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Embedding Leader Traits: Leadership's Role in the
Creation of Organizational Culture

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Abstract

Many organizational scholars and theorists have speculated that leaders play a prominent role in the creation of their organization's culture. Through a variety of mechanisms, leaders are thought to transfer or embed their personality and values into their organizations. This study addresses the relationship between the personality and values of leaders and the personality and values of individuals whose selection they influenced, their organization's structural characteristics, and their organization's culture. The top executive leader from each of 32 organizations, along with 467 employee participants from these organizations completed personality, values and culture inventories. Results provide empirical support for assumptions by Schein (1992) and Schneider (1987). Leader personality and values profiles were related to profiles of personality and values shared by organizational members. Additionally, specific leaders personality and values scores were predictive of organizational culture values. Implications for leadership, organization change and effectiveness are discussed.

Embedding Leader Traits: Leadership's Role in the Creation of Organizational Culture

Organizational leadership and culture are highly related aspects of organizational life; both provide an organizing mechanism to guide behavior, reduce ambiguity, and bring order out of potential chaos. Organizational culture is a system-level construct rising from members' beliefs and interactions (James, James, & Ashe, 1990) that contains notions of shared values, mutual understandings, and patterns of beliefs and behaviors (Rousseau, 1990). Culture impacts nearly every aspect of organizational life by ensuring social order and creating commitment among the workforce (Trice & Beyer, 1993), as well as affecting outcomes such as productivity (Kopelman, Brief, & Guzzo, 1990), return on investment, return on sales and other financial performance indicators (Denison, 1990). Leaders are believed to be the primary influence on the creation and development of organizational culture (e.g., Bennis & Nanus, 1985; Kotter & Heskitt, 1992; Schein, 1992; Selznick, 1957; Schneider, 1987). The decisions that leaders make, particularly founders and leaders in the early stages of the organization's lifecycle, have a profound effect on the direction of the organization, types of people who become members of the organization, and the culture that emerges. Schein (1992) even suggests that the most important function of organizational leaders may be the creation and management of organizational culture.

Several theories of the relationship between leaders' personal characteristics and organizational culture exist (e.g., Hambrick & Mason, 1984; Kets De Vries & Miller, 1986; and Kotter & Heskitt, 1992). However two such theories, Schein's (1992) theory of culture and leadership, and Schneider and colleagues (Schneider, 1987; Schneider, Goldstein, & Smith, 1995) Attraction-Selection-Attrition (ASA) model provide concise and complementary perspectives on culture creation. According to Schein (1992) the culture formation process begins with the decisions of organizational founders who embed their assumptions in the organization through several primary embedding mechanisms, such as the things they pay attention to and criteria used to make decisions, and then further articulate and reinforce their assumptions through the use of several secondary mechanisms, such as the structures, systems, and processes they establish. Founders begin to embed their values and assumptions into the organization

through the goals they establish. Schneider's (1987) ASA model proposes that an organization's goals are an "operationalization of the personality of the organization's founders" (Schneider et al., 1995, p. 752), and these goals attract people who have similar personal characteristics as the founder. Founders then select an initial group of members that have similar personality traits, values, and assumptions (Schein, 1992; Schneider, et al., 1995). Leaders further reinforce the values and assumptions that are important for the organization through the structures, infrastructure, processes, and procedures they establish to guide behavior (Schein, 1992). These decisions result in the development of an organizational climate pertaining to "the way things are" in that particular organization. As assumptions and values become widely shared among members, a unique organizational culture emerges.

While there is much theoretical speculation about the link between leadership and organizational culture, there has been little empirical research in this area. This study seeks to address this gap by investigating the relationship between the personal characteristics of organizational leaders and their organization's culture. Specifically, this study investigates the similarity among leaders and the people whose selection they influence, the relationship between leader personal characteristics and organizational features (e.g., use of teams, types of rewards), and ultimately the link between leaders and organizational culture. These aspects of organizational life are part of the leadership process: selecting the right people, implementing the tools, processes and structures to get work done, and creating and fostering a culture consistent with the leader's values and beliefs.

Hypothesis 1a: The selection of similar others creates a representative organizational personality profile, such that the variance of personality characteristics within organizations is less than the variance of personality characteristics between organizations.

Hypothesis 1b: The selection of similar others creates a representative organizational values profile, such that the variance of individual values within organizations is less than the variance of values between organizations.

Hypothesis 1c: Organization's personality and values are similar to leader's personality and values profiles.

Hypothesis 2: Organizations' structures and systems are related to leaders' personality and values.

Hypothesis 3: There is a direct relationship between the leaders' values, and the values underlying an organization's culture.

Method

Participants

Leaders and their organizations were recruited for the study through three mechanisms, a) contacting clients from previous consulting engagements, b) personal referrals, or c) one of two 15-minute presentations regarding culture and leadership delivered by the author at a monthly meeting of business leaders in a large Midwestern city specifically prepared to solicit participation in the project. A total of fifty-three organizations expressed interest in and were subsequently invited to participate in this study, of which 33 (62%) organizations consented to participate and 32 organizations (60%) followed through with the process completely. In all cases, the organization's leader (president, CEO and/or owner) was contacted and personally invited to participate. Leaders were provided a brief description of the project, and those who volunteered their organization's participation completed a form letter indicating their understanding of the study and its requirements for participation. In exchange for their participation, leaders received a report summarizing the overall results of the study, and their organization's specific results. These reports were constructed to be shared with the employee participants in the organization as feedback for their participation. Beyond this report, neither leaders nor non-leader participants received any other remuneration.

