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<td>Sandra D. Edwards</td>
<td>Northeastern State University</td>
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<td>University of Central Oklahoma</td>
</tr>
<tr>
<td>Immediate Past President</td>
<td>Christine Miller</td>
<td>Tennessee Tech University</td>
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THE EFFECT OF PERCEIVED ETHICAL CLIMATE ON THE ORGANIZATIONAL COMMITMENT OF FULL-TIME FACULTY MEMBERS
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ABSTRACT

The purpose of this quantitative study was to examine the relationship of perceived ethical climate on the organizational commitment of full-time faculty members in institutions of higher education. Full-time faculty members are the forefront employees of any educational institution, and they have a direct impact on the successful implementation of the vision, mission, and goals of the institution. It is imperative to understand potential factors influencing organizational commitment because decreased levels of commitment have been linked to lower productivity, stagnated creativity, higher levels of turnover, and deviant workplace behaviors.

Four regional universities participated in this study. The data analysis indicated significant differences in self-reported levels of organizational commitment for full-time faculty members with regards to type of perceived ethical. Results of this study also indicate that gender differences play a significant role in the self-reported level of organizational commitment. Females reported higher levels of organizational commitment than their male counterparts.

INTRODUCTION

Institutions of higher education are some of the most complex organizations in the U.S. They have multi-million dollar budgets, operating incomes, capital expenditures, and intense marketing plans. The competition they face with other institutions can be as vicious as any corporate boardroom. They have no individual shareholders, yet society is seen as the largest of the stakeholders. The customers of an institution of higher education are as difficult to identify as the stakeholders who benefit and invest in their livelihood. Some of these institutions receive a significant amount of federal and state appropriations, yet may not be considered government agencies. Their existence can be found in the form of brick and mortar buildings, trade and vocational schools, hybrid institutions, or completely virtual associations, operating as public, private, or for-profit entities.

For administrators in higher education, however, it is imperative to identify areas of operational concern where they can have a positive effect. Recent research has focused on the role ethics plays in the scope of organizational climate and employee behavior. This includes the effect leaders or administrators have on their employees’ behavior as well. The most prevailing reasons behind the occurrence of deviant workplace behaviors is the conflicting perception, via
deviant role models, that the organization supports such behavior (Appelbaum, Iaconi, & Matousek, 2007). The ethical climate of an organization is linked directly to the positive behaviors of employees and also to a range of negative work behaviors including tardiness, absenteeism, and social loafing (Peterson, 2002a; Peterson, 2002b). Negative work behaviors also are linked to decreases in job satisfaction and organizational commitment, lower levels of creativity, stagnated productivity, increased antisocial behavior, as well as increased employee turnover (Appelbaum et al., 2007; Morrison, 2008; Peterson, 2002a; Peterson, 2002b). The detailed financial implications of these behaviors are difficult to capture; however, the impact to the bottom line can also be overwhelmingly apparent.

Most of the research conducted on ethical climate and organizational commitment has been analyzed using for-profit businesses and corporations. A growing stream of research is starting to look at organizational factors that influence institutions of higher education. Very little research, however, has been done on the relationship between ethical climate and organizational commitment in institutions of higher education. Cullen, Parboteeah, and Victor (2003) found a link between ethical climate types and organizational commitment. Therefore, the purpose of this study is to further explore the relationship between the perceived ethical climate and the organizational commitment of full-time faculty members.

By deepening the understanding of the effect that perceived ethical climate has on the organizational commitment of full-time faculty members, administrators could better understand the impact their managerial decisions have on the long-term viability of the institution. In 1871, during his inaugural presidential address, Yale University president, Noah Porter declared, “The most efficient of all moral influences in a college are those which proceed from the personal characters of the instructors . . . A noble character becomes light and inspiration, when dignified by intellectual power and attainments” (Brackner, 1992, p. 22). According to Webber (2007) it is the systematization or application of the values Porter refers to that evolve into the shared norms that are enacted upon by members of the organization; thereby, creating the organization’s culture.

