

Servant Leadership in Construction

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Leadership makes a difference and Arizona's construction executives are practicing servant leadership as defined by Robert Greenleaf and measured by the researchers' servant leader index (SLI). The researchers hypothesized that servant leadership could be measured and the feeling and intuition preferences would help define servant leaders. The researchers' SNTFeeling Assessment represented an abridged Myers-Briggs Indicator concentrating heavily on the thinking/feeling and sensing/intuition preferences. Eighteen construction executives participated. The feeling preference was closely correlated with the executives' servant leader index scores, but the intuition preference while positive was not strongly related to the SLI. The Leadership Practices Inventory was also used to determine servant leader relationships. Sensing-thinking (ST) personalities viewed as detailed oriented are common among contractors, but the researchers contend servant leaders and intuitive-feelers (NF) enjoyed greater profitability by utilizing their complementary abilities to be champions of change. Servant leaders displaying the out-of-the-norm Myers-Briggs types also enjoyed greater profitability on average.

Key Words: Leadership; Servant Leadership; Myers-Briggs Type Inventory; Profitability; Leadership Practices Inventory

Introduction

“Technical advances in the construction industry continue dynamically, while leadership research has stagnated” states Chris Reseigh of the National Academy of Construction and President of Construction Services at Parsons-Brinckerhoff (2007). After all, the industry is based on technical proficiency. “There is a perennial problem in the construction industry: the technical skills that engineers are trained in and hired for alone do not make them effective team members or able to learn on the job (Goleman, 1999). In an industry of low profitability and staggeringly high business failure (CFMA, 2007), leadership must be examined.

It is under the examination of leadership that the concept of “Servant Leadership” has garnered attention as leaders seek an enlightened path that encompasses such virtues as “growth, responsibility, and love” quotes Warren Bennis in Greenleaf's book (Greenleaf et al, 2003). John Maxwell (2002) writes “The first step to leadership is servanthood” and much has been written about leadership and the factors which define successful leaders (Covey, 1989; Blanchard et al, 2003; Collins et al, 1994; de Saint-Exupery, 1939), but little has been devoted to servant leadership (Russell et al, 2004). Servant leadership recognizes the move away from “the more traditional, autocratic, and hierarchical models of leadership” and toward servant-leadership as a way of being in a relationship with others (Spears, 1998). Servant leadership reaches beyond technical skills and hierarchy to “involve others in decision making and attempts to enhance the personal growth of workers while improving the caring and quality of our institutions (Spears, 1998).”

Problem Statement

While many authors have presented arguments for servant leadership as a valid theory of organizational leadership (Greenleaf, 1977; Covey, 2006; Blanchard, 2000), a lack of published, well-defined, empirical research has dampened its significance (Northouse, 1997). With insufficient scientific data to measure servant leadership, the theory has been viewed as widely anecdotal calling into question the ability to even quantitatively examine servant leadership.

Research Hypothesis and Objectives

The authors hypothesized that the relative amount of Servant Leadership characteristics in a leader can be quantified. In testing this hypothesis, the current research attempted to begin formulating the remedy for the empirical shortcomings of servant leadership research and examine servant leadership through the development of a quantitatively-based “Servant Leader Index” or SLI, along with the adaptation of other previously established and accepted individual testing methods. A secondary goal of this research was to establish the existence of servant leadership in the construction industry and understand its effects on the servant leaders’ companies and communities.

The research was based on the existing literature in servant leadership and attempted to utilize widely accepted testing methods which align themselves with servant leader characteristics. The accepted testing methods included the Myers-Briggs Type Indicator (with the expectation that the feeling and intuition preferences would be elevated among servant leaders) and the Leadership Practices Inventory. The research defined servant leadership based on the available literature, identified profiling instruments, and used the servant leader attributes to create an index to rank servant leadership characteristics that were not specifically profiled in the assessment instruments.

With the developed tools, leaders in the construction industry (18 different CEO’s and Presidents of construction companies from the Arizona area) were measured based upon their “servant and service” attributes. Along with their companies’ financial performance, the CEO’s were then analyzed to achieve a greater understanding of servant leadership in the construction industry and the relationship between servant leaders attributes in CEOs and company profitability.

