambers of Commerce were identified from cities across the nation and businesses from those cities were randomly selected to participate and were contacted by telephone. If there was a family business, they were asked to complete the survey. Twenty percent returned a completed survey. Second, for class credit, students asked family business owners to complete questionnaires about their businesses. Seventy percent of those business owners contacted by the students agreed to complete the questionnaires. The use of student informants to identify rare populations has been used in previous entrepreneurship research (Stewart, Watson, Carland, & Carland, 1999). The total original completed database consisted of 393 (182 student identified and 211 telephone identified) businesses. Comparison tests showed no significant differences in mean scores on key variables between the respondents identified through different methods.

In 2002, a follow up study on these firms that had completed the original survey was conducted. Through multiple contacts (both mail and phone), 211 of the follow up questionnaires were received. Additional contacts by mail, telephone, and the Internet verified that some businesses were no longer available for contact. Our effective response rate for the follow up survey was over 60 percent.

To test the hypotheses, it was necessary to further refine our sample. We used responses to ensure that our sample only consisted of respondents who had significant ownership in their firms (at least 15 percent), were involved in the day-to-day operations, and whose firms had at least one full time employee. This left 159 family business owners and their firms on which the analyses in this study were conducted.

VARIABLES AND MEASURES

Dependent variables

Satisfaction was measured using a scale developed by Quinn and Staines (1979), which is an established measure (see Price and Mueller, 1986: 220-223). The five items are detailed in the appendix, $a = .74$.

Intentions to Exit was measured using four items, each scored on a 7-point Likert-type scale. These items were employed by O'Reilly et al. (1991), who reported that a Principal Components Analysis yielded a single factor. The four items are detailed in the appendix, $a = .64$.

Perceived Fit - Skills. We used a single item measure, similar to the one used by Cable & Judge, 1996 to measure perceived fit on skills and abilities (in the appendix).

Main effects

Formalization was operationalized using a scale of eleven items (Hanks et al., 1994), $\alpha = .90$. The items are detailed in the appendix.

Decision-making Style: The CSI consists of 38 items, each requiring the subject to respond on a trichotomous true-uncertain-false scale (Allinson and Hayes, 1996). The CSI consists of 38 items, each requiring the subject to respond on a trichotomous true-uncertain-false scale. In the item analysis, a score of 0 is assigned for a response of false, 1 for uncertain, and 2 for true. This produces a theoretical range of scores from 0 to 76 and a theoretical mean of 38.5. Twenty-one of the items are worded in such a way that a response of "true" indicates an analysis orientation. The remaining 17 items are reverse scored. As a result, the closer the individual's total CSI score to the theoretical maximum of 76, the more analytical the respondent. Conversely, the nearer the total CSI score to the theoretical minimum of zero, the more intuitive the respondent.

To validate the CSI, Allinson & Hayes (1996) administered the CSI to seven different samples totaling almost 1000 subjects. Their findings suggested that the CSI measures a continuous variable that is approximately normal in its distribution. The internal consistency of the CSI was found to be high, with Cronbach's alpha coefficients ranging from .84 to .92 across the seven sample groups (Allinson & Hayes, 1996). Temporal stability was suggested by a test-retest coefficient of .90 for the one sample group that administered the retest. Both construct and concurrent validity were demonstrated in the initial validation study (Allinson & Hayes, 1996). A replication study to further validate the Cognitive Style Index was undertaken by Sadler-Smith, Spicer, and Tsang (2000). They reported similar reliability coefficients across seven different subject groups with a total n of over 1000. They concurred with the measure's designers that the CSI displayed both construct and concurrent validity and showed good reliability across a diverse range of samples (Sadler-Smith et al., 2000). For the current study, $\alpha = .86$.

Control variables

Following previous P-O Fit studies examining similar dependent variables (e.g., O'Reilly et al., 1991; Cable & Judge, 1996), we controlled for *owner's gender*, and *owner's age*. Owner experience was controlled for by using the variable *habitual*, and included the number of businesses the owner had founded, purchased or inherited over their career. We also controlled for whether or not the owner was the *founder* of the family business.

