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Examining Collegiality and Social Justice in Academia and the Private Sector: An Exploratory Symlog Analysis

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Abstract

This research compares the perceptions of the private sector, high-technology employees to the perceptions of university faculty members regarding organizational culture, social justice and collegiality concepts. The SYMLOG assessment technique was used to record the perceptions of respondents to four different concepts of organizational culture, two different aspects of social justice and two measures of collegiality. Comparative findings of gender differences across the eight concepts raise key organizational culture, legal, measurement, governance, and social policy issues for academia and high tech organizations. The development of a conceptual framework to guide future research and a blueprint to discuss desired organizational change are highlighted.

Keywords: collegiality, social justice, organizational culture, most effective profile.

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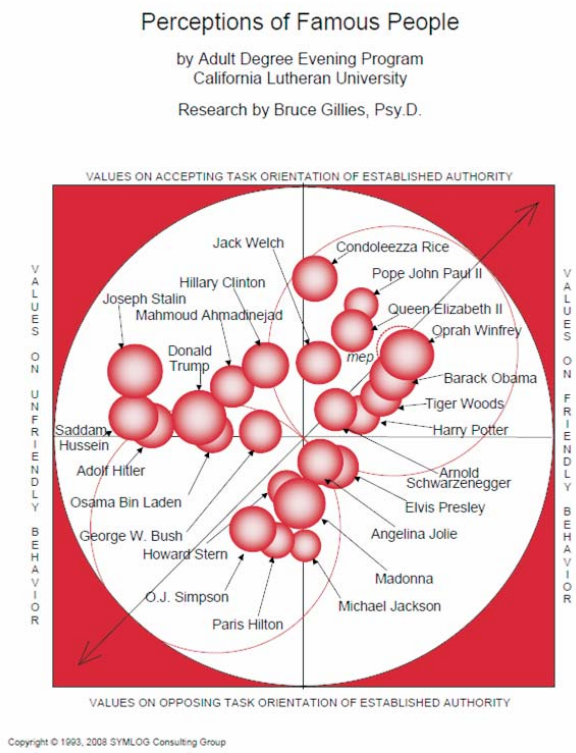
Introduction and Purpose of the Research

The purpose of the present exploratory research study was to examine the perceptions of organizational members with respect to organizational culture, social justice, and collegiality concepts in both academic and private-sector organizational settings. All three concepts are key internal, contextual variables that have an influence in determining organizational effectiveness (Pettigrew, 1979; Collins & Porras, 1994; Drucker, 1994; Luthans, 2011). Since perceptions often guide behaviour in organizations, we will use the SYMLOG measurement system to explore the relationships between the perceptions of respondents in two different organizational settings to these three concepts and organizational effectiveness.

In social interacting systems (Bales, 1999), individuals are often assessed by others not on the basis of who they are, but, rather, by the *perception* of what they seem to be; not on the basis of what they say, but, rather, how they are heard; and, most importantly, not on the basis of what they intend, but, rather, by their actual effect on others (SYMLOG Consulting Group, 2012). In light of these realities, the present authors chose to incorporate in the present study a measurement system ideally suited for easily and accurately measuring and displaying ***perceptions*** that greatly influence how people respond to individual persons, to each other in a group, and to organizations and their products and services. This measurement system is known as SYMLOG, which is the only method that provides a research-based universal standard (most effective profile or *mep*) against which to measure multiple levels of interaction so as to systematically and simultaneously improve leadership, teamwork, and organizational effectiveness.

While a greater explanation of the SYMLOG measurement system is provided later in this paper, a Field Diagram depicting average ratings of well-known leaders and other famous personalities is provided in Figure A to help the reader "calibrate" the SYMLOG psychological space. Relative perceived dominance of the persons rated (U-D dimension) is reflected in the size of the image circles for a particular personality. Larger circles represent more dominant personalities and smaller circles represent more submissive personalities. Figure A reflects the perception of values shown by famous people as rated by a random selection of adult students in North America, and it illustrates how perceptions of different people vary considerably. The reader's own perceptions of these famous personalities may not agree with the exact placement of images from these students' ratings. However, Figure A should provide an intuitive feel for the SYMLOG space and the authors doubt that many persons would disagree with the placement of images on the Positive versus Negative sides of the diagram.

Figure A



Moreover, if the images in Figure A were of persons from an actual organization, the implications for the persons outside of the PF quadrant of the diagram are huge with respect to individual coaching and counselling, leadership training and development, team development, strategic planning, and human resource development – all of which are just a few of the many applications and uses for the SYMLOG measurement system. According to the SYMLOG Consulting Group, SYMLOG has been used in over sixty countries in 17 different languages to provide integrated solutions to complex problems of social interaction (SYMLOG Consulting Group, 2012).

The presentation of this empirical study continues as follows. We begin with an overview of the research concerning organizational culture, social justice, and collegiality, and their relationship to organizational effectiveness. We then provide an overview of the SYMLOG measurement system we used to gather perceptions of eight concepts related to organizational culture, social justice and collegiality from members of the academic and private business sectors. Next, we provide an analysis and discussion of the results, future research and current organizational applications. We then propose a model for future research that should shed additional light on the complex inter-relationships and provide new practical applications for organizations.

Organizational Culture

Organizational culture (OC) evolved from earlier concepts such as organizational climate and company culture (Sathe, 1985; Schein, 1985; Schneider et al, 2002; Osland, et al, 2007). It is defined as the collective values, beliefs, symbols, myths, norms and other organizational symbols that provide meaning to individuals and

organizations and, in turn, guide their actions (Pettigrew, 1979; Osland, et al, 2007; Luthans, 2011). OC is based on perceptions that influence organizational outcomes and it is a major component of organizational strategy; it promotes consistent behaviour and it gets new members to socialize (Cook & Hunsaker, 2001; Osland, et al, 2007; Luthans, 2011). Cook & Hunsaker (2001) and Luthans (2011) suggest that variables such as industry competitiveness, organizational size, organization structure, and technology all influence the key contextual variable of organizational culture, which, in turn, ultimately influences organizational effectiveness.

Literature on organizational behaviour is replete with studies of the underlying dimensions of organizational culture (Cook & Hunsaker, 2001; Luthans, 2011). Two popular and opposing dimensions of organizational culture, namely, "organic," which is considered as open, adaptive and collaborative, and "mechanistic," which is considered to be closed, traditional and hierarchical, have existed for several decades (Reigle, 2001).

Wiener (1988) identified a 2X2 organizational culture model based on four value systems: elitist, charismatic, functional and traditional. The Wiener (1988) study found the combination of elitist and charismatic values to be the weakest and least stable combination for organizational performance, and the functional and traditional combination to be the strongest and most enduring. More recent contextual studies by William Schneider (1994, 2000) based on private sector organizations indicated that there are four core cultures that show superior results depending on the nature of the organization. Schneider identified these core cultures as: 1) collaboration culture, 2) competence culture, 3) cultivation culture, and 4) control culture. The studies found that different organizations emphasized on one or more of these four cultures, depending on the organizational context (Schneider, 1994, 2000). Hence, a large, centralized and mechanistic organization in an industry with little competition and low technological complexity may benefit more from a "control" type of culture than an organization with different internal characteristics and external pressures. A small, research-oriented university may prosper more readily with a "collaborative" culture than large, research–oriented universities or business firms.

Reigle (2001) indicated that managers needed to know how their cultures are perceived by others in order to retain knowledge workers across industries, especially the high-technology industry. Schneider (2000) described a collaborative culture as adaptive, democratic, informal, participative and collegial. Friedman (2005) mentioned that collaborative teamwork and culture were the driving forces behind the development of high technology based open source software such as the Linux operating system and Firefox Web browser. Although collegiality is often compared to OC dimensions such as collaboration, teamwork and cooperation, it has not replaced the underlying dimensions of OC and social justice. In the present study, we adopted Schneider's four-culture types as organizational culture concepts to be assessed, i.e., collaboration culture (COL), competence culture (COM), cultivation culture (CUL), and control culture (CON).

Social Justice

Social justice (SJ) is another internal, contextual variable that affects organizational outcomes through the perceptions of equity by its members. The SJ field is generally viewed as having only two underlying dimensions: distributive justice and procedural justice. A meta-analysis of organizational justice research showed that distributive and procedural justice is related to all desirable organizational outcomes (Colquitt, et al, 2001). According to Mowday (1987) and Colquitt (2001), "distributive justice" is primarily concerned with the fairness of the quantity of organizational rewards, and "procedural justice" is primarily concerned with the fairness of the process used to determine organizational rewards. SJ concepts have been shown to be related to a wide range of outcomes such as performance, organizational citizenship, motivation, well being and attitudes that are relevant to organizations and their members (Colquitt, et al, 2001; Cropanzano, et al, 2001; Fortin, 2008).