The participating organizations consisted of small to mid-sized organizations, ranging in size from 8 to 1,000 employees (Mdn = 27), and with annual revenues of \$400,000 to \$310,000,000 (Mdn = \$13,250,000). Located in four states throughout the Midwestern U.S., the participating organizations, represented ten different industries, and had been in existence from 1 to 131 years (Mdn = 22). Thus, participants comprised a relatively heterogeneous sample, as organizations are included from a diverse range of industries and sizes.

Individual participants included the 32 organization leaders and 467 employees (255 male and 212 female) representing all organizational levels. Excluding the organization's leader, the number of participants from each organization ranged from 8 to 30 ($M = 14.5$). Leaders ranged in age categories from 25-30 to 51 years and over, with the majority in the 41-50 and 51 years and over categories, while non-leader participants ranged in age categories from 18-24 to 51 years and over, with the majority of participants in the 31-40 years age range. Leaders had been with their organization from 0-.5 to 11 or more years, with the majority of participants in the 11 or more years range. Moreover, 18 leaders were the actual founder of their organization. Non-leaders participants had been with their organization from 0-.5 to 11 or more years, with the majority of participants in the 5-10 range.

Measures

Personality. Personality was measured using Goldberg' (2000) 50-item Big-Five personality inventory, which contains five 10-item subscales: extraversion, agreeableness, conscientiousness, emotional stability and intellect or openness to experience. This publicly and freely available inventory was derived from the International Personality Item Pool (IPIP), a pool of 1,252 English terms, and provides a short scale that addresses the Big-Five makers (Goldberg, 1992, 1997). These markers provide measures of the Big-Five domains and are considered criterion indicators of the FFM (Hogan & Hogan, 1995). Acceptable internal consistency reliabilities were reported for each of the scales, with mean alpha across scales of .84. Responses were anchored along a 5-point response scale, 1 = strongly disagree to 5 = strongly agree.

Values. Individual values were measured using a recently developed values measure (Smith, Grogan, & Dickson, 2000). The instrument provides a brief measure of individual values and motives, and is designed to be comparable to the Motives, Values, Preferences Inventory (MVPI; Hogan & Hogan, 1996). The Smith et al. (2000) values measure assesses 10 values, however it contains 64 items (ten subscales of 5 – 8 items each) compared to 200 items on the MVPI. The ten values include: aesthetic, affiliation, benevolence, economic, hedonistic, power, security, status, theoretical, and tradition. Internal consistency reliabilities were reported for each of the scales, with mean alpha across scales of .74. As with

the personality measure, responses were anchored along a 5-point response scale, 1 = strongly disagree to 5 = strongly agree.

Culture Values. The Competing Values Instrument (CVI) (Zammuto & Krakower, 1991) was used to measure organizational culture. Quinn and Kimberly (1984) assert that organizations are unlikely to have a value system completely characterized by one of the four cultural values, and are more likely hold a combination of values, with certain values emphasized more strongly than others. In line with this logic, the CVI is an ipsative measure intended to provide a rank order of the four values in an organization (Zammuto & Krakower, 1991). The instrument presents descriptions of four organizations across five different areas (e.g., organizational character). Within each of the categories, respondents are asked to determine which of the four organizations is more like their own organization by distributing 100 points across the organizations. Acceptable internal consistency reliabilities were found, with mean alphas across scales = .78.

Organizational Demographics. Organizational features were identified using an Organizational Demographics (OD) questionnaire developed specifically for this project. Unlike the personality, values, and culture measures, the OD questionnaire was completed by only one individual. The survey asked the respondent to indicate a) the use of formal teams, b) the use of informal teams, c) the use of gainsharing plans, d) the use of incentive pay, e) if pay increases were based on individual performance or seniority, f) having planned social events, g) the number of planned social events, h) the number of management levels, i) time since last reorganization, and j) use of formal recognition of employee birthdays. A copy of this survey is available from the author.

Procedure

Organizational leaders completed a brief organizational background questionnaire and indicated the number of employees who would subsequently be asked to participate in the study. Leaders were instructed to request the voluntary, anonymous participation from employees that the leader influenced their selection into the organization. A package was prepared for each respective organization containing an instruction sheet for the leader, a leader package, the requested number of employee participant packages, a tracking

sheet, and the OD questionnaire. Each participant and leader package included a participant demographic questionnaire, the personality measure, the values measure and the culture survey. In all packets (leader and employee participant) the participant demographics survey was the first survey (to ensure completion), with the values, personality, and culture measures included in random order to control for any order effects. Those participants who agreed to participate completed their surveys, sealed them in a provided envelope, and returned them to the leader or their designate to return to the author. In all, 92% of participant packets were returned completed. The leader was also asked to select a non-participating employee (where feasible) to complete the OD questionnaire. While the OD questionnaire was designed to capture verifiable information, having a non-participating person complete the survey helped to avoid any potential single-source effects. To ensure the accuracy of information, follow-up telephone calls were made to 5 organizations (15%).