Servant Leadership Theory

Greenleaf (1977) believed there was a leadership crisis in America and in its institutions, colleges, and seminaries. He believed the path to leadership lied in serving first. In his writings, Greenleaf posed the question: “Do those served grow as persons and do they while being served become healthier, wiser, more autonomous, and more likely to become servant leaders?”

Although the literature on servant leadership is anecdotal, the characteristics can be quantified. In consideration of the available servant leadership literature, the authors arrived at three repetitive and definitive characteristics of servant leaders: Growth of People, Stewardship, and Building Community.

Commitment to the growth of people recognizes that people possess an intrinsic value beyond visible contributions and the servant leader is committed to the development of the growth of individuals within the organization. This growth can be quantified through mentorship and supported company efforts to personal development such as educational funding, time devoted to employee growth, and enabling others to act.

Greenleaf (1977) described stewardship as holding something in trust for one another. Servant leaders, like stewards, are committed to serving the needs of others and emphasis the use of openness and persuasion, rather than control.

The servant leader builds community by recognizing the workplace is not merely a place for work, but seeks to increase awareness that work is one component of the workplace. “All that is needed to rebuild community as a viable life form for large numbers of people is for enough servant-leaders to show the way, not by mass moments, but by each servant-leader demonstrating his or her unlimited liability for a quite specific community-related group” (Greenleaf et al, 2003). It is under the precepts of servant leadership theory that the current research based its initial studies.

Research Methodology

The study was broken into four parts: literature review, development of the Servant Leader Index, assessment design and pilot testing with the incorporation of the Meyers-Briggs Type Indicator and Leadership Practices Inventory, modification, and data collection of assessments and financial data.

Development of the Servant Leader Index and CEO Questionnaire

This study used the three servant leader characteristics of the Growth of People, Stewardship, and Building Community to develop a Servant Leadership Index (SLI) to be used as one of the servant leadership measurement tools for construction company CEO's. The researchers devised a simple scale of zero to two for each characteristic. Perfect scores in every category would yield a total score of six.

As Greenleaf's philosophies encouraged the growth of people, questions pertaining to mentorship and the existence of leadership development in the organization were developed. A question was asked concerning mentorship and time devoted weekly to this activity. If the construction executive was actively mentoring someone within the company, he/she scored one point. If the executive was mentoring and the company was actively participating in leadership development of company personnel, the executive received an additional point for growth of people.

An executive holds the organization and its' employees in his/her trust. Greenleaf recognizes the latter characteristic as stewardship. Of the eighteen companies/CEO analyzed, five thousand employees were represented in the local Arizona market. If those employees represent national standards, they are most likely married and have 2.4 children according to the most recent census of 2000. The Arizona construction executives surveyed hold in stewardship the lives of 17,000

people. By considering an individual CEO’s voluntary efforts the research sought to quantitatively capture stewardship: 1-3 voluntary efforts yielded one point while 4 or more voluntary efforts yielded two points.

The CEO Questionnaire also considered how the executives foster community building. Points were earned for company community efforts. A zero was recorded for no supported efforts. A one was awarded if the company encouraged community involvement among its employees for up to two different efforts. A score of two was awarded for three or more community efforts.

The table below summarizes the responses and point distribution to the CEO questionnaire.

Table 1. *Servant Leader Index Description and Scoring*

Servant Leader Characteristic	Measurement	Description	Score
Growth of People	Mentoring	Devoting time to personal development	1
	Corp. Leadership Development	Supports and participates in the company's leadership development	1
Stewardship	Voluntary Efforts	Involved in 1-3 activities outside workplace	1
	Voluntary Efforts	4 or more efforts	1
Building Community	Company Supported Efforts	1-2 Occurrences	1
	Company Supported Efforts	3-plus community efforts	1
Total Score			6