SJ is sometimes viewed from the ethical and philosophical perspectives with normative rules concerning what is just and unjust (Colquitt, et al 2001). Organizational justice (OJ) is related to social justice and is concerned with people's fairness perceptions in their employment relationships (Fortin, 2008). Since information about the current employment status of respondents was not requested, we will use the terms OJ and SJ synonymously in this paper. Methodological issues exist within the field concerning (1) whether there is justice and injustice asymmetry related to different outcomes, (2) the longitudinal effects on outcomes, (3) monistic views of justice, and (4) whether there are more than two OJ dimensions (Truxillo, Steiner, & Gilliland, 2004). Fortin (2008) indicated there is ample evidence to suggest 'interactional justice" as a third SJ dimension that has two main elements, "quality of personal treatment" and "information regarding decision–making." Folger and Konovsky (1989) and Tepper and Taylor (2003) contend that effective organizations have adequate amounts of both forms of social justice. However, certain settings tend to emphasize one form of social justice more than the other. For the present study, we focused on the two primary SJ dimensions and asked respondents to provide only their perceptions of fairness of procedures (FAP) and fairness of results (FAR).

Collegiality

Collegiality is a third internal, contextual concept that is linked to perceptions of organizational outcomes. As organizations across different settings move toward more team and knowledge based organizational designs, collegiality is viewed as a concept independent of OC and SJ, and also viewed as directly linked with organizational outcomes. Connell (2001) asserts that collegiality is entrenched in academia as an important aspect of faculty performance and the AAUP adopted *On Collegiality as a Criterion for Faculty Evaluation* as a guide in 1999. Recent U.S. research findings based on the Collaborative on Academic Careers in Higher Education research project reflect that gender, race and ethnic group affiliation make a difference in terms of the perception of relationships between pre-tenure faculty members and their peers and senior faculty counterparts (Ponjuan, Conley & Trower, 2011). Further, Tang's (2010) PhD dissertation, based on the perceptions of young faculty in selected four-year universities in the Inner Mongolia Autonomous Region (IMAR) of China regarding pre-service training, collegiality, and teacher effectiveness training, reported that ethnicity, gender, and teaching experience and demographic categories had a significant impact on young faculty perceptions. The author also found that ethnicity influenced the young faculty's perceptions regarding the level of their need for pre-service training and collegiality as well as their

actually-received level of collegiality and teacher effectiveness training (Tang, 2010). The international context for collegiality has also come under scrutiny from the growth in the use of performance appraisals to measure faculty performance (Morris, 2011; Kok, 2010). As collegiality creeps more and more into the faculty performance evaluation process, we argue that anecdotal evidence suggests different demographic groups in the USA such as African-American faculty will have different perceptions toward collegiality and organizational outcomes compared to other demographic groups (Rockquemore & Laszloffy, 2008). Additionally, Fogg (2006) found that contemporary junior professors are markedly different from previous generations, and collegiality is more important to them than compensation, tenure clarity, and workload.

The increased diversity of business organizations has increased the focus on collegiality issues in non-academic settings. We contend that as the complexity of job tasks in the private business sector grows, teamwork and the inter-dependence of relationships will also grow. The modern workplace and federal employment law require employers to consider collegiality factors when they are job-related, such as "getting along with others," under the Americans with Disabilities Act (U.S. Dept. of labor, 2012). Virtual communities, knowledge sharing, social networking and other modern workplace trends that result in creative, knowledge-based and information-intensive jobs have moved employers toward collaborative systems (Peddibhotla & Subramani, 2008). Since the knowledge sharers often tend not to be co-located, collaboration requires collegiality in order to be effective. Some employers enable this form of collegiality by offering software tools ranging from simple forms such as SharePoint to more complex collaboration suites, and they require employees to use these tools. This "expected collaboration" form of collegiality is popular in the scientific and engineering-dominated parts of the high tech and bio tech industries, but it has also moved into professions such as accounting and law. In a recent article, the author bemoans the decline of collegiality and professionalism among lawyers (cf. Angones, 2007).

Bugeja (2002) points out that collegiality in academic settings is based on one's perception rather than one's contract or the faculty handbook, and is often confused with congeniality. He defines collegiality as behaviours based on the tenets of academic freedom that are required for shared governance. On the other hand, he defines a competing concept, "congeniality" as based on agreeable, friendly and confirming environments, and not positively related to shared governance. Although not necessarily in this order, 1) teaching, 2) research and publication, and 3) service are commonly known as the traditional criteria considered for granting tenure in academia. However, some universities consider collegiality to be a fourth "unspecified" criterion or a component of the other three criteria (cf. DiLeo, 2005; Mawdsley, 1999). When faculty have been denied tenure based on a perception of poor collegiality, and the decision is challenged in court, usually the courts have upheld these university decisions (cf. Levi v. University of Texas at San Antonio, 1988, p. 282; McGill v. Regents of University of California, 1996, p. 472). Connell (2001) contends that "Breach of Contract" is a common faculty argument rejected by the courts. The usual breach of contract scenario occurs when the university does not define collegiality as a criterion for tenure and the faculty member argues that failure to do so violates the tenure policy or employment contract (Connell, 2001). Cho (2005) concluded in a recent law review symposium that faculty members who challenge these collegiality-based decisions usually indicate that collegiality is subjective, vague, and merely a

pretext for illegal discrimination as well as denial of academic freedom. Academic institutions usually counter the aforementioned argument with the position that collegiality is the key to social justice in the form of shared governance, and it is the vehicle that drives both the "output" and "reputation" of these institutions." Thus, contemporary legal cases (cf. Connell, 2001; Hartle, 2004; Lewin, 2002; and McKinney, 2005) involving tenure decisions, where collegiality is involved as a key issue, have served to create an evolving "battleground" within academia.

Often, collegiality is used in academic settings to describe organizational effectiveness and is linked to organizational culture and social justice (Massey, 1994). Bugeja (2002) suggests that one form of social justice, namely, procedural justice, is emphasized more in academia than distributive justice, and results in "congeniality" often being confused with "collegiality." A study by Colquitt, Noe and Jackson (2002) indicated that procedural justice is used more in team-based business organizations and it has both positive and dysfunctional consequences. Tepper and Taylor (2003) further suggested that procedural justice perceptions of supervisors and subordinates alike in a National Guard military setting strongly influences OC and citizenship behaviour (OCB). For our study, perceptions of the most collegial person (MCP) and least collegial person (LCP) in both academic and non-academic settings were assessed.

Organizational Effectiveness

The individual, group and organizational levels should be interconnected when the concept of organizational effectiveness (OE) is analyzed. A single economic metric such as "profit" that is used as a general accounting or economic measure of success may be efficient but has shortcomings because it is static, retrospective, and does not capture and integrate all three effectiveness levels simultaneously. Organizational learning (OL) is a macro level concept that is often related to organizational effectiveness. Becerra-Fernandez and Sabherwal (2008) traced the evolution of the knowledge management (KM) field and concluded KM is the individual and team level learning that allows organizational learning to occur. Performance management (PM) is another OE concept that has been touted as a more practical approach than OL. Osland, et al. (2007) define performance management as a process of establishing performance standards and evaluating performance to ensure that goals are being effectively accomplished. Performance management at the macro or organizational level can be aligned with performance appraisal at the team and individual levels. The balanced scorecard (BSC) is a popular performance management approach to assist managers in considering all important aspects of organizational performance and to attempt to "integrate" and "directly measure" competing levels and forces (Osland et al., 2007). At the individual level, most performance appraisal systems focus on either outcomes or behaviour criteria, and inaccurate information, lack of accountability and poor decision-making erode their effectiveness (Osland et al., 2007). The previously mentioned SYMLOG system has several advantages over the organizational learning and performance management approaches. The single prospective effectiveness measure (*mep*), shown in Figure A, seamlessly integrates performance outcomes and all three behavioural levels. Thus, the SYMLOG *mep* was used in this study as the outcome measure against which to compare organizational culture, social justice and collegiality perceptions.

SYMLOG Measurement System

Why SYMLOG?

The research literature review uniformly points out that it is the perception of organizational culture, social justice and collegiality that is related to organizational outcomes. Hence, the present authors selected the SYMLOG assessment system, which is based on perceptions of values, to measure the perceptions of the respondents toward organizational culture, social justice and collegiality concepts. SYMLOG research draws on "field theory," in which values, behaviours, and other factors affect each other in the social-psychological field (Bales, 1994). Several factors in the social-psychological field reinforce each other to provide a unified organizational experience while other factors are in opposition, producing polarization. The "harmonizing" SYMLOG *mep* is the "ideal" location among the famous people (images shown earlier in Figure A), and this meta norm is considered to be the "gold standard" for assessing effectiveness across a wide range of organizational concepts and disciplines.

What is SYMLOG?

The name "SYMLOG" is an acronym for (1) Systematic, (2) Multiple Level, (3) Observation of Groups (Bales & Cohen, 1979). The SYMLOG system was developed through fifty years of research by Robert Bales and his colleagues. It is a method for repeated measures and ongoing feedback for continuous improvement, as well as a powerful theory and set of professional methods for improving team and organizational performance. SYMLOG theory states that human behaviour can be most effectively and parsimoniously understood as consisting of three orthogonal, bi-polar dimensions. The first is a power dimension, with "U" representing "Upward" or "Dominance" versus "D" representing "Downward" or "Submissiveness," hereafter referred to as the U-D dimension. The second dimension is relationship-oriented and uses "P" to represent "Positive" or "Friendliness" versus "N" to represent "Negative" or "Unfriendliness," hereafter referred to as the P-N dimension. The third dimension reflects both task orientation and relationship with authority and uses "F" to represent "Forward" or "Acceptance of the Task Orientation of Established Authority" versus "B" to represent "Backward" or "Rejection of the Task Orientation of Established Authority," hereafter referred to as the F-B dimension (Bales, 1994; Bales & Cohen, 1979; Hogan, 2005).