Additional controls included whether or not the firm had a *formal succession plan*. The final control was for *firm profitability*. This variable is a subjective measure of performance in which the respondent is asked about the profitability of his or her firm over the last 5 years. Inclusion of this variable as a control is important since a goal of this study is to identify the relationship between the interaction of cognitive style and work context in explaining the dependent variables over and above what may be explained by the financial performance of the firm. We followed Cooper & Artz (1995), who controlled for firm performance when looking at individual predictors of owner satisfaction.

RESULTS

Means, standard deviations, and intercorrelations for the variables used in the models are presented in Table 1.

As expected, the three dependent variables were significantly correlated with one another. However, these variables measure distinct constructs and it is important to look at each of these constructs individually. The relatively high mean score for satisfaction shows that overall, family business owners are a satisfied group. Also, they have relatively low intentions to exit the business. Average age of the respondents was 51 years. The incidence of habitual and portfolio entrepreneurs was slightly lower than other entrepreneurial samples (Brigham & De Castro, 2003).

The mean decision-making style (CSI) score for this sample of family business owners was 40.68. This is slightly to the analytic side of the theoretical general population mean of 38.5. The family business owners, as a group, possessed significantly more analytic scores than were found in a sample of non-family owners in entrepreneurial, high technology firms (CSI score = 32.06; Brigham & De Castro, 2003).

To test the hypothesized interaction effect, we used hierarchical regression analysis (Boal and Bryson, 1987) and the results are reported in Table 2. To reduce the possibility of multicollinearity between the main effects and their interactions, the independent variables were centered (Aiken & West, 1991) and diagnostics reported VIFs below 10, which indicated that multicollinearity was unlikely to be a problem. For *Satisfaction*, the main effects model does not make a significant contribution over and above the base model ($\Delta R^2 = 0.005, p > 0.05$). However, and as hypothesized, the full model makes a significant contribution over and above the main effects model ($\Delta R^2 = 0.031, p < 0.05$).

For the full model, the control variables of founder status, having a formal succession plan, and firm profitability were all significant. Both being a founder of the family business and having a formal succession plan were positively associated with satisfaction. Also, firm profitability ($p < .001$) was highly and positively associated with satisfaction. The additional variance accounted for by the interaction term (3.1%) is consistent with interaction effect sizes in both the psychology and

organizational behavior literature (1 to 3%, see Aiken & West, 1991). Interactions are very susceptible to measurement error and may greatly underestimate true effect sizes and sample sizes of approximately 400 are normally recommended for detecting small effects through interactions (Aiken & West, 1991). Given our relatively small sample, $n = 159$, the detection of a significant interaction is very encouraging. The overall R^2 for the model was .227. The interaction was plotted and is displayed in Figure 2a. The plot indicates that for less formalized work environments, intuitive owners experience higher satisfaction than those who are analytic, but for more formalized work environments, intuitive owners experience lower satisfaction than those who are analytic. This provides support for hypothesis 1.

TABLE 1
Means, Standard Deviations, and Correlations ^a

	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11
1. Satisfaction	4.05	.95											
2. Intention to Exit	2.05	1.45	-.60										
3. Perceived Fit (Skills)	4.30	12.63	.31	-.30									
4. Formalization	40.27	14.55	.11	.03	.13								
5. Decision-making (CSI)	40.68	12.25	-.12	.09	.03	.30							
6. Age	51.45	10.97	.10	.19	-.12	-.04	.03						
7. Gender (1=F, 2=M)	1.76	.43	.12	-.12	-.18	-.04	-.10	.11					
8. Habitual	1.20	1.89	.13	-.07	.03	-.06	-.17	-.03	.18				
9. Founder (1=Y, 2=N)	1.45	.49	-.14	-.07	-.08	.03	.13	-.19	.06	-.16			
10. Succession Plan (1=Y)	1.75	.44	-.20	.19	.01	-.37	-.10	-.07	-.25	.09	-.15		
11. Firm Profitability	3.18	.92	.32	-.34	.15	.25	-.09	-.08	.07	-.05	.14	-.20	