Development and Pilot Study of the SNTFeeling Assessment

Beyond the created Servant Leader Index, a more widely accepted and rigorously validated assessment of an individual’s attributes and characteristics was desired by the authors. Arguably the most well known assessment tool is the Myers-Briggs Type Indicator, or MBTI. The MBTI analyzes an individual based upon four categories of type with juxtapose characteristics: Sensing (S) vs. Intuition (N); Thinking (T) vs. Feeling (F); Introversion (I) vs. Extroversion (E); Perceiving (P) vs. Judging (J) (if the reader desires more information about the MBTI, he/she is encourage to visit www.myersbriggs.org). Since in the servant leadership literature the Intuition and Feeling attributes are most prevalent, the MBTI was abbreviated to focus on the categories of Sensing vs. Intuition (or iNtuition) and Thinking vs. Feeling. As such, the assessment was reduced to 56 questions (93 questions for the full test) with a breakdown of:

- Sensing/iNtuition - 25 questions

- Thinking/Feeling - 25 questions
- Introversion/Extroversion - 3 questions
- Perceiving/Judging - 3 questions

The abbreviated assessment was named the SNTFeeling Assessment within the research. As a control to verify the veracity of the abbreviated test, it was piloted on a group of “known” servant leader types: Volunteer Catholic High School Teachers. The control group of catholic teachers (CT) included 14 females and seven males and yielded the following results presented in Table 2.

Table 2. *SNTFeeling Assessment Results from Catholic Teachers (CT)*

Preference	Number of Participants
Sensing	7
iNtuition	14
Thinking	3
Feeling	18

The catholic teachers overwhelmingly preferred the intuition and feeling preferences over the sensing and thinking opposite preferences. This small test encouraged the applicability of the shortened MBTI to better identify the attributes associated with servant leaders.

Method of Analysis

The method of analysis within the servant leadership research methodology was composed of three steps: 1) Interview of CEO’s (and Construction Industry Leaders); 2) Assessment of CEO’s and Industry Leaders with the SNTFeeling tool and the Leadership Practices Inventory; and 3) Financial Statements for the previous three years. The interview was the integral part for obtaining information regarding Greenleaf’s servant leader characteristics for calculating an executive’s Servant Leader Index (SLI). Also the interview allowed the exchange of a non-disclosure document that assured executives no private financial data would be disclosed. Only collective industry analysis would be revealed. For the interviews companies in the local Arizona area were contacted and interviewed.

The Leadership Practices Inventory was developed by Kouses and Posner (2002, 2006) and evaluates five exemplary practices of leadership: 1) Challenging the process; 2) Enabling others to act; 3) Inspiring a shared vision; 4) Modeling the way; and 5) Encouraging the heart.

While this paper focuses on the research of Arizona Construction Company CEO’s, participants for the interviews and assessments were not only conducted locally, but many members of the National Academy of Construction (NAC) completed surveys and provided leadership wisdom (which will be presented in another paper). The table below outlines the participants in the study and their contributions:

Table 3. Research Participants

Type & (# of Participants)	SNTFeeling Assessment	Servant Leader Index (SLI)	Leadership Practices Inventory (LPI)	Interview & Financial Statements
Catholic Teachers (21)	X			
Arizona CEO's (18)	X	X	X	X
NAC Members (13)	X		X	

Data Collection and Characteristics

Thirty-one construction executives, eighteen local Arizona and the thirteen national executives, completed assessments. The assessments were returned by mail locally and e-mailed to national participants. The assessments were scored, evaluated and summary results were provided to all participants. Of the 31 participants, all but one said the shortened Myers-Briggs summary was the same as a previous result on the MBTI. The one participant was an NAC member who admitted he “knew he always preferred the feeling preference,” which was portrayed on the SNTFeeling assessment. The shortened assessment was an accurate predictor or preference according to the study with 97 percent accuracy.

When surveys and financial data were returned, a collective industry analysis was prepared of the surveys, financial data, and the servant leader index. All of the companies interviewed, except for a specialty contractor had annual revenues greater than 50 million dollars per year.

There are sixteen possible type profiles on the MBTI. The local Arizona executive and NAC type preferences are displayed below in Figure 1 and are not uncommon to Kersay's prediction of contractors preferring the ST or sensing-thinking combination (2005).