The SYMLOG value questionnaire, which is used to collect ratings of objects or constructs, is composed of 26 standard items, each representing a different combination of the three SYMLOG dimensions. The rating items are shown in Figure B. Next to the number for each rating item is a one-to-three letter code representing the combination of SYMLOG dimensions for that item. For example, item 1 is coded "U" for Upward, indicating that it is intended to measure only the Upward (i.e., Dominant) direction. Item 2 combines two directions -- "U" for Upward and "P" for Positive (i.e., Friendly). Item 3 combines three directions with the addition of "F" for Forward (i.e., accepting established authority). The remainder of the codes for the rating items indicate various combinations of Upward or Downward, Positive or Negative, and Forward or Backward in the value field.

Figure B
SYMLOG Individual and Organizational Values

Values on *Dominant* Behavior	1	U	Individual financial success, personal prominence and power
	2	UP	Popularity and social success, being liked and admired
	3	UPF	Active teamwork toward common goals, organizational unity
	4	UF	Efficiency, strong impartial management
	5	UNF	Active reinforcement of authority, rules, and regulations
	6	UN	Tough-minded, self-oriented assertiveness
	7	UNB	Rugged, self-oriented individualism, resistance to authority
	8	UB	Having a good time, releasing tension, relaxing control
	9	UPB	Protecting less able members, providing help when needed
Neither Dominant Nor Submissive	10	P	Equality, democratic participation in decision making
	11	PF	Responsible idealism, collaborative work
	12	F	Conservative, established, "correct" ways of doing things
	13	NF	Restraining individual desires for organizational goals
	14	N	Self-protection, self-interest first, self-sufficiency
	15	NB	Rejection of established procedures, rejection of conformity
	16	B	Change to new procedures, different values, creativity
	17	PB	Friendship, mutual pleasure, recreation
Values on *Submissive* Behavior	18	DP	Trust in the goodness of others
	19	DPF	Dedication, faithfulness, loyalty to the organization
	20	DF	Obedience to the chain of command, complying with authority
	21	DNF	Self-sacrifice if necessary to reach organizational goals
	22	DN	Passive rejection of popularity, going it alone
	23	DNB	Admission of failure, withdrawal of effort
	24	DB	Passive non-cooperation with authority
	25	DPB	Quiet contentment, taking it easy
	26	D	Giving up personal needs and desires, passivity

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SYMLOG Reports

As noted previously, the three SYMLOG dimensions are bipolar, that is, they each have a positive and negative end with a zero point in the middle. The meaning of the code letters (U-D, P-N, F-B) at the ends of the dimensions can be understood by examining the cube diagram shown in Figure C. The diagram in Figure C shows the three dimensions as if they were the three dimensions of a physical space. The SYMLOG measurement system can be used to produce a **Field Diagram**, a flat projection of the three-dimensional space. The Field Diagram shows the three-dimensional cube as seen from the top, with the eye looking down on the arrowhead of Vector 1U along the U-D dimension to Vector 26D on the bottom of the cube. What is seen is only a two-dimensional flat plane representation Field Diagram, where the P-N dimension is the X-axis and the F-B dimension is the Y-axis. The third U-D dimension is reflected in the relative size of individual image circles representing the objects that were rated. Figure D displays a Reference Field Diagram that summarizes research data from the general American experience. This reference "norm" was developed by the SYMLOG consulting Group for use as a "reference point" for comparing results from other SYMLOG studies.

Figure C
SYMLOGS pace

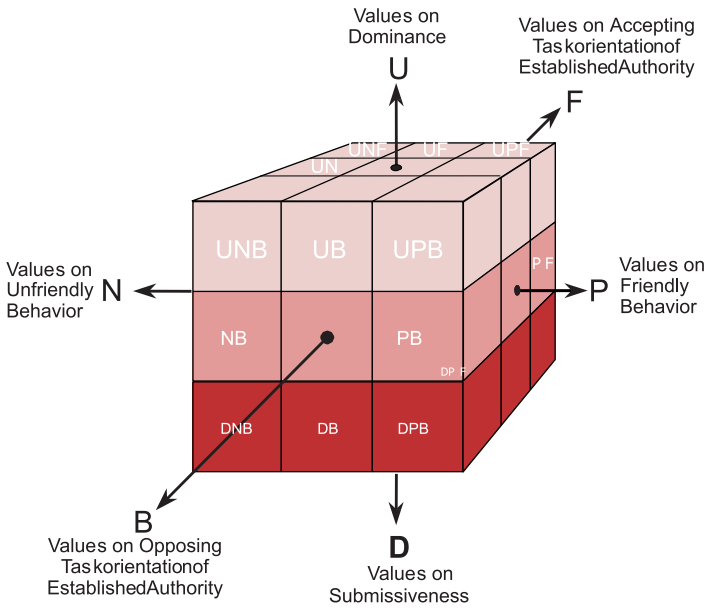

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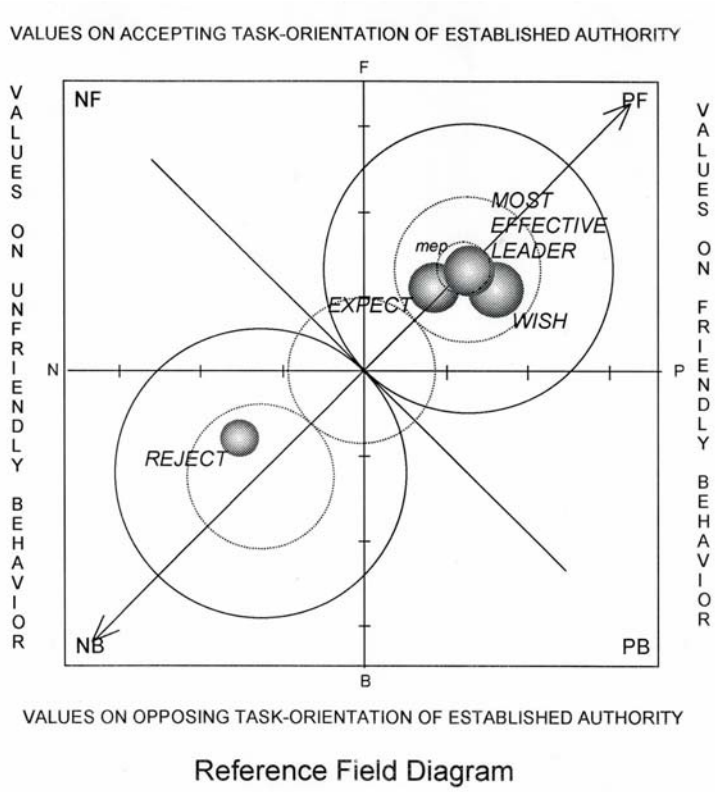
Figure D



Reference Field Diagram

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In the American experience, most of the values that are found to contribute to effective teamwork are located in the PF quadrant of the Field Diagram. In Figure D, the image *mep* represents the "most effective profile." The *mep* is a "consensus" or "meta norm" for outcomes based on value-oriented perceptions of many outcome variables. It is derived from thousands of ratings of effective management, of effective leadership and of experiences with effective teams. The *mep* location was found to be optimal for the American business culture. It represents a balance between an emphasis on accepting the task-orientation of established authority and emphasis on friendly behaviour. The image labelled "REJ", for REJECT, represents the average response for the SYMLOG norm group when respondents were asked to rate the values they would tend to reject either in themselves or in others in a work setting. The REJ image is seen to be in a polarized or opposition position to the *mep* image. Through the image REJ, the answers to important questions begin to emerge, such as: What value positions do most people tend to find repelling and avoid? What value position is likely to most adversely affect individual, team and organizational functioning and effectiveness?

The image labelled "MEL" represents the average of ratings of the values shown by the "Most Effective Leader" of a task-oriented group they have actually known. It should be noted that the images MEL and *mep* are nearly co-located in the field. Two other images in Figure D, EXPECT and WISH, represent the average responses from the SYMLOG norm group. The norm group was asked to rate the values they would EXPECT (EXP*)* other persons would rate them as *showing in their behaviour, and values which* they WISH (WSH) to be able to show in behaviour, whether or not they are actually able to do so.

In many systems for assessing effective individual or group performance, all items on a questionnaire are given equal weight. This is not true for the SYMLOG questionnaire. In the context of teamwork, some values are seen to *contribute* to effective teamwork, some may be *necessary sometimes but dangerous*, and still others *almost always interfere* with teamwork. When these items are placed in categories and interpretation given based on the norm group, a SYMLOG report is available called the **Bales Report**.

The SYMLOG measurement method has respectable validity and reliability measures across many different research domains (Bales, 1994). The images in Figure D will serve as reference points against which to compare the present study's results. One could establish other reference points should they believe that the *mep* image based on the American experience does not apply to their setting. An organization operating outside the U.S. could establish a country norm or a company with an unique organizational culture may choose to create a company norm. However, as a practical matter, these unique reference points are usually close enough to the American *mep* location such that its use is not problematic for comparisons. Results can be evaluated based on the proximity of the images to the REJ, EXP and WSH images, but especially the consensus *mep* outcome norm.