The requirements of the study necessitated that leader responses be known to the researcher, therefore, anonymity of leader data was not possible. However, data for all employee participants were anonymous. Leaders were asked to read and sign a form granting consent to the author to collect data from the members of their organization. Employee participants received a letter explaining the purpose of the study, the process to ensure their anonymity, and an explanation of informed consent. Non-leader participants were not asked to sign a consent form, which increased anonymity and avoided potential issues during the analysis phase (e.g., decisions about what to do if an organization returns 15 completed surveys with only 10 separate consent forms).

Results

Hypotheses 1a, 1b, and 1c suggest that members of an organization hold similar personality and values profiles. Testing of these hypotheses necessitated that individual-level data be aggregated into a higher-level construct, in this case a mean or “representative” score (simply the mean trait score for all non-leader participants within each organization) for each trait for employee participants within each organization. To justify the validity of the representative trait scores, sufficient within-group agreement must be demonstrated (Klein & Kozlowski, 2000). Index I_{wg} (James, Demaree and Wolf, 1984) was

calculated by trait for each organization to determine if sufficient within organization agreement existed. The index r_{wg} assesses the extent to which individual responses within an organization differ significantly from a random distribution, indicating the extent to which the mean organizational response is representative of all participant responses. Using the .7 or greater rule of thumb, acceptable r_{wg} scores values for non-leader personality and values traits were found in most organizations. For the personality traits, acceptable levels were found in 24 to 32 organizations. For the values, a slightly higher number of organizations achieved acceptable levels ranging from 28 to 32 organizations. It was concluded that a generally acceptable level of agreement regarding personality or values was found within each of the organizations¹.

Hypotheses 1a and 1b, suggest that the variability of non-leader personality and values is larger between organizations than within organizations. Separate multivariate analyses of variance (MANOVAs) were conducted using SPSS's General Linear Model (GLM) procedure to test homogeneity of personality and homogeneity of values. Organizational membership was entered as the fixed variable, and either the Big-Five or values scores were entered as multiple dependent variables. Using the Wilk's Lambda multivariate criterion, an overall significant result was identified for both the personality ($\lambda = .10$; $p < .001$) and values ($\lambda = .11$; $p < .001$) MANOVA procedures. A significant main effect for organizational membership was found for three of the five personality traits, agreeableness ($F = 2.79$; $p < .001$), extraversion ($F = 2.67$; $p < .001$), and emotional stability ($F = 1.38$; $p < .087$). The observed power for each dependent variable (i.e., personality trait) ranged from .84 (Conscientiousness) to 1.0 (Extroversion and Agreeableness). Thus, partial support was found for hypothesis 1a. All main effects for organizational membership were significant at the $p < .1$ or greater level. The observed power for each dependent variable (i.e., value) ranged from .99 to 1.0. Hypothesis 1b was supported.

The overall significance of the MANOVAs and acceptable r_{wg} scores justified aggregation of individual personality and values score to create representative organizational personality and values

¹ The author would like to acknowledge that space limitations required prudence when selecting where tabled presentation of data were absolutely required throughout this section.

profiles. Two sets of analyses were then conducted to determine if the representative personality and values profiles of non-leader members were related to leader personality and values profiles. First, to identify the impact of individual personality and value traits, zero-order correlations were calculated across organizations by trait to determine the relationship between specific leader and organizational traits. Personality and values scores were included on a case-by-case basis by organization where $r_{wg} = .7$ or greater. For example, when calculating the correlation between leader and organizational emotional stability scores, only the 27 organizations achieving r_{wg} of .7 or greater were included in the analysis. Regarding personality, a significant relationship between leaders and organizational traits was found only for agreeableness ($r = .34$; $p < .03$). Significant correlations between leader and organizational traits were found across four of the values, aesthetic ($r = .35$; $p < .03$), benevolence ($r = .43$; $p < .01$), hedonistic ($r = .25$; $p < .09$), and security ($r = .26$; $p < .07$).

A final analysis was conducted to further investigate the relationship between leader and organizational personality and values by analyzing the within-organization patterns of similarity between leader and representative trait scores. This was accomplished through an organization-by-organization correlation across all personality and values trait scores, and then averaging these scores across organizations using r -to- z transformation. The purpose for this analysis was to understand the relationship across all traits within organizations, as similarity and homogeneity in each organization could take on different meaning. Within organization correlations ranged from $r = -.40$ to $.87$ ($M = .48$; $p < .05$). Within organization correlations were positive for 29 of the 32 organizations, and positive and significant for 26 organizations. Results of the r to z transformation were also significant across these 26 organizations ($M = .53$; $p < .05$). Based on the three sets of analyses, hypothesis 1c was generally supported.

To test hypothesis 2, zero-order correlations between leader personality and values, and the organizational demographics were conducted. Only 9 of the 165 correlations were significant at the $p < .05$ level. An additional 3 correlations were significant at the $p < .10$ level. The number of significant correlations identified is close to what would be expected by chance alone, therefore it was concluded that hypothesis 2 was not supported. Interesting personality and organizational demographic correlations

include: emotional stability and the use of teams ($r = .32$; $p < .05$), and extraversion and performance-based pay raises ($r = .35$; $p < .05$). Interesting value and organizational demographic correlations include: economic values and the use of gainsharing programs ($r = .40$; $p < .05$).