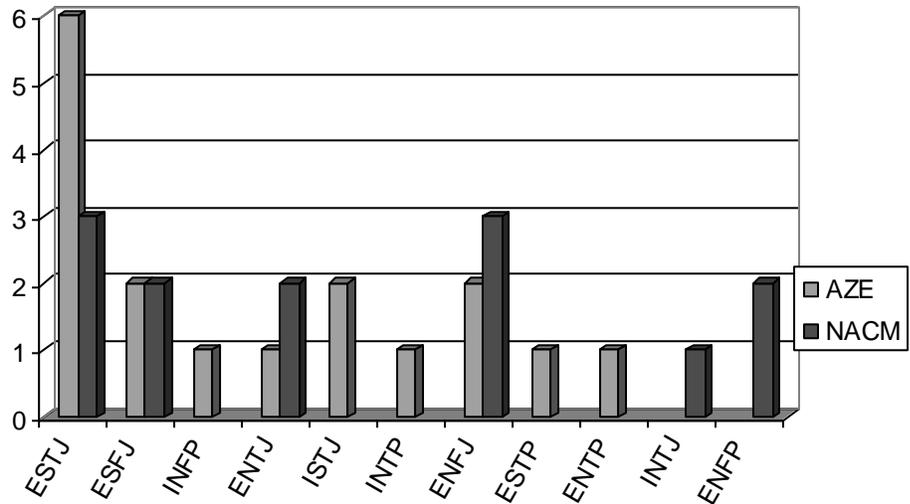


Figure 1. Number vs. MBTI Type for Arizona CEO's (AZE) and NAC Members (NACM)

Data Analysis and Results

Focusing on the collected data from the 18 Arizona CEO's, linear relationships were used to compare the servant leader index (SLI) to net after-tax returns and SNTFeeling assessment results with profitability. The trend line between the SLI and profitability (Figure 2) was positively sloped, but because there were so few data points, this relationship could be skewed by an introduction of controversial data. Another point for developing a servant leadership assessment questionnaire is so more data could be easily obtained. Although an instrument would be a more prolific method of data collection, it would not guarantee the success of gathering financial data produced by the interview.

Servant Leader Index and Profitability

A regression model of SLI vs. Three-Year Average Profitability for the 18 Arizona construction companies yielded additional profits of 12 percent for each incremental increase on the servant leader index. The index scale ranged from zero to six with the construction leaders at the high end of the SLI being 50 to 66 percent more profitable in net-after tax returns than non servant-lead companies. The significance of the r-squared for the linear regression was +0.4667 with a correlation of +0.6832. Although the data set was small, a positive relationship did exist. The horizontal mark of 2.1% represents the collective data reported the Construction Financial Management Association (CFMA). The CFMA reported the return for average returns for 2006 in the industry. Ninety companies responded to compute this average.

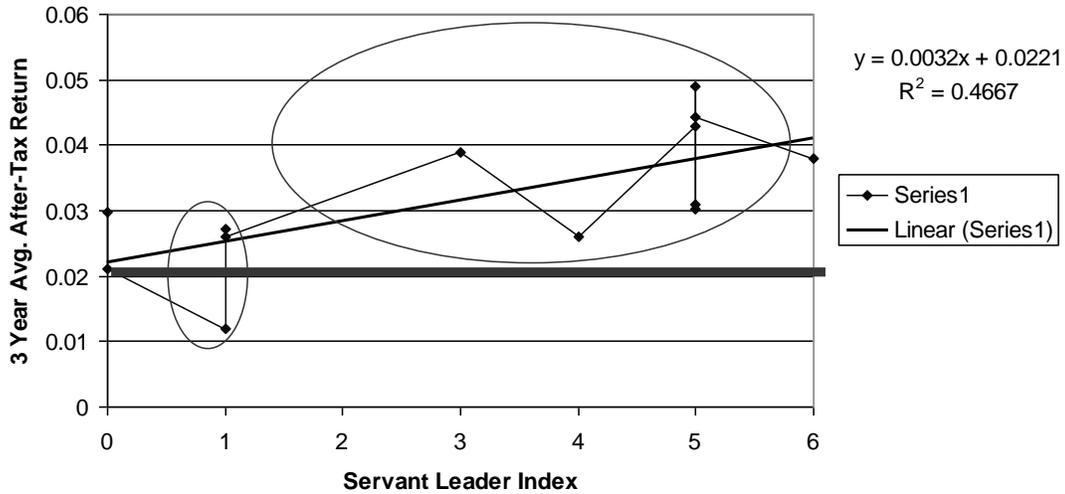


Figure 2. *SLI and 2004-2006 Average Annual After Tax Profits (18 AZ CEO Companies)*