Faculty members are the front-line employees at any institution of higher education. The job tasks they perform everyday have a direct impact on the organization’s ability to meet stakeholder expectations. Whether that stakeholder is the student, local municipalities, neighboring businesses, the federal government, or society at large, all successful endeavors will begin at the hands of the front-line faculty members. Thus, the current manuscript contains an empirical analysis focusing on the following research questions:

1. Is there a significant difference in the organizational commitment of full-time faculty members with regard to type of perceived ethical climate?
2. Is there a significant difference in the organizational commitment of full-time faculty members with regard to gender?

**LITERATURE REVIEW**

Organizational Culture and Climate

Organizational cultures not only reinforce the vision, the mission, and the goals of an organization, but they also provide the framework for expected behaviors of conduct for employees. Schein (1992) defined organizational culture as basic assumptions and beliefs about the organization that are shared by employees. It is the organizational culture that establishes the boundaries and parameters for acceptable employee behavior. The organizational culture characterized by shared assumptions, beliefs, and values helps to shape and guide [individual and group] behavior (Erakovich, Bruce, & Wyman, 2002).

According to McCrimmon (2007) culture was the personality or the stable force behind the organization. Often times a person’s personality is shaped early on in his or her life cycle, and when it is firmly established it can be difficult to change. Nelson and Quick (2009) defined organizational culture as “[patterns] of basic assumptions that are considered valid and that are taught to new members as the way to perceive, think, and feel in the organization” (p. 251). Simply stated, culture is synonymous with values. Apple Computers exemplifies an entrepreneurial culture of innovation and risk. Insurance companies and banks, however, tend to have cultures dominated by risk avoidance (McCrimmon, 2007). Organizational climates, however, are a distinct yet interrelated entity within organizational life.

Reichers and Schneider (1990) defined organizational climates as “the shared perception of the way things are around here” (p. 22). Ironically, it possesses both formal and informal - or some might even say casual – elements reinforcing ‘the way things are around here’ attitude of the organization’s employees. It differs significantly from organizational culture in that it is the executed behaviors of the individuals in the organization that produce the climates. When intertwined into the organization, the social norms become increasingly apparent as to what behaviors will considered acceptable and unacceptable. Organizational norms establish the climate and eventually evolve into acceptable behaviors that are well known by organizational members (Erakovich et al., 2002).

Ethical Climate
It is important to note that many types of climates exist within the organizational framework: climates for safety compliance, community service, and innovation are just a few that have been researched. A newer type of organizational climate is ethical climate. Introduced into the literature by Victor and Cullen (1988), the ethical climate of an organization refers to the behaviors that are perceived to be ethically correct and how issues regarding deviations away from those expected behaviors are handled in the organization. Therefore, organizationally speaking, it could be concluded that the culture of an organization establishes the values, while the climate of an organization establishes the ethics.

There are two general approaches for assessing ethics within an organization: cognitive approach and the shared-perception approach (Webber, 2007). The cognitive approach relies solely on the individual’s perception of the work environment. The shared-perception approach attempts to use unbiased data such as organizational structure, reward and performance evaluation systems, employee code of conduct manuals, and other formal documents (i.e. letters and memos from executives) to make an impartial assessment of the work environment. Critics to this approach claim that even though documents are used to assess the environment, they still represent the viewpoint of a single individual or small group of individuals.

**Ethical Climate and Organizational Commitment**

Cullen et al. (2003) further researched the relationship between organizational commitment and the three ethical climate criteria: egoistic, benevolent, and principled. In their research they found that benevolent organizations are positively related to organizational commitment, egoistic organizations are negatively related to organizational commitment, and principled organizations have a positive relationship to organizational commitment but only with professional workers. The negative impacts of egoistic climates are far reaching. Employees who work in egoistic climates perceive that self-interest is promoted and reinforced even at the expense of hurting other people. Organizations that promote self-interest within their social norms can experience higher levels of deviant workplace behaviors, lower forms of group cohesion, higher turnover intentions, and a reduction in the organizational commitment of their membership. Organizations that promote benevolent climates encourage a perception of a local caring environment. These caring environments “[are] more likely to encourage positive affect among organizational members, which in turn can result in higher attachment to the organization (Cullen et al., 2003, p. 138). Interpersonal cohesiveness that supports affective attachment and reinforces the organizational commitment of its membership is promoted.
Organizational Climate and Deviant Workplace Behavior