Table 1 presents a correlation of leader personal characteristics and culture values. Four separate hierarchical regression equations were run to test the relationships between leader values and organizational culture values. For each equation, the hypothesized leader values were entered as a block of variables. The specific traits were selected based upon a rational analysis of the culture and values definitions. The hypothesized leader values explained a significant portion of variance only for rational cultures, with leader theoretical and status values accounting for approximately 25% of the variance in rational culture values. A closer look at the beta weights indicated that status values positively related to rational culture values ($B = .345$; $p < .05$), while theoretical values were negatively related to rational cultures ($B = -.317$; $p < .061$). Limited support was found for the specified relationships in hypothesis 3.

Table 1
Test of Hypothesis 3 Predicting Culture Values from Leader Values

Variables Entered	B	SE	R ²
Group Culture			
Affiliation	.192	20.022	.098
Benevolence	.199	29.329	
Developmental Culture			
Economic	.078	11.126	.006
Rational Culture			
Status	.345**	11.191	.252**
Theoretical	-.317*	12.690	
Hierarchical Culture			
Power	-.267	15.627	.069
Security	.070	16.871	
Tradition	.018	12.107	

* $p < .10$. ** $p < .05$. *** $p < .01$. $N = 32$. Standardized betas are reported.

Exploratory analyses were conducted to further examine the relationships between leaders’ personal characteristics, and organizational culture values. This set of analyses allowed for a more in-depth exploration to identify the best predictors of cultural type. These results are listed in Table 2. Analyses were conducted

using a forward stepwise procedure that allowed SPSS to enter variables one at a time based on the amount of variance accounted for with p set at .05. Leader agreeableness and theoretical values predicted group culture values, ($R^2 = .38$; $p < .01$). Beta weights indicated that both variables were positively related to group culture values. Leader emotional stability was the only predictor of developmental culture values ($R^2 = .14$; $p < .05$), and beta weights indicated this relationship was negative. Leader agreeableness and status values together were predictors of rational culture values ($R^2 = .30$; $p < .01$). Beta weights indicated a negative relationship for agreeableness and a positive relationship for status values. Leader theoretical values and extraversion predicted hierarchical culture values ($R^2 = .27$; $p < .01$), with both traits negatively related to hierarchical values. These results, while exploratory in nature, provide evidence of the relationship between leader’s personal characteristics and organizational cultures.

Table 2

Exploratory Stepwise Hierarchical Regression Equations Predicting Culture Values from Leader Personality and Values

Step	Variables Entered	<u>B</u>	<u>SE</u>	Total <u>R</u> ²	<u>Δ R</u> ²
Group Culture					
1	Agreeableness	.517***	14.791	.267***	
2	Theoretical	.335**	15.375	.377***	.110
Developmental Culture					
1	Emotional Stability	-.368**	8.962	.136**	
Rational Culture					
1	Agreeableness	-.431**	11.748	.186**	
2	Status	.336**	10.847	.296***	.111
Hierarchical Culture					
1	Theoretical	-.397**	11.317	.157**	
2	Extraversion	-.340**	9.656	.272***	.115

* $p < .10$. ** $p < .05$. *** $p < .01$. $N = 32$. Standardized betas are reported.

Discussion

The purpose of this study was to empirically examine the relationship between leaders and their organization’s culture, by testing several key assumptions set forth by Schein (1992) and Schneider and colleagues (1987, Schneider et al., 1995). Findings indicate that leaders’ personality and values traits were similar to the representative characteristics of people whose selection they influenced, and to their

organizations' cultural values. Surprisingly, few meaningful relationships between leader personal characteristics and organizational demographics were found. However, a number of the identified relationships were clearly interpretable. While little support was found for the hypothesized relationships between leader values and culture values, exploratory analyses indicated that specific leader personality traits and values accounted for a statistically and practically significant amount of variance in culture values.

This study also extends the work of Schneider et al. (1998) by providing additional support for the homogeneity hypothesis using different measures of individual traits, and broader samples of organizational members. First, homogeneity of personality was assessed using a Big-Five personality measure, which is a more accepted taxonomy of individual dispositional differences than the Myers-Briggs Type Indicator (MBTI; Myers & McCaulley, 1985), and also allowed for the investigation of trait-specific differences between organizations. A significant organization main effect was found for extraversion and agreeableness with $\alpha = .05$, and also emotional stability with α extended to $.10$. Second, this study extended the investigation of trait homogeneity to the realm of individual values. Significant organization main effects were found for all ten values at $\alpha = .05$. And third, the higher-level constructs of organizational representative personality and values were calculated by averaging member trait scores across all organizational levels, whereas the archival data used in the Schneider et al. (1998) investigation only allowed them to assess the homogeneity of management-level personnel. These results provide evidence that trait homogenization occurs across organizational levels. These results are further supported by the results of the r_{wg} analysis. A high level of within organization agreement was found across all personality traits in all organizations ($\underline{M} = .82$) and all values in all organizations ($\underline{M} = .85$). Together these results suggest that organizations can be differentiated via the representative personality traits and values of individuals selected by leaders, which addresses a concern of Schaubroeck, Ganster, & Jones (1998) regarding the specificity of traits along which organizations become homogeneous. Three of the Big-Five personality traits, and all ten of the individual values were identified as meaningful traits along which to study organizational homogenization.