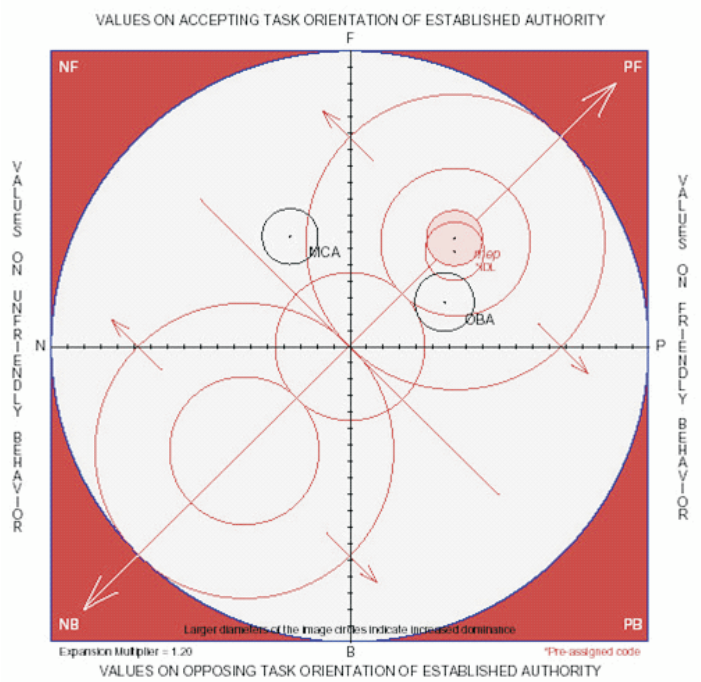
SYMLOG Applications in Other Settings

Numerous applications of SYMLOG in different organizational settings, cultures, and situations exist. Several published applications of SYMLOG include the edited works by Hare and Hare (1996) and Hare, Sjovold, Baker, and Powers (2005).

Scholarly applications of SYMLOG have investigated perceptions of *effective leadership styles and roles* among Central Eurasian managers (Ford & Ismail, 2006, 2008), *gender differences in management values* (Hare, Koenigs & Hare, 1997), *perceptions of political leaders* (Ellis, Nadler, & Rabin, 1996),

African immigrants' and African-Americans' *perceptions of workplace opportunity structures* (Whaley & Ford, 2007a, b), and *perceptions of entrepreneurial values* (Kecharananta & Baker, 1999). Additionally, we provide here a brief summary of one application of SYMLOG that should further help the reader to grasp and understand the SYMLOG measurement system and its power. The example comes from research conducted by the SYMLOG Consulting Group in the months leading up to the USA 2008 Presidential election (SYMLOG Consulting Group, 2008). Figure E is a SYMLOG Field Diagram depicting the final field location averages over all raters for the images of the Presidential candidates – Senator John McCain (MCA) and Senator Barack Obama (OBA). These ratings were provided by 320 respondents who identified themselves as either Democrat (N=131), Republican (N=71), Independent (N=86), or Other (N=32). The ratings were collected online between September 22 and October 10, 2008, following the first debate between the candidates. The diagram indicates that the candidates were perceived to be polarized, wherein McCain's image appears on the negative side of the space and Obama's image is slightly overlapped with the Ideal Candidate (IDL) image on the positive side of the space. The location of the images did not change in another data collection five days prior to the election (October 30). Given the location of the images, it was concluded that Obama would likely be attractive to more voters than McCain. Indeed, if they voted according to their Ideal Candidate, Obama would most likely win the election. Although the 320 respondents was not a random sample of the U.S. voting population, we know that the outcome of the election was consistent with the respondents' perceptions in that study.

Figure E
Perceptions of 2008 USA Presidential Candidates



Legend
- IDL = Ideal Candidate
- MCA = John McCain
- OBA = Barack Obama
- MEP = Most Effective Profile (optimum for effective leadership)

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Method

Research Questions

The following seven (7) research questions were generated for examination in this exploratory study:

R1. Do significant differences exist among the final field locations of the Collaboration (COL), Competence (COM), Cultivation (CUL) and Control (CON) images on the SYMLOG Field Diagram?

R2. Will Competence (COM) and Collaboration (COL) be rated closer to the Most Effective Profile (*mep*) image on the PN dimension than Cultivation (CUL) and Control (CON) in that order?

R3. Is the Most Collegial Person (MCP) image closer to *mep* on the PN dimension than any other concept rated?

R4. Is the Least Collegial Person (LCP) image the furthest from the *mep* image on the PN dimension and also closer to Reject (REJ) than any other concept rated?

R5. Are there any significant differences among the final field locations of the eight concepts as rated for different identity groups such as gender and organizational groups?

R6. Is there a significant difference between the final field locations of Fair Procedures (FAP) and Fair Results (FAR) images?

R7. Are there any significant differences between the final field locations of Fair Procedures (FAP) and Fair Results (FAR) as rated by different identity groups such as gender and organizational groups?

Data Collection

This exploratory research study attempts to reduce the measurement bias by using one common assessment instrument and a single methodology. Therefore, SYMLOG is used as the measurement system to compare all eight concepts. Each respondent was asked to rate their perceptions of the same eight concepts on the SYMLOG assessment instruments and two reports were produced. The Bales Report and Field Diagram Report were used to compare individual, group and organizational responses across all eight concepts. Each one of the eight concepts is assessed by using the same twenty-six (26) SYMLOG items rated as: Often (O), Sometimes (S) or Rarely (R). The two SYMLOG reports provide a basis for analyzing the similarities, differences, and the relationships among the concepts.

The four core organizational culture concepts: collaboration, competence, cultivation, and control were individually rated. In addition to the perceptions of the four core organizational culture concepts, the perceptions of respondents concerning the "most collegial" and "least collegial" person in their organization and the perceptions of "distributive = fair results" and "procedural=fair procedures" social justice concepts were also rated.

Specifically, the respondents were asked to "rate" their "impressions" of the eight (8) different behavioural concepts on the **SYMLOG** assessment instrument. These eight behavioural concepts were identified with a three-letter CODE as indicated below:

1. Collaboration **(COL)**
2. Competence **(COM)**
3. Cultivation **(CUL)**
4. Control **(CON)**
5. Most Collegial Person **(MCP)**
6. Least Collegial Person **(LCP)**
7. Fair Procedures **(FAP)**
8. Fair Results **(FAR)**

Sample

A convenience sample of MBA students and faculty members was used for this exploratory study. The MBA respondents were full-time working professionals and managers inside a range of high-tech business firms. They were middle level, technical professionals and first-line managers who work in the high-tech industry located in Northern California. The average age of the respondents was 33 and they had an average of 8 years of work experience. Most of the faculty members were full-time and part-time employees of a large public university located in Northern California. The faculty respondents from the California based university represented four different colleges within the university and averaged 43 years of age. A smaller number of faculty members in the study are located at universities representing three different geographical regions of the U.S. All persons in the sample volunteered to participate in the study and they were assured of anonymity.

The sample consisted of 122 respondents: 22 faculty members (5 female, 17 male), 100 private sector respondents (50 female, 50 male) who were also either enrolled as students (N= 70) in a graduate management course at the aforementioned California University or were employed full-time and not attending school (N=30). One statistical test required the omission of one questionnaire (male faculty) that reduced the working sample to 121 respondents.

Analysis

The results are compared from the perspective of: 1) type of organization, 2) gender of respondent, 3) job of respondent and 4) location perspectives. For example, do female faculty members view collegiality and social justice the same way as male faculty members? Would members of high tech business organizations view these concepts different from academic organizations?

The SYMLOG reports that are based on the type of analysis undertaken: individual leadership assessment, assessment of intra-group dynamics, assessment of inter-group dynamics, organizational culture assessment, or customized assessment of particular conceptual issues. The present study falls into the latter category of assessments, in that organizational culture, social justice and collegiality perceptions were the objects of the respondent's ratings of the twenty-six standard SYMLOG questions rather than rating the myriad of other concepts that can be measured with SYMLOG assessments. Prior research has shown SYMLOG to be a highly reliable assessment tool (cf. Bales & Cohen, 1979; Van Velsor & Leslie, 1991).

As noted previously, the present study is exploratory in nature. The unavailability of organization outcome data for each respondent made the creation of unique reference norms mentioned previously not feasible. Therefore, the first analysis was conducted based on the proximity of each image to the SYMLOG consensus *mep* outcome location. Secondly, ANOVAs were used to investigate the independence of each image.