^a n = 159; Note: Correlations greater than .16 indicates p < .05

TABLE 2
Results of Hierarchical Regression Analyses: Interaction between Cognitive Style and Formalization with Satisfaction, Intentions to Exit and Perceived Fit

Variable	Satisfaction			Intentions to Exit			Perceived Fit (Skills)		
	Base Model	Main Effects	Full Model	Base Model	Main Effects	Full Model	Base Model	Main Effects	Full Model
(Constant)	3.354	3.418	3.510	2.271	1.917	1.790	5.515	5.060	5.140
Owner Age	.007	.008	.005	.016	.018*	.022*	-.009	-.008	-.011
Gender	.111	.094	.134	-.219	-.169	-.223	-.313	-.296	-.262
Habitual	.064	.059	.061	-.048	-.047	-.050	.020	.022	.024
Founder	-.325*	-.309*	-.302*	-.007	.016	.006	.175	-.177	-.171
Formal Succession Plan	-.316	-.337	-.362*	.310	.480*	.515*	-.054	-.012	-.034
Firm Profitability	.332***	.325***	.309***	-.369***	-.414***	-.392***	.145	.140	.126
Decision-making Style (CSI)		-.069	-.054		-.007	-.027		.026	.039
Formalization		-.004	-.032		.208*	.248*		.042	.018
Decision-making Style (CSI) X Formalization			.177*			-.246**			.153*
R ²	.191***	.196***	.227***	.159***	.184***	.225***	.077	.081	.116*
R ² Change	.191***	.005	.031*	.159***	.025	.041**	.077	.004	.035*

Unstandardized Beta Coefficients are reported (Following Aiken & West, 1991).

n = 159; *** significant at p < .001; ** significant at p < .01; * significant at p < .05