Organizations in this sample could not be differentiated based on two of the personality traits, conscientiousness and openness to experience. These results are not surprising. The two main facets of conscientiousness include achievement striving and duty or methodicalness (Jackson, Ashton, & Tomes, 1996; Jackson, Paunonen, Fraboni, & Goffin, 1996). Highly conscientious individuals likely have a proclivity to engage in behaviors that make them better employees. Meta-analytic reviews and empirical investigations of personality and job performance have consistently identified conscientiousness as a strong predictor of performance and career success across nearly all types of jobs in all types of settings (e.g., Barrick & Mount, 1991; Judge, Higgins, Thoresen, & Barrick, 1999; Mount, Barrick, & Stewart, 1998; Ones, Viswesvaran, & Schmidt, 1993; Salgado, 1997). Moreover, facets of conscientiousness are related to extra-role, pro-social behaviors, such as organizational citizenship behavior and citizenship performance (e.g., Organ, 1994; Borman & Penner, 2001). It seems logical that organizations would seek individuals who have high levels of this trait, thereby restricting the variance across organizations. Additionally, openness to experience is related to being imaginative, intelligent and somewhat unconventional (Costa & McCrae, 1992). Organizational leaders in this sample may have consciously selected individuals who were high in conscientiousness and openness to experience, to ensure members can successfully fulfill broadly defined roles in smaller organizations. A closer look at the data indicated that the average non-leader conscientiousness ($M = 3.99$; $SD = .565$), and openness to experience ($M = 3.71$; $SD = .514$) scores were high.

Results indicated that member values were somewhat better discriminators of organizations than personality traits. Personality traits are believed to be a relatively enduring set of personal characteristics, and recent findings by Judge et al. (1999) demonstrated high correlations for Big-Five traits across individual life span. Homogeneity of personality is likely more directly a result of the ASA cycle, while value trait homogeneity is likely a combination of the ASA process and the socialization process. Values are believed to be a product of social phenomenon (Kluckhohn, 1951; Rokeach, 1973) with environmental forces such as organizational socialization practices influencing individually held values (Chatman, 1991; Cable & Parsons, 2001). The homogeneity of values likely occurs through two steps, the ASA process

results in similar individuals being attracted to, selected by and remaining with the organization, and the socialization process smoothes off the rough edges to ensure a good “fit.” The interactive effects of the ASA cycle and social processes in the environment may combine to increase the within organization similarity of values, making values a more useful set of traits on which to study the homogeneity hypothesis.

A key assumption of the culture theorists and ASA theory is that leaders select others who have similar characteristics as themselves. The within organization correlation of traits averaged .48 across organizations, suggesting relatively high within organization congruence. Analyses of specific traits were less conclusive. The results from the tests of Hypothesis 1c suggest that organization leaders select individuals with similar characteristics as themselves, and the characteristics that leaders focus likely differ somewhat by organization. For example, one leader may select similar others in terms of agreeableness, openness, affiliation, and tradition. Collectively, these traits distinguish the organization from others. Another leader may select members based on a completely different series of traits, which results in a different underlying pattern of trait homogeneity that would not be revealed through trait-by-trait analysis across organizations.

Few relationships were found between leader personality and values, and organizational demographic features, and the relationships that were discovered may have been due to chance given the large number of correlations computed. However, several interesting correlations were found. Among the personality variables, emotional stability was positively related to the use of teams. Emotional stability had been found to be related to team performance, viability, and social cohesion (Barrick, Neubert, Stewart, & Mount, 1998). Additionally, Turban and Keon (1993) who found that lower self-esteem individuals were more attracted to centralized organizations. It is likely that individuals low in emotional stability are less secure, have lower self-esteem, and are less willing to give up decision making controls by implementing a more decentralized, team-based work structure. Additionally, leader extraversion was positively related to the use of performance-based pay increases. While extraversion is typically viewed in terms of sociability, it also contains a urgency component that deals with dominance and ambition, and an activity component

that deals with assertiveness (Watson & Clark, 1997). Leaders with higher levels of extraversion are likely to view pay increases as something that employees need to earn as opposed to being entitled to. These leaders will likely reward performance over seniority. Leader economic values were positively related to the use of gainsharing plans. Individuals who score high on measures of economic values are interested in financial prosperity and motivated to seek opportunities for financial growth (Smith et al., 2000). It is likely that leaders who score high on measures of economic values would use gainsharing arrangements as a motivation mechanism to align employee interests with organizational interests.

There are a few plausible reasons for the failure to find a stronger relationship between leader characteristics and organizational demographics, including inadequate operationalization of the demographic features or the lack of a true relationship between leader characteristics and organizational features. The primary challenge in operationalizing organization demographics was to identify features or processes that could exist in any size organization, in any industry or geographic region. Ideally, aspects of the organization that leaders can change and implement without restriction needed to be identified and captured, allowing the organization features to vary according to the leader's unique personality and values. Perhaps these were not captured adequately, or key aspects of organizational demographics were missed. Conversely, there may be a weak relationship between founder characteristics and organization demographics. Several factors that can determine an organization's demographic features, such as industry norms, union requirements, customer requirements, organization size, production technology, and the nature of the workforce. The influence of the leader's personal characteristics would be over-determined to the extent that leaders, like other individuals with similar personalities, tend to be attracted to specific industries and jobs (Holland, 1976, 1985). Therefore, the leader's personal characteristics may influence which industry they choose to work in and the nature of the work performed, which indirectly influence the organization's demographic features. Leaders do not uniquely create their organization's features. They are attracted to a type of work and to an industry, in part due to a fit with their personal characteristics. The nature of the work and industry also influences the particular types of organization structures and features that need to be implemented for the organization to prosper.