Quasi-Euclidean Distance and One-Way Anovas

The Euclidean distance analytical approach is inductive yet rigorous in terms of the comparative interpretative lens with which we examined the data. Analyses for the research questions were undertaken in two stages. First, we examined the proximity of each one of the eight measures of perception to the "reference" image, *mep*, along the P/N dimension. If the image was more proximate to the *mep*, the outcome was assumed to have perceived values that were consistent with effective organizational functioning. Ordinarily, proximity of the images would be determined by computing the three-dimensional Euclidean distance between the "reference" image location (in this case *mep*) and the final field location in SYMLOG space of each of the eight images underlying the organizational culture, social justice, and collegiality concepts, and doing the analyses for identity groups of interest in the study such as male and female sub-groups. The "significance" of the size of the Euclidean distances can be assessed by comparing them to estimates of significant Euclidean distances reported in another SYMLOG-based study (cf. Kelly & Duran, 1985). The Euclidean distance between two images is computed using the following formula:

$$SQRT(((U\text{-}D)_a - (U\text{-}D)_b)^2 + ((P\text{-}N)_a - (P\text{-}N)_b)^2 + ((F\text{-}B)_a - (F\text{-}B)_b)^2)$$

Kelly & Duran (1985), in a study that examined group cohesion within high and low performing groups, observed that an optimal level of cohesion was one in which the groups exhibited average interpersonal Euclidean distances ranging from 3.5 to 5.9 SYMLOG scale units. Groups with very high distance scores did not perform well. Applying this result to the present study, as a "rule of thumb," it could be assumed that images with distances greater than or equal to 6.0 Euclidean distance scale units have significantly different locations in SYMLOG space. Images with distances less than 6.0

scale units can be considered to be close enough in their locations to be similar in meaning.

Moreover, for the present study, we also used a quasi-Euclidean distance comparison of images by examining differences in location along the P/N dimension only, which allowed us to use a more "traditional" statistical procedure (One-Way ANOVA) that would specify which image differences were significantly different at the .05 level of significance or greater.

Results and Discussion

The quasi-Euclidean distance comparisons among the images rated are shown in Figures F and G for faculty and private sector participants, respectively. This approach was taken because the largest differences between the eight images were along the P-N dimension, reflecting the positive versus negative bias in public opinion of the eight social justice, organizational culture, and collegiality concepts that were rated.

Figure F
Symlog Findings for Faculty*

NEGATIVE	MALE	FEMALE
	LCP[a]	LCP[a]
	CON[a]	CON[ab]
	COM[b]	COM[abc]
	FAR[bc]	FAR[abc]
	FAP[cd]	FAP[abc]
	COL[cd]	COL[abc]
	CUL[cd]	CUL[abc]
	MCP[cd]	MCP[bc]
	mep[d]	***mep***[c]
POSITIVE		

*Note: Images with the same superscript letter are not significantly different from one another; images with superscripts that differ are significantly different from one another at $p < .05$ on the PN dimension.

Figure G
Symlog Findings for Private Sector*

NEGATIVE	MALE	FEMALE
	LCP[a]	CON[a]
	CON[a]	LCP[a]
	COM[ab]	COM[ab]
	FAP[bc]	FAP[bc]
	FAR[bc]	FAR[bcd]
	CUL[cd]	MCP[cd]
	MCP[cd]	CUL[cd]
	COL[de]	COL[de]
	mep[e]	***mep***[e]
POSITIVE		

*Note: Images with the same superscript letter are not significantly different from one another; images with superscripts that differ are significantly different from one another at $p < .05$ on the PN dimension.

Examination of Participant Sub-group Differences

The second step in analyses for the research questions involved examining sub-group differences between male and female respondents in the perceived values that they associated with the eight images. Figures H - L display SYMLOG Field Diagram Reports associated with the images previously discussed.

Figure H
Field Diagram of Final Image Locations for Aggregate Data

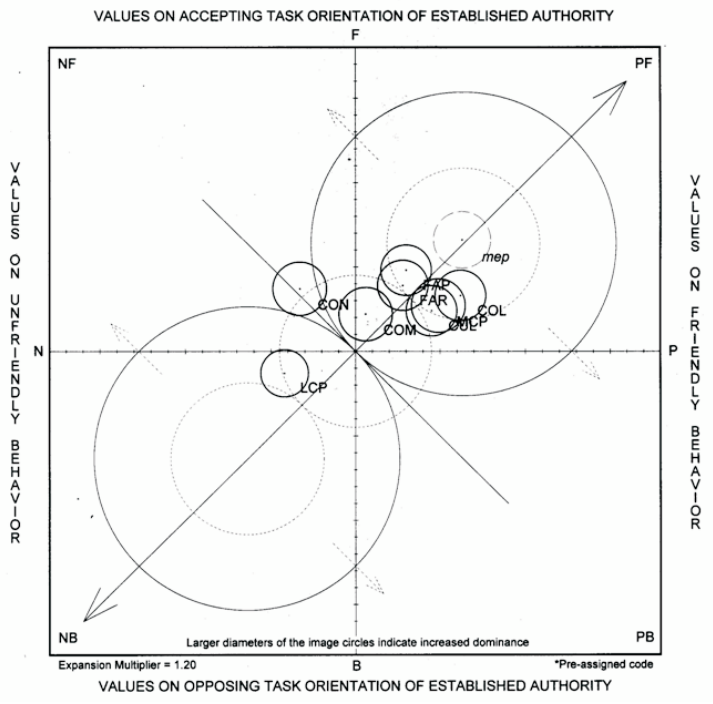


Figure I
Field Diagram of Final Image Locations for Male Faculty Participants

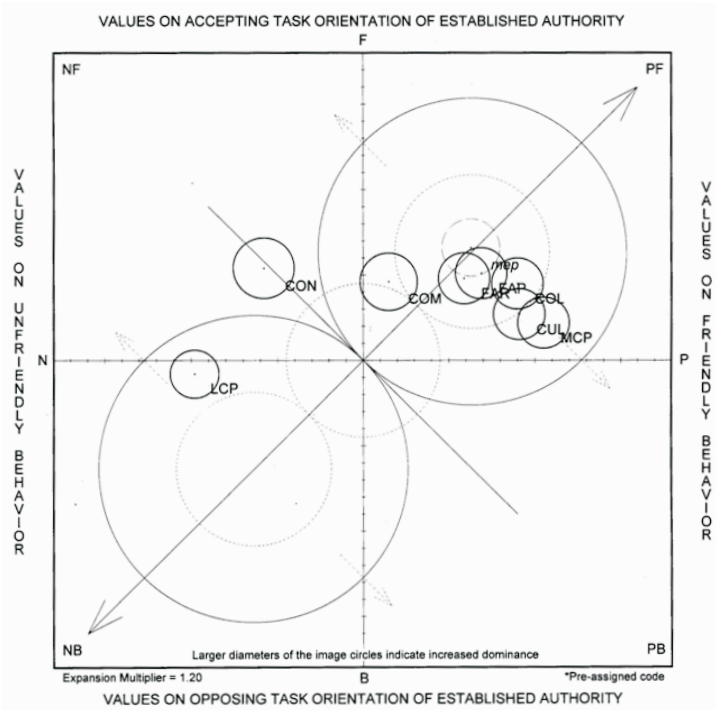


Figure J
Field Diagram of Final Image Locations for Male Private Sector Participants