FIGURE 2a
Plot of Decision-making Style x Formalization on
Satisfaction

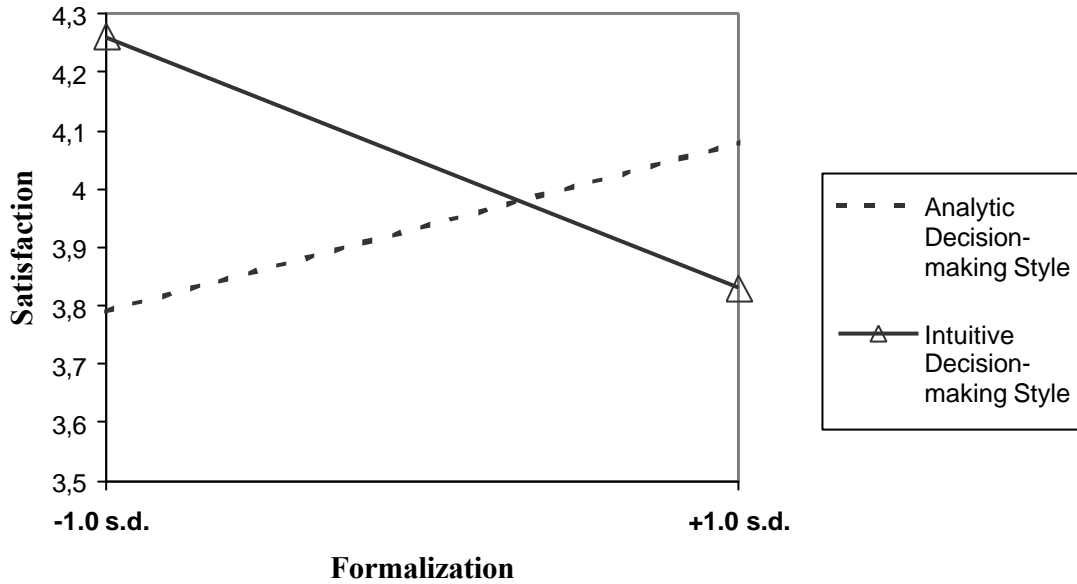


FIGURE 2b
Plot of Decision-making Style x Formalization on
Intentions to Exit

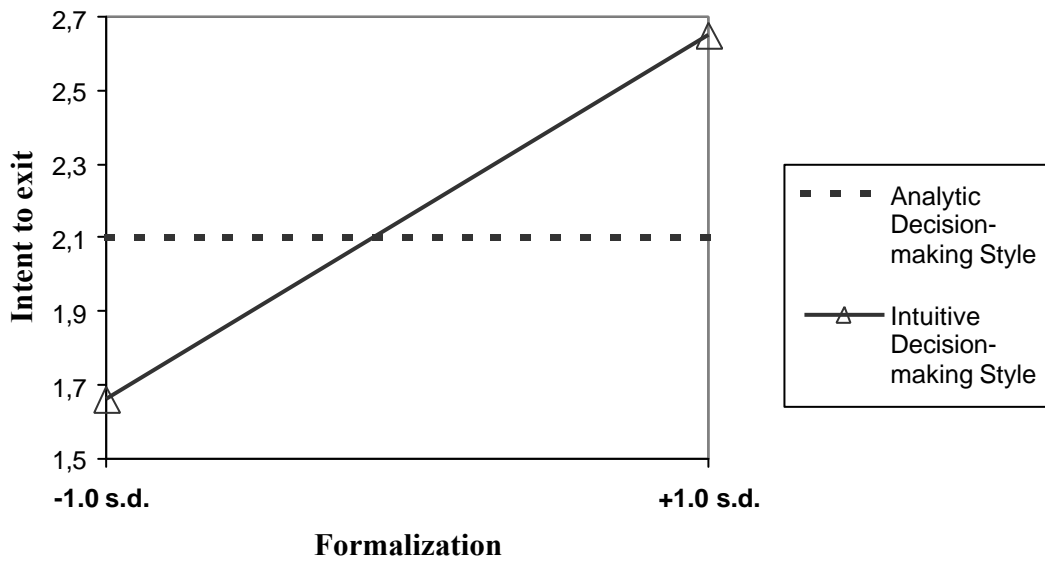
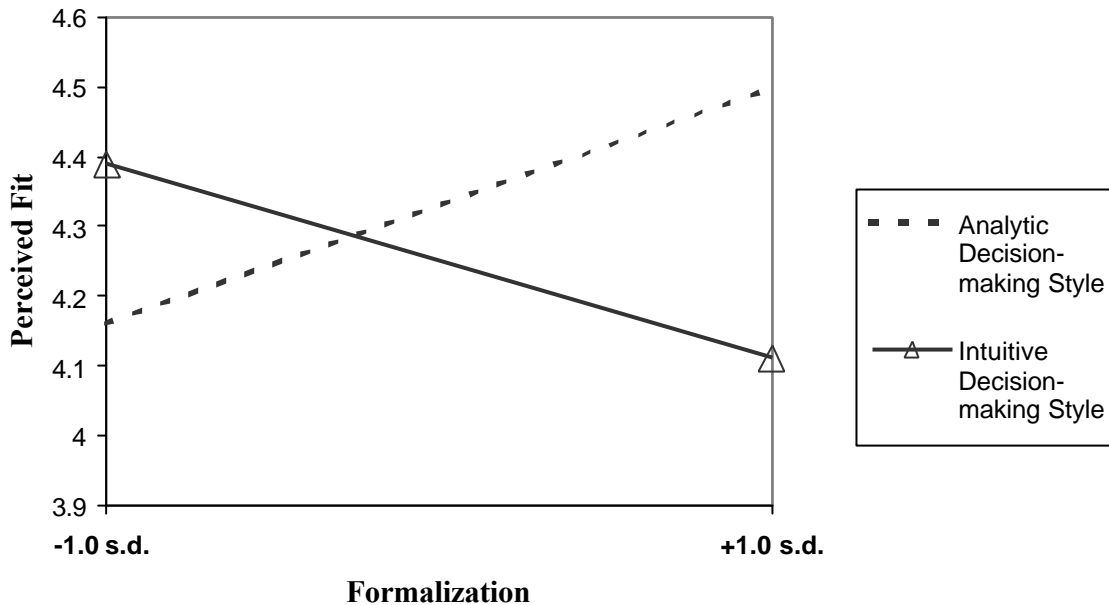