Findings indicated little support for the specific relationships between leader values and culture values identified in hypothesis 4. Only rational culture values were predicted by the hypothesized leader status and theoretical values. However, exploratory analyses revealed interesting and useful relationships between leaders' personality and values, and organizational culture.

Leader agreeableness ($B = .517$; $p < .01$) and theoretical values ($B = .335$; $p < .05$) combined to be the best predictors of group cultures, accounting for approximately 38% of the variance. Group cultures are characterized by a focus on group cohesion, attachment to others, supportive leadership styles, and the development of human resources (Zammuto & O'Connor, 1992). Agreeableness is associated with cooperativeness and concern about relationships with others (Hogan & Hogan, 1995), and has found to be related to group cohesion and viability (Barrick et al., 1998). Additionally, theoretical values are associated with a desire to learn and explore, which would likely lead to a concern for the development of organizational members. It seems logical that leaders who score high on agreeableness and theoretical values would implement a culture focused on cohesion and attachment.

Leader emotional stability was the only predictor of developmental culture scores ($B = -.368$; $p < .05$) accounting for approximately 13% of the variance. Developmental cultures are characterized by assumptions of growth, risk taking, change, and adaptability (Zammuto & O'Connor, 1992). Individuals lower in emotional stability are characterized as experiencing a greater range of emotions more often than those who have higher levels of emotional stability (Hogan & Hogan, 1995). The fast paced environment that is a result of a developmental culture is likely to appeal to less emotionally stable leaders. These leaders may crave excitement and change, and would select an industry that requires it, then create a culture to excel in that industry.

Leader agreeableness ($B = -.431$; $p < .05$) and status values ($B = .336$; $p < .05$) accounted for approximately 29% of the variance in rational culture scores. Rational cultures are externally focused, goal-oriented, and value competence and efficiency (Zammuto & O'Connor, 1992). Rational and group culture types represent opposite ends of a continuum in terms of flexibility versus control, internal versus external and concern for people versus concern for production. Interestingly, high and low leader agreeableness scores

were strong predictors of each culture type. While group cultures, focus on a concern for people, rational cultures focus on what people can do to make the organization more efficient and more competitive. Individuals who score low on measures of agreeableness tend to be rational and competitive (Hogan & Hogan, 1995). In addition, status values are associated with a desired to achieve, be visible, and be known. The combination of low agreeableness and high status values seems to be logically related to rational culture values.

Finally, hierarchical cultures were predicted from leader theoretical values ($B = -.397$; $p < .05$) and extraversion ($B = -.340$; $p < .05$), which combined to account for approximately 27% of the culture score variance. Hierarchical cultures are cautious, conservative, routine, and control-oriented. Theoretical values focus on innovation and continuous learning (Smith et al., 2000). Highly extraverted individuals tend to be aggressive and ambitious (Hogan & Hogan, 1995) and likely have little regard for rules. Leaders who are less theoretical and less extraverted are probably more likely to implement a culture that values stability, control, and a rules-orientation.

Personality traits tended to be stronger predictors of culture values than individual values, which appears to support Judge and Cable's (1997) finding of a relationship between personality traits and preferences for organizational cultures. Perhaps the more enduring and stable personality traits are better predictors of culture, which is a stable characteristic of organizations. An alternative explanation involves the wording of the survey items. Statements on the CVI are written as behaviors and outcomes, rather than as value propositions (e.g., Organization A distributes its rewards fairly equally among its members. It's important that everyone from top to bottom be treated as equally as possible.) (Zammuto & Krakower, 1991). The CVI appears to infer values via the behaviors and outcomes visible in the organization. The statements on the personality inventory are also written in behavior terms (e.g., I don't talk a lot.), which may provide a more similar level of abstraction to the CVI than preferences, motives or values. Therefore, it may be that the personality and culture instruments were more similar in construct terms, allowing better prediction of organization culture scores via personality rather than leader values scores.

Limitations and Suggestions for Future Research

The nature and size of the sample of participating organizations are perhaps the most explicit limitations of this study. The sample of convenience raises questions about the generalizability of results due to the lack of random (or even randomized) sampling procedures. The nature of the project itself required that a request be made of organization leaders to solicit their participation. It is a rare luxury to be able to randomly select from organizations meeting the criteria for participation in studies such as this, and may even represent a practical impossibility. Additionally, while data were compiled based on 499 individual participants, only 32 separate organizations were represented. Many of the analyses were conducted using a relatively small sample size ($N = 32$), providing somewhat limited power. However, even given these limitations the study does advance our understanding of organizational culture and provides initial support for the notions of several culture theorists, as well as further support for Schneider's (1987) ASA model.

Schein (1992) suggests that basic assumptions influence values, which influence artifacts, which influence assumption, and so on. Climates emerge which influence culture, which influence climates, which influence the types of people attracted to an organization, which influence the culture, and so on. Attempts to isolate the true causal direction of this relationship are difficult. However, the process begins somewhere. Organizations are founded and led by individuals who have personalities and values, and these characteristics are likely influential in the development of the nascent organization.