SNTFeeling and Profitability

The Servant Leader Index (SLI) was also compared to the Myers-Briggs preferences, including the research developed SNTFeeling assessment. The individual preferences of sensing, intuition, feeling and thinking were noted among participants taking the SNTFeeling Assessment. Their servant leader index scores were averaged to determine SLI score per preference. Data analysis was performed using the results from the SNTFeeling Assessment and the servant leader index. Linear regression and Pearson coefficients confirmed positive relationships between servant leaders and the feeling (Figure 3) and intuition preferences (Figure 4). The correlations for the feeling and intuition preferences yielded +0.802 and +0.120, respectively.

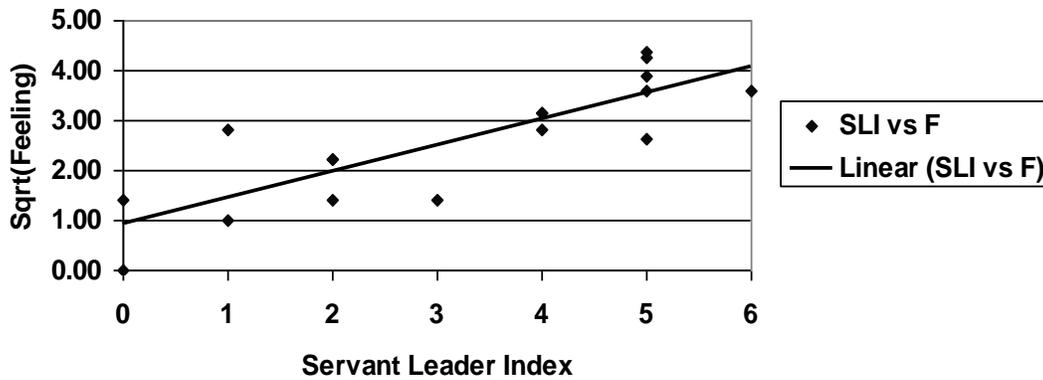


Figure 3. *Servant Leader Index and Feeling Preference*

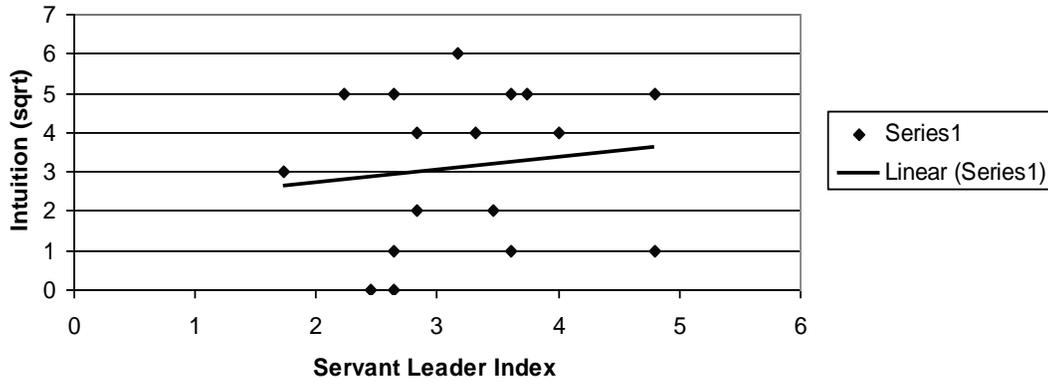


Figure 4. *Servant Leader Index and the Intuition Preference*

The feeling and intuition preferences were positively correlated to the servant leader index. The researcher posits the two preferences would positively affect profitability. So profitability was compared with the SNTF preferences, as well. Personality preferences were noted for each executive. The average profitability was then computed among the four preferences. The sensing versus intuition and the thinking versus feeling were compared by simple averages of profitability per preference.

The SNTF Assessment yielded a positive correlation with profitability and the feeling preference. Participants displaying the Feeling preference enjoyed greater profitability than their Thinking counterparts (Figures 5 and 6). These numbers were determined by averaging the after-tax returns in each preference.