FIGURE 2c
Plot of Decision-making Style x Formalization on Perceived Fit



For *Intentions to Exit*, the main effects model does not make a significant contribution over and above the base model ($\Delta R^2 = 0.025, p > 0.05$), but the full model makes a significant contribution over and above the main effects model ($\Delta R^2 = 0.041, p < 0.01$). For the full model, the control variables of owner age, having a formal succession plan, and firm profitability were all significant. Owner age was positively associated with intentions to exit ($p < 0.05$); older owners were more likely to have greater intentions to exit the firm. Having a formal succession plan ($p < .05$) and firm profitability ($p < .001$) were negatively associated with intentions to exit. The additional variance accounted for by the interaction term was 4.1% and the overall R^2 for the model was .225. The interaction was plotted and is displayed in Figure 2b. The plot indicates that for less formal work environments, intuitive owners express weaker intentions to exit than those who are analytic, but for more formal work environments, intuitive owners express stronger intentions to exit than those who are analytic. This provides support for Hypothesis 2.

For *Perceived Fit*, the main effects model does not make a significant contribution over and above the base model ($\Delta R^2 = 0.004, p > 0.05$), but the full model makes a significant contribution over and above the main effects model ($\Delta R^2 = 0.035, p < 0.05$). For the full model, none of the control variables reached significance. The additional variance accounted for by the interaction term was 3.5% and the overall R^2 for the model was .116. The relatively low R^2 indicates that the controls in this model were not as good of predictors as in the previous models. However, the interaction was significant and is plotted and displayed in Figure 2c. The plot indicates that for less formal work environments, intuitive owners perceive greater fit between their skills and abilities and the demands of the firm than those who are analytic. Conversely, for more formal work environments, intuitive owners perceive greater fit between

their skills and abilities and the demands of the firm less than those who are analytic. This provides support for Hypothesis 3.

DISCUSSION AND CONCLUSION

In this study, we built and tested a model of owner to organization fit in family businesses. We found that the interaction between the owner-manager's decision-making style and the extent of formal organizational structure in their firm was significantly associated with the individual outcomes of satisfaction, intent to exit, and perceived fit. The model and findings make a contribution to both the family business and organizational behavior literatures.

There has been a recent surge of interest in entrepreneurs' cognition (Mitchell et al., 2002) and the role of context on cognitive processes (Baron, 1998), but entrepreneurship scholars have primarily steered away from investigating those individual differences that are relatively stable, such as cognitive style and, more generally, styles of thought. Our findings suggest that stable individual differences can play an important role in explaining entrepreneurial phenomenon and suggests an opportunity to take advantage of, and make a contribution to, recent developments in the field of psychology and organizational behavior.

A criticism of such research in the entrepreneurship context is that because these individual differences cannot be changed there are very limited practical implications. However, when we consider their interaction with the environment then there are important practical implications. While there is little that can be done to change one's cognitive style over an extended period, the work environment can be chosen and/or changed. Our research suggests that intuitive decision-making styles are well suited to the creation and early stages of organizational growth. However, intuitive styles may become a liability and less suitable to the tasks required as the organization matures and requires a more analytic style. If intuitive owners are aware of their dominant style and its relative strengths and weaknesses they may better prepare their succession/exit strategies (rather than have their exit forced upon them by other stakeholders). We speculate that such an approach may be reflected in the activities of many habitual owner-managers; individuals who found multiple businesses over their entrepreneurial careers (Westhead and Wright, 1998).