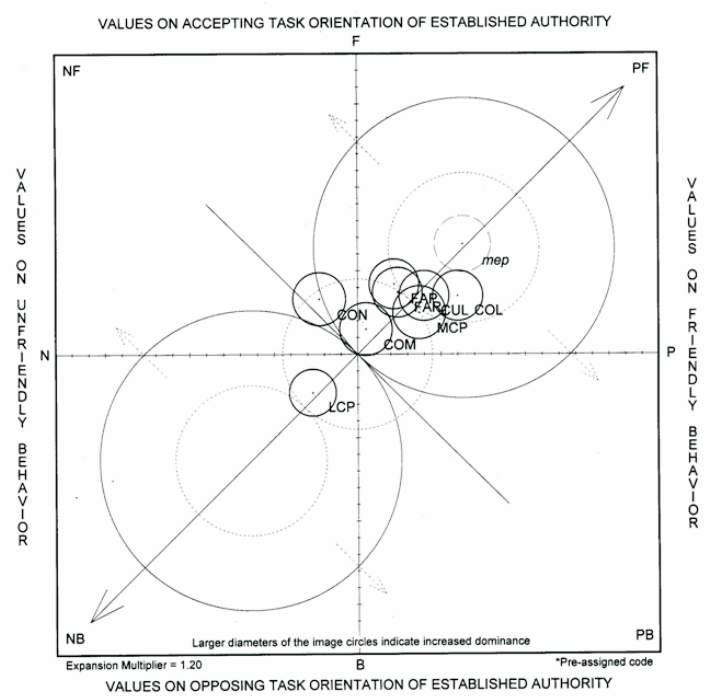


Figure K
Field Diagram of Final Image Locations for Female Faculty Participants

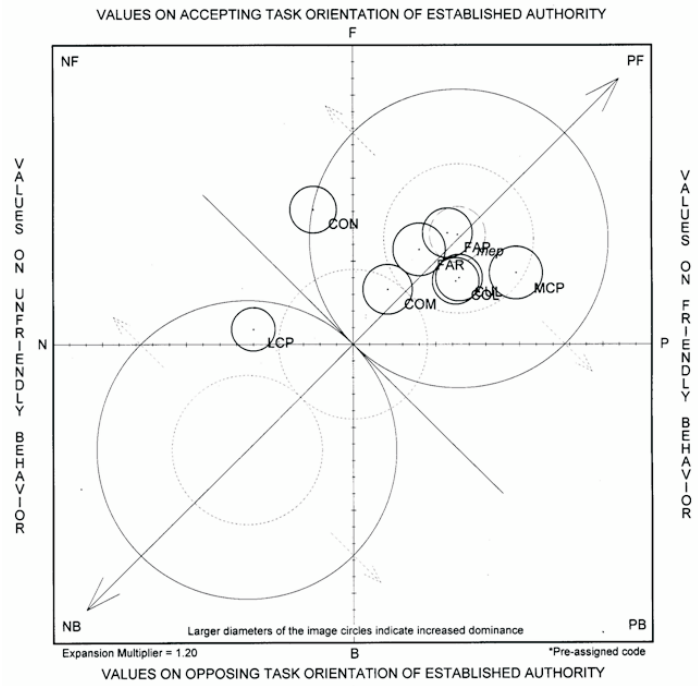
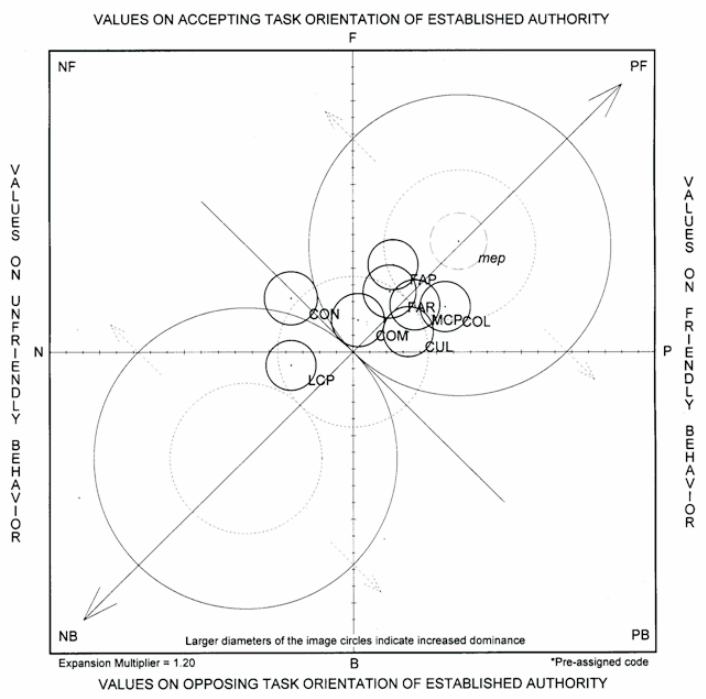


Figure L
Field Diagram of Final Image Locations for Female Private Sector Participants



The SYMLOG dimension inter-correlations for this study were calculated and are shown in Table A, along with Cronbach Alpha values. Additionally, Cronbach's Alpha values were computed for each of the collegiality images that were rated for each of the SYMLOG dimensions. These reliability values are shown in Table B. It was encouraging to note that the values for each of the three SYMLOG dimensions (U/D, P/N, F/B) were close to the suggested .70 minimum threshold value in most cases. Nonetheless, we do note that the reliabilities for the SYMLOG dimensions using traditional Cronbach Alphas is really not appropriate since SYMLOG values load on one, two, or all three SYMLOG dimensions (U/D, P/N, F/B). Additionally, the Euclidean distances between the rated images and *mep* by participant sub-groups are shown in Table C.

Table A
SYMLOG Dimensions Inter-correlations

	UD	PN	FB
UD	(.65)	.01	.16*
PN		(.66)	.22**
FB			(.70)

*p < .05; ** p < .01; Total Sample reliability coefficients appear in parentheses on diagonal.

Table B
Collegiality Image Reliabilities*

SYMLOG Dimension

Image	UD	PN	FB
Collaboration	.63	.58	.65
Competence	.68	.69	.71
Cultivation	.66	.65	.68
Control	.63	.62	.65
Most Collegial Person	.68	.66	.70
Least Collegial Person	.65	.68	.70
Fair Procedures	.61	.62	.62
Fair Results	.62	.64	.66

*Note: The Cronbach Alpha values shown were computed in the traditional sense. Most fall short of the recommended minimum value of .70. However, it should be recalled that many of the SYMLOG values load on more than one dimension. Therefore, use of "traditional" reliability metrics is really inappropriate.

Table C
Euclidean Distances Between SYMLOG mep and Collegiality Images by Identity Subgroup

Identity Subgroup	Collegiality Images					
	MCP	COL	FAP	FAR	CON	LCP
Female Faculty	3.76	3.51	2.30	2.76	9.79*	14.29*
Female Pvt. Sctr	4.73	4.02	4.85	5.99	10.87 *	12.82*
Male Faculty	6.07*	3.54	2.34	2.40	12.66*	18.16*
Male Pvt. Sctr	4.91	3.57	5.10	5.45	9.49*	13.32*

*Euclidean distance represents a significant difference between location of indicated image and mep at $p < .05$ level. Final location for mep used in computing Euclidean distances was 2.7U 6.7P 6.4F.

Differences among the images on the P/N dimension were assessed using SPSS One Way ANOVA computations incorporating a Tukey post-hoc test of mean differences. Since the largest differences within settings were gender based, the results of these analyses were arrayed along a continuum representing the interpersonal relations-oriented Positive – Negative (P/N) SYMLOG dimension and are shown in Figure F and Figure G, respectively, for Faculty and Private Sector Respondents. As noted in Table C, each image's location was also compared by gender sub-group to the *mep* location on all SYMLOG dimensions (*mep's* location is generally considered to be 2.7U 6.7P 6.4F). Figure M contains the conclusions drawn from these comparisons.

Results of the literature review and analyses for

examining the research questions indicate that organizational culture, social justice and collegiality have several sub-components and they are different from each other. The ANOVA results confirmed that selected concepts in the continuums displayed in Figures F and G were significantly different from each other for male and female respondents.

The SYMLOG reports, legal cases and anecdotal evidence suggest "collegiality" is used in fundamentally different ways in the university and business environments. In this study, for both the academic and business settings, the most effective and least effective colleague images have polar opposite locations in SYMLOG space because they were located in the PF and NB quadrants, respectively, of the field diagram. Control is the only other image that was rated in the negative part of the SYMLOG space (NF) for all field diagram reports. The collaboration, cultivation and most collegial images overlap in the PF quadrant. Competence is rated in the PF quadrant but slightly more negative than other images in the PF quadrant. The distributive justice and procedural justice images were rated in the PF quadrant close to the collaboration and most collegial images. These findings are illustrated in the field diagrams shown in Figures H – L. The demographic comparisons create the most distinctive results for the eight concepts.

The ANOVAs in Figure F indicate that six of the sixteen image combinations for males and females on the P/N dimension in academia were significantly different from each other at $p < .05$ level. It was interesting to note the least collegial person (LCP) image was the same for male and female faculty while the most collegial person (MCP) and *mep* were always different for male and female private sector respondents, but not for male and female faculty respondents. The other images varied in terms of significance on the P/N dimension for males and females in private sector settings. On the other hand, there was more consistency between male and female perceptions of these same eight images and the *mep* in the academic setting. The LCP, MCP, *mep*, COM, CUL, and FAP images were all significantly different from each other for both private sector males and females. Since the results from both the private sector and academia confirmed that the *mep*, MCP and LCP were significantly different, this suggests that *mep* and collegiality are the most salient images, and gender makes less of a difference in the private sector as opposed to academic settings in terms of perceptions of these images.

Conclusions and Recommendations

Figure M is a summary of the tentative conclusions from this exploratory study. These conclusions and the literature review formed the basis for recommendations for future research that are displayed in Figure N and followed by a few practical implications for current organizations.

Figure M
TENTATIVE CONCLUSIONS

1. THE MOST COLLEGIAL PERSON (MCP) AND LEAST COLLEGIAL PERSON (LCP) IMAGES ARE POLARIZED IN OPPOSITE PF AND NB PARTS OF SYMLOG SPACE.
2. THERE IS LESS DISTANCE BETWEEN MCP AND LCP IMAGES FOR ACADEMIC SAMPLE AS COMPARED TO PRIVATE INDUSTRY SAMPLE.
3. THE P/N SYMLOG DIMENSION ACCOUNTS FOR MOST OF THE VARIANCE IN SCORES FOR ACADEMIC AND PRIVATE INDUSTRY SAMPLES.
4. CONTROL AND COMPETENCE IMAGES WERE MORE TASK ORIENTED (F) IN PREVIOUS RESEARCH OF ORGANIZATIONAL CULTURE AT A LARGE, PRIVATE SOFTWARE COMPANY THAN IN THE PRESENT STUDY.
5. THE SOCIAL JUSTICE IMAGES (FAR,FAP) ON SYMLOG WERE CLOSER TO MOST EFFECTIVE PERSON (MEP) NORM THAN THE FOUR ORGANIZATIONAL CULTURE IMAGES (CON,COM,CUL,COL).
6. THE SOCIAL JUSTICE IMAGES IN ACADEMIC SAMPLE WERE MORE TASK ORIENTED FOR FEMALES AS COMPARED TO MALES.
7. THE MCP, FAR AND FAP IMAGES CLUSTER CLOSE TO MEP FOR PRIVATE SECTOR SAMPLE AND ONLY FAR AND FAP ARE CLOSE TO MEP FOR ACADEMIC SAMPLE.
8. MCP IMAGE FOR ACADEMIC SAMPLE CLUSTER CLOSE TO COL AND CUL IMAGES IN P DIRECTION OF SYMLOG SPACE.