Contributors such as social, interpersonal, and organizational factors have been linked to workplace deviance. Researchers have discovered that the most prevailing reasons behind the occurrence of deviant workplace behavior is the conflicting perception, via deviant role models, that the organization supports such behavior (Appelbaum et al., 2007). Deviant or negative workplace behavior is linked to antisocial behavior, organizational misbehavior, noncompliant behavior, workplace deviance, and dysfunctional workplace behavior (Peterson, 2002a; Peterson, 2002b). Potential costs include lost productivity, lost resources, lost customers, employee turnover, and decreased employee morale.

Trevino (1986) claimed that both organizational and situational factors can influence the attitude and behavior of the organizational membership. According to Webber (2007) it is the executed behaviors of the individuals in the organization that produce the organizational climates. The ethical climate of an organization is linked directly to the positive behaviors of employees and also to the range of negative work behaviors including tardiness, absenteeism, and lax performance (Peterson, 2002a; Peterson, 2002b). In his research Peterson (2002b) found that the Ethical Climate Questionnaire created by Victor and Cullen was a partial predictor of deviant workplace behavior. More specifically, the ethical dimensions were predictive of many types of behaviors including deviant workplace behavior.

Morrison (2008) proposed that negative workplace relationships will impact the level of job satisfaction, turnover intentions, organizational commitment, and cohesion experienced by organizational members. She concluded that “those [participants] with at least one negative relationship at work were significantly less satisfied, reported less organizational commitment, were part of less cohesive workgroups and were significantly more likely to be planning to leave their job” (Morrison, 2008, p. 340). Furthermore, increased stress, eventually leading to employee burnout, was another predictable outcome of negative workplace relationships.

One suggestion for countering deviant behavior is the establishment of a strong organizational culture, specifically a culture focused on core ethical values (Appelbaum et al., 2007). Additionally, it is critically important that these ethical values are also communicated and disseminated to all employees in the organization and reinforced by the behavior of the supervisors and leaders in the establishment of the organizational policies and applicable social norms.

Ethical Leadership and Organizational Climate

Leaders within an organization are responsible for establishing the vision, mission, goals, and values of an organization; therefore, it is important to note the role that leaders play within
the organizational climate. Ethical scandals have plagued U.S. business practices in recent times and questions have been raised as to the impact leaders have on providing ethical guidance. Brown, Trevino, and Harrison (2005) defined ethical leadership as the demonstration of appropriate conduct through personal actions and interpersonal relationships. Maxwell (2005) described leadership simply as influence. Therefore, in order to have influence with one’s followers, a leader must be viewed as an attractive, credible, and legitimate role model (Maxwell, 2005).

The study of ethical leadership is built upon the foundation of social learning. Social learning proposes that leaders will influence the ethical behavior of others through modeling (Brown et al., 2005). It is the leader’s responsibility to model the ethical behavior they want from followers. Wimbush and Shepard (1994) found that subordinates mimic supervisors’ behavior because it is supervisors who hold the subordinates accountable for their actions.

This theory of social learning and modeling is grounded in Mead’s (1934) theory on symbolic interactionism. “Symbolic interactionism is a theory which explains how people create shared perceptions through an on-going, social interactive process of interpreting, defining, and evaluating events through symbols” (Wimbush & Shepard, 1994, p. 642). In a work relationship, symbols take on many different forms. Symbols are most often expressed through verbal and nonverbal communication between supervisors and subordinates (Wimbush & Shepard, 1994). Also, supervisors and leaders play an important role in reinforcing and disseminating the organization’s visions, mission, goals, and policies throughout the organization. Supervisors and other organizational leaders become a critical determinant of how organizational policies are perceived throughout the organization (Wimbush & Shepard, 1994). When policies and expectations are communicated incorrectly, inconsistently, or dissimilarly, the various climate types begin to emerge.