There are several implications of the results of this study for family business. One of the most quoted statistics on family business is that only 30% of family businesses transition to the second generation and only 10% to the third generation. Cognitive misfit may explain some of this failure to transition. Intuitive founders may become habitual entrepreneurs who develop and harvest multiple businesses over their careers. Those businesses may be family businesses. However, because the owner is happiest creating businesses, even though it is a family business, he/she may never have intended to keep the business in the family.

Another implication of this study has to do with possible extension of negative individual owner outcomes on employees and/or other family members. The results of this study suggest that cognitive misfit leads to lower levels of satisfaction for the owner. An unsatisfied owner who feels tied to a family business may express some resentment in a variety of ways to family members, leading to stress

and a lack of harmony among family members. This could have negative implications for family dynamics, succession planning, and eventual succession.

Furthermore, do poor individual owner outcomes on satisfaction extrapolate into negative firm level outcomes? Researchers have proposed that firms with more satisfied owners may likely outperform their less satisfied counterparts (Cooper & Artz, 1995). Whereas testing for links between cognitive misfit and firm performance was beyond the scope of this study, we believe that examining the survival and performance of family firms from a cognitive fit perspective is compelling future research direction.

The model testing in this study also complements work in the P-O fit literature, which has primarily focused on employees. We have expanded the traditional boundaries from the study of regular employees to owner-managers. This study demonstrates that relevant facets of P-O fit can be applied to other contexts; specifically, to the context of family businesses. This not only adds validity to the P-O fit approach and measures, but also opens some interesting avenues for future research. A logical first step would be to examine what other dimensions of fit in the P-O fit literature could be applied to better understanding the family business owner-manager?

This study, as with all studies, has a number of limitations and opportunities for future research. First, we focused on owners of small family firms. Care must be taken in generalizing our results to other populations. Second, we investigated intentions rather than behavior. Although there appears to be a strong link between the strength of an intention and subsequent behavior (Ajzen, 1991) and significant associations between intentions to exit and actual turnover have been demonstrated in the P-O fit literature (Chatman, 1991), we must acknowledge that other factors can intervene between intentions and behavior. Such investigations of behavior will require longitudinal designs.

Third, as is often the case with field survey studies, it is impossible to rule out common method bias. Same source bias is more common in certain types of questions than others even within the same self-reported instrument (Crampton & Wagner, 1994). Items asking for demographic information seldom exhibit effect-size inflation and more concrete constructs may be less susceptible than more abstract constructs (Podsakoff & Organ, 1986). Many of the items in this study are demographic or factual in nature. Also, great care was taken in the questionnaire to reduce all sources of bias possible through question creation, and ordering. In addition, common method bias is of less concern when we are interested in the individual's perceptions, rather than using their self-reports as a proxy for an objective measure, i.e., we are interested in the owner-managers' perceptions of the demands of their work environments because these perceptions drive their intentions. To try and determine if common method variance was a significant problem in our study, we conducted a Harman's single-factor test (Podsakoff & Organ, 1986). The basic assumption of this test is that if there is a large amount of common method variance present, it will emerge as a single factor in a factor analysis or a general factor will account for the majority of covariance in the independent and dependent variables. The results of the analysis indicated that there was not one large single factor or general factor explaining a majority of the variance. While common method variance cannot be ruled out, it was not detected to be a significant problem in this study.

Fourth, we focused on one specific dimension of fit, the interaction of decision-making style and work context demands. Much like measures of personality type are theorized to capture broad aspects of a person's overall personality, decision-making style attempts to capture an individual's broad,

characteristic approach to problem -solving. Decision-making styles are often conceptualized as high order heuristics. There are many more specific measures that capture intuitive and heuristic approaches to decision-making. Examining the interaction of these measures with the work environment or other aspects of the firm could also be useful in exploring the relationship between owners and their organizations.