Future studies could expand these results by using refined measures of organization features and alternative research designs. Measurement of organization structure and outcomes could build on the work of Lorsch (1970), to identify organizational features that could be found in organizations regardless of size. Utilizing such standard measures of organization structure could more clearly reveal the relationship between leaders and organizational features.

Given that organizations develop and change over time, additional research could take a longitudinal approach to investigate the process of culture creation. Researchers could empirically and clinically track the steps organizational founders and leaders take to transmit their personality and values

into their organization's culture. Of critical interest would be the choices and decisions founder / leaders make throughout the first few years of their organization's lifecycle. The researcher should use standard questionnaires and other tools to track which structural features are put into place, and at what stage in the organization's lifecycle they are implemented. Without a longitudinal perspective, the true process of culture formation is likely to be misrepresented.

Conclusions

These findings demonstrate that leaders have a significant role in the creation of their organization's culture, and perhaps more importantly, that organizations themselves may be a reflection of their leader. Results provide some indication of how the "people make the place" suggesting that "leaders choose the people who make the place." Practically applied, these results may explain some of the struggles organizations face when attempting major change and improvement initiatives. Given the key role of leader characteristics in shaping the organization's they lead, perhaps organizational change cannot be achieved without a change in top-level leadership. It may be that changing leadership based upon competence as well as personal characteristics may be a key factor that enables an organization to change.

And finally, these findings demonstrate the multilevel nature of organizational phenomenon, highlighting the need for multilevel models to address the cross-level influence of individuals, groups, and organizational factors. Gaining a better understanding of the contextual influences of organizational and unit phenomenon on individual behavior, as well as the emerging influences of individual characteristics on group and organizational activities will likely enhance our understanding of performance, development, and change initiatives at both the individual and organizational level.

References

- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. Personnel Psychology, *44*, 1-26.
- Barrick, M. R., Stewart, G. L., Neubert, M. J., & Mount, M. K. (1998). Relating member ability and personality to work-team processes and team effectiveness. Journal of Applied Psychology, *83*, 377-391.
- Bennis, W. & Nanus, B. (1985). Leaders. New York: Harper & Row, Pub.
- Borman, W. C., & Penner, L. A. (2001). Citizenship performance: Its nature, antecedents, and motives. In B. W. Roberts & R. Hogan (Eds.), Personality psychology in the workplace, (pp. 45-61). Washington, DC: American Psychological Association.
- Cable, D. M., & Parsons, C. K. (2001). Socialization tactics and person-organization fit. Personnel Psychology, *54*, 1-23.
- Chatman, J. A. (1991). Matching people and organizations: selection and socialization in public accounting firms. Administrative Science Quarterly, *36*, 459-484.
- Costa, P. T., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, FL: Psychological Assessment Resources.
- Denison, D. R. (1990). Corporate culture and organizational effectiveness. New York: Wiley.
- Dickson, M. W., Smith, D. B., Grojean, M. W., & Ehrhart, M. (in press). Ethical climate: The result of interactions between leadership, leader values, and follower values. Leadership Quarterly.
- Edwards, J. R. (1993). Problems with the use of profile similarity indices in the study of congruence in organizational research. Personnel Psychology, *46*, 641-665.
- Edwards, J. R. (1994). The study of congruence in organizational research: Critique and proposed alternative. Organizational Behavior and Human Decision Processes, *58*, 51-100.
- Goldberg, L. R. (1990). An alternative "description of personality": the big-five structure. Journal of Personality and Social Psychology, *59*, 1216-1229.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. Psychological Assessment, *4*, 26-42.

Goldberg, L. R. (1997). A broad-bandwidth, public-domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), Personality psychology in Europe, Vol. 7. The Netherlands: Tilburg University Press.

Goldberg, L. R. (2000). International Personality Item Pool. [On-Line]. Available: <http://www.ipip.org>.

Hambrick, D. C. & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top management. Academy of Management Review, *9*, 193-206.

Hirsch, P. M. (1986). From ambushes to golden parachutes: Corporate takeovers as instances of cultural framing and institutional integration. American Journal of Sociology, *9*, (4), 800-837.

Hogan, R., & Hogan, J. (1995). Hogan Personality Inventory manual. Tulsa, OK: Hogan Assessment Systems.

Hogan, R., & Hogan, J. (1996). Motives, values, and preferences inventory manual. Tulsa, OK: Hogan Assessment Systems.

Holland, J. R. (1976). Vocational preferences. In M. D. Dunnette (Ed.), Handbook of industrial and organizational psychology, 521-570. Chicago, IL.: Rand-McNally.

Holland, J. R. (1985). Making vocational choices: A theory of careers. Englewood Cliffs, NJ: Prentice-Hall.

Jackson, D. N., Ashton, M. C., & Tomes, J. L. (1996). The six-factor model of personality: Facets from the Big Five. Personality and Individual Differences, *21*, 391-402.

Jackson, D. N., Paunonen, S. V., Fraboni, M., & Goffin, R. D. (1996). A five-factor versus six-factor model of personality structure. Personality and Individual Differences, *20*, 33-45.

James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group inter-rater reliability with and without response bias. Journal of Applied Psychology, *69*, 85-98.

James, L. R., James, L. A., & Ashe, D. K. (1990). The meaning of organizations: The role of cognition and values. In B. Schneider (Ed.). Organizational climate and culture (pp. 40-84). San Francisco: Jossey-Bass.