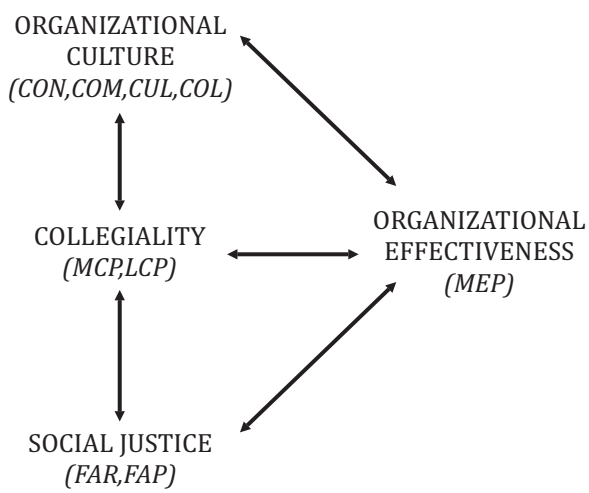
Figure N
SUGGESTIONS FOR FUTURE RESEARCH

1. DEVELOP A CONCEPTUAL FRAMEWORK THAT INCLUDES ORGANIZATIONAL CULTURE, SOCIAL JUSTICE, COLLEGIALITY AND ASSOCIATED DEPENDENT VARIABLES.
2. INCLUDE OUTCOME MEASURES FOR EACH RESPONDENT.
3. INCLUDE REPRESENTATIVE SAMPLE OF INDUSTRIES, PROFESSIONS, GENDER, RACE AND OTHER KEY DEMOGRAPHIC VARIABLES SUCH AS COUNTRY OF ORIGIN.
4. INCREASE SAMPLE SIZE FOR GENERALIZABILITY.
5. CROSS-VALIDATE RESULTS FROM SYMLOG INSTRUMENT WITH RESULTS FROM OTHER APPROPRIATE ASSESSMENT INSTRUMENTS.
6. USE APPROPRIATE PARAMETRIC STATISTICS TO MEASURE STATISTICAL SIGNIFICANCE WITH LARGER SAMPLE.

Conceptual Research Framework

The first recommendation led to the development of a new conceptual framework for future research and the model is displayed in Figure O. The exploratory study established organizational culture, social justice and collegiality as important variables based on current research for U.S. respondents. SYMLOG was used to assess the perceptions of eight concepts, and several methods of analysis resulted in the conclusion that these variables were significantly different from each other. The model in Figure O reflects organizational culture, social justice, and collegiality constructs together with the relationships among these three concepts and organizational effectiveness outcomes. The present exploratory study focused on comparisons to the SYMLOG effectiveness norm *mep* and clustering of images, and did not attempt to directly test the relationships among variables in the model. Future research will seek to directly test all components and paths in Figure O and employ appropriate statistical techniques to identify key relationships and their importance for application within different types of organizations. The literature review and findings of this study suggest future testing of the conceptual model to start with the collegiality and organizational effectiveness path. We assert that collegiality is an under-researched area in academia and private business for different reasons. Collegiality is embedded in the culture of academia as a relevant performance measure and is supported by the courts. Therefore, additional research in the measurement of collegiality and consistent, legal sub-group analysis concerning its relationship to performance should be welcomed. Collegiality research in other sectors, but especially the private business sector, has been discounted because it was considered to be subjective and not job-related. As the modern workforce changes and places a premium on teamwork, collaboration and reputation as job-related factors, future research on the relationship between collegiality, and stable and effective prospective measures of performance should be welcomed. This path in the research model would make practical and theoretical contributions in human resource management. Moreover, the research would contribute key insights concerning the saliency and significance of the variables in the model as well as their application to organizations across different settings in areas such as strategy and policy. Indeed, such research would continue to add to the small but emerging group of studies in the management literature that have incorporated the SYMLOG assessment methodology.

Figure O
MODEL BASED ON LITERATURE REVIEW



The other recommendations for future research in Figure N, such as a larger, more representative sample of employees, locations and employers, would help to generalize the results across different settings and implement effective changes where needed. Since the literature review suggests issues related to collegiality and organizational effectiveness are growing in countries outside the U.S., future research should extend to the international context. The current findings suggest that SYMLOG could provide a useful framework for collecting future data; however, other assessment techniques and statistical methods should be considered to cross-validate future data collection and results.

Practical Implications for Organizations and Employees

Since organizations have increasingly indicated that collegiality is an important measure of effectiveness, one obvious practical application of collegiality measurement in organizations is in the area of performance management. The applications are similar no matter whether the practical focus is the macro organizational level of performance management or the micro level of individual performance appraisal. If consultants to organizations as well as HR professionals in organizations desired to create a custom balanced scorecard, as opposed to the template created by Kaplan & Norton (2005), these practitioners could use SYMLOG to help design and gather information concerning "how customers perceive the organization" category. At the individual and team levels, SYMLOG measures of collegiality could help with getting a handle on perceptional bias in performance data collection. For organizations that use 360 degree multi-rater feedback methods and that desire a method for uncovering areas to collect additional behavioural feedback, the SYMLOG approach could help. From an HR and legal perspective, if collegiality is not job-related, it should be ignored as a selection factor or performance criterion. However, many organizations today struggle to improve performance measurement in areas where the work is heavily based on knowledge, reputation and teamwork, or the organization simply lacks accurate measures of collegiality. From a strictly legal perspective, the literature review mentioned the Americans with Disabilities Act (ADA) in the United States, which requires employers to consider job-related collegiality factors such as "getting along with others" when determining "essential" job functions. The ADA indicates that improper behaviour in and of itself does not constitute a disability, and having a disability does not excuse employees from performing essential job tasks and following the same conduct standards required of all employees (US Dept. of Labor, 2012). To measure "collegiality," employers could gather data from its workforce concerning the perception of "getting along with others" in their organizational context and compare it to the SYMLOG metric for effectiveness (*mep*). Moreover, we contend this job related data could be useful to organizations and employees alike in understanding collegiality behaviour in areas related to job redesign, stress and mental disorders. SYMLOG could be used to: (1) compare individual-level measures of collegiality to group- and organizational-level responses as well as to the SYMLOG norm (*mep*); and (2) provide a research-based "language" that managers could use with employees to discuss collegiality and effectiveness.

Organizations could be more proactive and use the previously mentioned SYMLOG "collegiality" profile to study, measure, develop and use their own profile for a "toxic-free" or "discrimination-free" workplace template. As future research is conducted with all components and paths of the research framework in Figure O, a plethora of practical applications will no doubt become apparent.

References

- Ambrose, M.L. & Cropanzano, R. 2003. A longitudinal analysis of organizational fairness: An examination of reactions to tenure and promotion decisions. *Journal of Applied Psychology*, 88: 266-275.
- Angones, F. 2007. Blessed are the peacemakers. *The Florida Bar Journal*. 81 (11): 6.
- Bales, R. F. & Cohen, S. P. 1979. *SYMLOG: A system for the multiple level observation of groups.* New York: Free Press.
- Bales, R.F. 1988. A new overview of the SYMLOG system: measuring and changing behavior in groups. In R. B. Polley, A. P. Hare, and P. J. Stone (Eds.), *The SYMLOG practitioner*: *Applications of small group research* (pp. 319-344). New York: Praeger.
- Becerra-Fernandez, I. & Leidner, D., (Eds.). 2008. *Knowledge management: An evolutionary view.* Armonk, New York: M.E. Sharpe, Inc.
- Becerra- Fernandez, I. & Sabherwal, R. 2008. Individual, group, and organizational learning: A knowledge management perspective. In Becerra-Fernandez, I. & Leidner, D. (Eds.) *Knowledge management: An evolutionary view* (pp. 13-39). Armonk, New York: M.E. Sharpe, Inc.
- Bugeja, M. J. 2002. Is Congeniality Overrated? *The Chronicle of Higher Education*, 30 July. http://chronicle.com/article/Is-Congeniality-Overrated-/46162/
- Cho, S. 2005. "Unwise," "untimely," and "extreme": Redefining collegial culture in the workplace and revaluing the role of social change. U.C. Davis Law Review Symposium, "Future of Critical Race Feminism" (April 1, 2005)
- Cohen, J., & Cohen, P. 1983. *Applied multiple regression/ correlation analysis for the behavioral sciences.* New York: Erlbaum.
- Collins, J.C. & Porras, J.I. 1994. *Built to last: Successful habits of visionary companies*. New York: Harper Business.
- Colquitt, J.A. Conlon, D.E.Wesson, M.J. Porter, C.O.L.H. & Ng, K.Y. 2001. Justice at millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*. 86, 425-445.
- Colquitt, J. A., Noe, R. A. & Jackson, C. L. 2002. Justice in teams: Antecedents and consequences of procedural justice climate. *Personnel Psychology*, 55: 83-100.
- Connell, M. A. 2001. The role of collegiality in higher education tenure, promotion, and termination decisions. *Journal of College and University Law,* 24 (4): 833-858.
- Cook, C.W. & Hunsaker, P.L. 2001. *Management and organizational behavior*. New York: McGraw–Hill Higher Education.
- Cropanzano, R. & Ambrose, M.L. 2001. Procedural and distributive justice is more similar than you think: A monistic perspective and a research agenda. In J. Greenberg and R. Cropanzano (Eds.), *Advances in organizational justice* (pp. 119-151). Stanford, Ca: Stanford University Press.
- Di Leo, J. R. 2005. Uncollegiality, tenure and the weasel clause. *Project MUSE: Scholarly Journals Online*, 13 (1-2), ISSN 1069-0697: 99-107.
- Drucker, P.F. 1994. The theory of the business. *Harvard Business Review* 72 (5):95-104.
- Ellis, S., Nadler, A., & Rabin, A. 1996. Political leaders in the SYMLOG space: Perceptions of right and left

wing leaders by right and left wing constituencies. *The Leadership Quarterly*, 7 (4): 507-526.