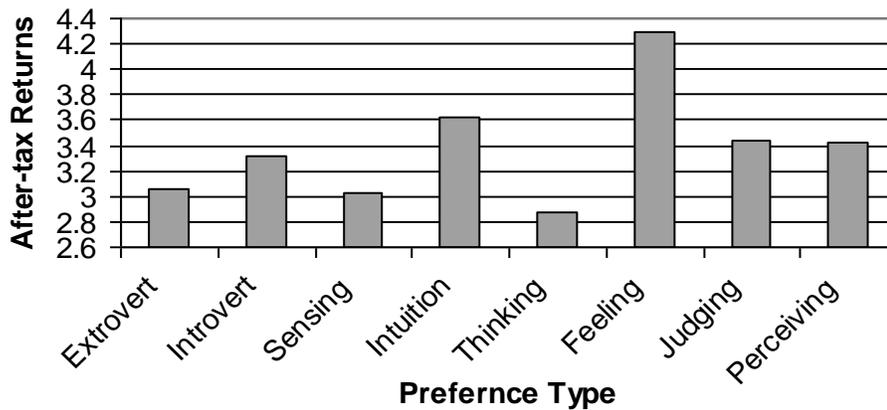


Figure 5. *2006 Profitability per Preference Type*

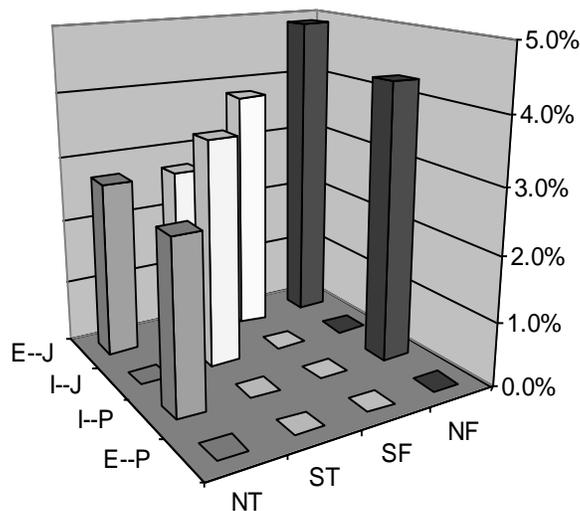


Figure 6. Paired SNTFeeling Preferences and Average Profits (z-axis)

Note: E—J is extroverted-judging, I—J is Introverted-judging, I—P is introverted perception and E—P is extroverted perception.

The preferences were paired in the next graph, creating four combinations, iNtuition-Thinking (NT), Sensing-Thinking (ST), Sensing-Feeling (SF), iNtuition-Feeling (NF). The combinations were compared with profitability because the SNTFeeling tested heavily in these categories. With more questions in these categories, the SNTFeeling assessment more accurately portrayed the actual Myers-Briggs instrument.

Conclusions and Recommendations

Servant leadership can be measured through the servant leader index and had a +0.802 correlation with the feeling preference on the SNTFeeling modified MBTI assessment. While the intuition preference was also positive, the 0.121 correlation was not significant in identifying servant leaders. Servant leadership also played a role in increased profits. The most significant aspect about this research was the number of Arizona Executives practicing the three servant leader characteristics of mentorship, stewardship and building community as measured in the research. The researchers did not interview the organizations who benefited from the eighteen Arizona executives and their companies, but over 200 groups were aided by corporate social responsibility.

The researchers did not interview employees to determine if they were better off working with servant leaders. Recommendations for further study would include refining the servant leader index and adding 360 surveys of employee evaluations on servant leadership.

The results of the study were enlightening, but not unexpected. The Arizona construction industry was well represented by servant leaders as confirmed by the servant leader index and the feeling preference of the SNTF Assessment. The abridged Myers-Briggs assessment helped

test the hypothesis. Servant leaders could be recognized in the feeling preference, but no conclusive evidence was displayed with the intuition preference to confirm servant leadership. Profitability was also positively affected by the presence of servant leadership with a high correlation. The intuition preference was insignificant when compared to profitability.

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