Finally, the theory on decision -making styles proposes that the formation of teams is a mechanism for coping with non -preferred tasks (Kirton, 1989). While the design of this study did not allow for the examination of team compositions, this would appear a fruitful area for future research. For example, does the presence of other family members help or hinder in this regard? We can argue that if the family members are better suited for the non -preferred task, the mechanism could work, but in the family firm, the introduction of non -family members to the TMT can cause extra stresses, and family members might not be suitable or willing to perform those tasks. Moreover, do well -balanced family teams (from a decision-making style perspective) have greater overall levels of satisfaction and weaker intentions to exit (and lower turnover) than teams that are made up of members with similar styles? Does having a team with a range of styles and different from that of the owner effect survival and performance in family businesses? There is a growing body of research on decision -making style and teams within large organizations. Extending this research to the family business context is an important and very promising area for future research.

APPENDIX A

Formalization

With respect to your firm, please indicate how strongly you agree or disagree with the following statements:

	Strongly Agree			Strongly Disagree		
Formal policies and procedures guide most decisions.	?	?	?	?	?	?
Important communications between departments are documented by memo.	?	?	?	?	?	?
Formal job descriptions are maintained for each position.	?	?	?	?	?	?
The top management team is comprised of specialists from each functional area (e.g., marketing engineering, production).	?	?	?	?	?	?
Reporting relationships are formally defined.	?	?	?	?	?	?
Lines of authority are specified in a formal organization chart.	?	?	?	?	?	?
Rewards and incentives are administered by objective and systematic criteria.	?	?	?	??	?	?
Capital expenditures are planned well in advance.	?	?	?	?	?	?
Plans tend to be formal and written.	?	?	?	?	?	?
Formal operating budgets guide day-to-day decisions.	?	?	?	?	?	?

To what extent is the method of strategic decision making used by top management in your organization: *entrepreneurial* – where one individual makes decisions based on personal judgment.

professional – where functional specialists make decisions based on expertise and analytical tools.

? always entrepreneurial ? 50% entrepreneurial, 50% professional ? always professional

? frequently entrepreneurial ? frequently professional

Not at All Completely

Skills

To what degree do you believe your skills and abilities “match” those required by the job?

? ? ? ? ?

Satisfaction

All in all, how satisfied would you say you are with your job? (mark the appropriate box)

? Very Satisfied ? Somewhat Satisfied ? Not Too Satisfied ? Not At All Satisfied

If a good friend of yours told you that (he/she) was interested in working in a job like yours, what would you tell (him/her)? (mark the appropriate box)

- ? I would strongly recommend this job.
- ? I would have doubts about recommending this job.
- ? I would strongly recommend against this sort of job.

Knowing what you know now, if you had to decide all over again whether to take the job you now have, what would you decide? (mark the appropriate box)

- ? I would decide without any hesitation to take the same job.
- ? I would have some second thoughts.
- ? I would definitely decide not to take the same job

If you were free to go into any type of job you wanted, what would your choice be? (mark the appropriate box)

- ? I would want the job I have now.

- ? I would want to retire and not work at all
- ? I would prefer another job to the one I have now.

In general, how well would you say that your job measures up to the sort of job you wanted when you took it? (mark the appropriate box)

- ? It is very much like the job I wanted when I took it.
- ? It is somewhat like the job I wanted when I took it.
- ? It is not very much like the job I wanted when I took it.

Intentions to Exit

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?	?	?	?	?	?	?	?																		
How long do you intend to remain with this organization?																									
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If you have your own way, will you be working for this organization three years from now?																									
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To what extent would you prefer another more ideal job to the one you have now?																									
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To what extent have you thought seriously about changing organizations since beginning to work here?																									
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?	?	?	?	?	?	?																			

Habitual

How many other businesses have you been involved with, not counting this business, where you were a founder, owner or partner? _____

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