- Fogg, P. 2006. Young Ph.D.'s say collegiality matters more than salary. *Chronicle of Higher Education.* Vol. 53 (6): p. 1-1.
- Folger, R. & Konovsky, M.A. 1989. Effects of procedural and distributive justice on reactions to pay decisions. *Academy of Management Journal*, 32: 115-130.
- Ford, D. & Ismail, K. 2006. Perceptions of effective leadership among Central Eurasian managers: A cultural convergence-divergence examination within a globalization context. *Journal of International Management*, 12: 158-180.
- Ford, D. & Ismail, K. 2008. Perceived leader effectiveness across organizational roles: Exploratory evidence from Central Eurasia. *Eurasian Journal of Business and Economics*, 1 (2): 131-156.
- Fortin, M. 2008. Perspectives on organizational justice: Concept clarification, social context integration, time and links with morality. *International Journal of Management Reviews*, 88 (2): 93-126.
- Friedman, T.L. 2005. *The world is flat.* pp 81-103 New York: Farrar, Straus and Giroux.
- Gilliland, S.W. 1994. Effects of procedural and distributive justice on reactions to a selection system. *Journal of Applied Psychology*, 79: 691-701.
- Hare, S. E. & Hare, A. P. 1996. *SYMLOG field theory: Organizational consultation, value differences, personality, and social perception.* Westport, CT: Praeger Publishers.
- Hare, A. P., Koenigs, R. J., & Hare, S. E. 1997. Perceptions of observed and model values of male and female managers. *Journal of Organizational Behavior*, 18: 437-447.
- Hare, A. P., Sjovold, E., Baker, H. G., & Powers, J. 2005. *Analysis of social interaction systems: SYMLOG research and applications*. Lanham, MD: University Press of America.
- Hartle, A. 2004. Collegiality: A criterion for tenure? Why it's not all politics. *The Academic Exchange*, Dec./Jan. http://www.emory.edu/ACAD_EXCHANGE/2004/decjan/hartle.html.
- Hogan, D. 2005. Leadership: Toward an integration of classical and current theories. In A. P. Hare, E. Sjovold, H. G. Baker, & J. Powers (Eds), *Analysis of social interaction systems: SYMLOG research and applications* (pp. 68-131). Lanham, MD: University Press of America.
- Kaplan, R.S. & Norton, D.P. 2005. The balanced scorecard: Measures that drive performance. *Harvard Business Review*, 70(1):71-80.
- Kecharananta, N. & Baker, H. 1999. Capturing entrepreneurial values. *Journal of Applied Social Psychology,* 29 (4): 820-833.
- Kelly, L. & Duran, R. L. 1985. Interaction and performance in small groups: A descriptive Report. *International Journal of Small Group Research,* 1: 182-192.
- Kok, S.- K., et al. 2010. The move toward managerialism: Perceptions of staff in "traditional" and "new" UK universities. *Tertiary Education and Management.* 16 (June): 99-113
- Levi v. University of Texas at San Antonio, 840 F.2d 277, 282 (5th Cir. 1988).
- Lewin, T. 2002. 'Collegiality' as a tenure battleground. *The New York Times*, 12 July, p. A12.
- Luthans, F. 2011. *Organizational behavior: An evidence-based approach*. Twelfth Edition., New York: Mc Graw-Hill/Irwin.
- Massey, W.F. 1994. Overcoming hollowed collegiality: How department cultures affect teaching. *Change,*

26: 11-21.

- Mawdsley, R. D. 1999. Collegiality as a factor in tenure decisions. *Journal of Personnel Evaluation in Education*, 13 (2): 167-177.
- McGill v. Regents of University of California, 52 Cal. Rptr. 2d 466 (Cal. Ct. App. 1996).
- McKinney, M. 2005. Collegiality – the tenure track's Pandora's box. *Inside Higher Education*, 23 June. http://insidehighered.com/workplace/2005/06/23/mckinney.
- Morris, L. 2011. *From collegial engagement to performance management: the changing academic landscape in Australia*. PhD thesis, Victoria University.
- Mowday, R.T. , 1987. Equity theory predictions of behavior in organizations. In R.M. Steers and Porter, L.W. (Eds.) *Motivation and Work Behavior* (pp.91-113). New York: McGraw-Hill.
- Osland, J. S., Kolb, D. A., Rubin, J. M., & Turner, M. E. 2007. *Organizational behavior: An experiential approach.* Eighth Edition, Upper Saddle River, NJ: Prentice-Hall.
- Peddibhotla, N.B. & Subramani. 2008. Managing knowledge in virtual communities within organizations. In Becerra-Fernandez, I. & Leidner, D. (Eds.) *Knowledge management: An evolutionary view*. (pp. 229-247) Armonk, New York: M.E. Sharpe, Inc.
- Pettigrew, A.M., 1979. On studying organizational cultures. *Administrative Science Quarterly, 24:574.*
- Ponjuan, L., Conley, V. M., & Trower, C. 2011. Career stage differences in pretenure track faculty perceptions of professional and personal relationships with colleagues. *Journal of Higher Education*. 82 (May-June) pp. 319-346
- Reigle, R.F. 2001. Measuring organic and mechanistic cultures. *Engineering Management Journal.*
- Rockquemore, K.A.& Laszloffy, T. 2008. *The black academic's guide to winning tenure—without losing your soul*. Boulder, Colorado: Lynne Rienner.
- Sathe, V. 1985. *Culture and related corporate realities*. Homewood, Illinois: Richard D. Irwin.
- Schein, E.H. 1985. *Organizational culture and leadership.* San Francisco, California: Jossey-Bass.
- Schneider, B, Salvaggio, A. N. & Subirats, M. 2002. Climate strength: A new direction for climate *research. Journal of Applied Psychology, 87(2): 220-229.*
- Schneider, William E.,. 1994. *The reengineering alternative: A plan for making your current culture work.* New York: McGraw-Hill/Irwin.
- Schneider, William E., 2000. Why good management ideas fail: The neglected power of organizational culture. *Strategy & Leadership, 28 (1): 24-29.*
- SYMLOG Consulting Group 2008. 2008 Presidential candidate ratings survey results. Nov. http://www.symlog.com/internet/2008CandidateSurvey/SurveyResults.aspx
- SYMLOG Consulting Group 2012. What is SYMLOG? July. http://www.symlog.com / internet / what is symlog / what is symlog-01a.htm
- Tang, L. 2010. An analysis of the perceptions of young (junior) faculty in selected four-year universities in China regarding pre-service training, collegiality, and teacher effectiveness training. PhD Dissertation, Fayetteville State University.
- Tepper, B. J. & Taylor E. C. 2003. Relationships among supervisors' and subordinates' procedural justice perceptions and organizational citizenship behaviors. *The Academy of Management Journal, 46*: 97-105.

- Truxillo, D.M., Steiner, D.D. & Gilliland, S.W. 2004. The importance of organizational justice in personnel selection: Defining when selection fairness really matters. *International Journal of Selection and Assessment,* 12 (1/2): 39-53.
- U. S. Dept. of Labor (2012). Employers and the ADA: Myths and Facts. Office of Disability Employment Policy. 26 July. Retrieved from http://www.dol.gov/odep/pubs/fact/ada.htm
- Van Velsor, E. & Leslie, J. B. (1991). *Feedback to managers, Volume II: A review and comparison of sixteen multi-rater feedback instruments*. Greensboro, NC: Center for Creative Leadership.
- Whaley, G. & Ford, D. L. 2007a. Perceptions regarding workplace opportunity models by African immigrants and African Americans: An exploratory SYMLOG analysis. *Challenge: A Journal of Research on African American Men*, 13 (1): 1-28.
- Whaley, G. & Ford, D. L. 2007b. Mapping identity group perceptions of organizational opportunity structure outcomes: An exploratory SYMLOG analysis. *Journal of Social and Behavioral Sciences*, 40 (Winter): 71-109.
- Wiener, Y. 1988. Forms of value systems: A focus on organizational effectiveness and cultural change and maintenance. *Academy of Management Review*. 13: 534-545.

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