Judge, T. A., & Cable, D. M. (1997). Applicant personality, organizational culture, and organizational attraction. Personnel Psychology, *50*, 359-393.

Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. Personnel Psychology, *52*, 621-652.

Kets De Vries, M. F. R. & Miler, D. (1986). Personality, culture, and organization. Academy of Management Review, *11*, 2, 266-279.

Kimberly, J. R. (1980). The life cycle analogy and the study of organization: introduction. In J. R. Kimberly, & R. H. Miles (Eds.), The organizational life cycle (pp. 1-17). San Francisco: Jossey-Bass.

Klein, K. J., & Kozlowski, S. W. J. (2000). From micro to meso: critical steps in conceptualizing and conducting multilevel research. Organizational Research Methods, *3*, 211-236.

Kluckhohn, C. (1951). Values and value orientations in the theory of action. In T. Parsons & E. Shils (Eds.), Toward a General Theory of Action (pp. 388-433). Cambridge: Harvard University Press.

Kopelman, R. E., Brief, A. P., & Guzzo, R. A. (1990). The role of climate and culture in productivity. In B. Schneider (Ed.), Organizational climate and culture, 282-318. San Francisco: Jossey Bass.

Kotter, J. P. & Heskitt, J. L. (1992). Corporate culture and performance. New York: The Free Press.

Lorsch, J. W., (1970). Introduction to the structural design of organizations. In G. W. Dalton, P. R. Lawrence, & J. W. Lorsch (Eds.), Organizational Structure and Design. Homewood, IL: Irwin and Dorsey.

Miller, D. & Droge, C. (1986). Psychological and traditional determinants of structure. Administrative Science Quarterly, *31*, 539-560.

Miller, D., Kets de Vries, M., & Toulouse, J. M. (1986). Top executive personality and corporate strategy: Three tentative types. In R. Lamb, and P. Shrivastava (eds.), Advances in Strategic Management, *4*, 223-242. Greenwich, CT: JAI Press.

Miller, D. & Toulouse, J. M. (1986). Chief executive personality and corporate strategy and structure in small firms. Management Science, *32*, 1389-1409.

Mount, M. K., Barrick, M. R., & Stewart, G. L. (1998). Personality predictors of performance in jobs involving interaction with others. Human Performance, 11, 145-166.

Myers, I. B. & McCaulley, M. H. (1985). Manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologists Press.

Ones, D. W., Viswesvaran, C., & Schmidt, F. L. (1993). Comprehensive meta-analysis of integrity test validities: Findings and implications for personnel selection and theories of job performance [Monograph]. Journal of Applied Psychology, 78, 679-703.

Organ, D. W. (1994). Personality and organizational citizenship behavior. Journal of Management, 20, 465-478.

Quinn, R. E. & Kimberly, J. R. (1984). Paradox, planning, and perseverance: Guidelines for managerial practice. In J.R. Kimberly & R.E. Quinn (Eds.), Managing Organizational Translations (pp. 295-313). Homewood, IL: Dow Jones-Irwin.

Rokeach, M. (1973). The nature of human values. New York: The Free Press.

Rousseau, D. M. (1990). Assessing organizational culture: The case for multiple methods. In B. Schneider (Ed.). Organizational climate and culture (pp. 153-192). San Francisco: Jossey-Bass.

Salgado, J. F. (1997). The five factor model of personality and job performance in the European community. Journal of Applied Psychology, 82, 30-43.

Schaubroeck, J., Ganster, D. C., & Jones, J. R. (1998). Organization and occupation influences in the attraction-selection-attrition process. Journal of Applied Psychology, 83, 869-891.

Schein, E. (1992). Organizational culture and leadership (2nd ed.). San Francisco: Jossey-Bass.

Schneider, B. (1987). The people make the place. Personnel Psychology, 40, 437-453.

Schneider, B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. Personnel Psychology, 48, 747-773.

Schneider, B., Smith, D. B., Taylor, S., & Fleenor, J. (1998). Personality and organizations: A test of the homogeneity of personality hypothesis. Journal of Applied Psychology, 83, 462-470.

Selznick, P. (1957). Leadership in administration. New York: Harper & Row, Pub.

Smith, D. B., Grojean, M. & Dickson, M. W. (2001). Development and validation of a new measure of personal values. Working Paper. Ithaca, NY: Cornell University.

Trice, H. M., & Beyer, J. M. (1993). The cultures of work organizations. Englewood Cliffs, NJ: Prentice Hall.

Turban, D. B. & Keon, T. L. (1993). Organizational attractiveness: An interactionist perspective. Journal of Applied Psychology, 78, 184-193.

Van Vianen, A. E. M. (2000). Person-organization fit: The match between newcomers' and recruiters' preferences for organizational cultures. Personnel Psychology, 53, 113-149.

Watson, D., & Clark, L. A. (1997). Extraversion and its positive emotional core. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp.767-793). San Diego, CA: Academic Press.

Zammuto, R. F., & Krakower, J. Y (1991). Quantitative and qualitative studies of organizational culture. Research in Organizational Change and Development, 5, 83-114.

Zammuto, R. F., & O'Connor, E. J. (1992). Gaining advanced manufacturing technologies' benefits: The roles of organizational design and culture. Academy of Management Review, 17, 701-728.