Organizational Commitment

Meyer and Allen proposed a three-pronged approach for understanding organizational commitment. This perspective on commitment consists of three general themes: “affective attachment to the organization, perceived costs associated with leaving the organization and obligation to remain with the organization” (Meyer & Allen, 1991, p. 64). These three themes are also more commonly referred to as 1) affective commitment, 2) continuance commitment, and 3) normative commitment.

Affective commitment refers to a person’s emotional attachment and identification with the organization’s goal and values. Strong affective commitment creates continued employment with the organization because the individual wants to do so. Continuance commitment refers to an acute awareness of the perceived costs associated with leaving the organization. When the costs associated with leaving the organization are perceived to be greater than potential benefits, continued employment occurs solely because the individual needs to remain with the
organization. Normative commitment reflects a feeling of personal obligation to remain with the organization. Strong normative commitment creates continued employment because employees feel that they ought to remain with the organization (Meyer & Allen, 1991). As a result, for this research study, organizational commitment is defined as the level of attachment, both emotionally and functionally, to one’s current place of employment (Elizur & Koslowsky, 2000).

Organizational Commitment and Values

Research on values is fraught with complex and individualistic motivations. Values can be as diverse as the number of individuals studied. According to Johnson (2007), values work as a primary driver for our decision making practices and our behavior on the job. Values directly influence job behaviors such as how hard we work, how we treat coworkers and subordinates, and how we evaluate performance. Values are also used for priority establishment and assessing the correctness of behaviors. Schwartz (1992) developed the most widely used assessments on value systems. He defined values as the desirable goals that serve as guiding principles that directly influence individual.

Leaders and managers play an important role in employees’ perceptions of the values they associate with their company. Actions and behaviors exhibited by superiors within the organization have a direct impact on employees’ perceptions of organizational values. Perceived organizational values have a direct link to organizational commitment; therefore, when leaders and managers behave in manners that reinforce the values of benevolence and vision, the levels of affective and normative commitment are increased in their workforce. Based upon previous research (Abbott et al., 2005), organizations play an important role in reinforcing the organizational commitment (specifically affective and normative) in their workforce as well.

Instrumentation

Two previous established survey instruments were used to collect data for this study. The modified Meyer and Allen (2004) Three-Component Model (TCM) survey for employee commitment, and Victor and Cullen’s revised Ethical Climate Questionnaire (1993). The revised Three-Component Model (TCM) of employee commitment measures three distinct factors of organizational commitment. These three types of employee commitment are affective, normative, and continuance commitment and each factor measures a separate component of the overall commitment process. This unique perspective on commitment consists of three general themes: “affective attachment to the organization, perceived costs associated with leaving the organization and obligation to remain with the organization” (Meyer & Allen, 1991, p. 64). It has also been explained that normative commitment relates to what one should do, affective
commitment pertains to what one wants to do, and continuance commitment explains what one has to do (Jenkins, 2009; Meyer & Allen, 2004).

Each component, affective, normative, and continuance, is measured based upon four questions off of the TCM instrument. A seven-point Likert-type scale was used to measure agreement with each statement. The scale ranged from (1) strongly disagree to (7) strongly agree.

**Revised Ethical Climate Questionnaire (RECQ)**

The Revised Ethical Climate Questionnaire (RECQ), a widely used assessment of ethical climate in organizations, was originally developed in 1988 by Victor and Cullen. Originally called The Ethical Climate Questionnaire (ECQ), it has undergone one significant revision from its origination, and it is now referred to as the Revised Ethical Climate Questionnaire. The purpose of the measurement was derived from Victor and Cullen’s desire to study the ethical work climate in an organization based primarily upon the analysis of the ethical choices made by individuals in that organization (Webber, 2007). Their primary focus was to develop a measurement heavily grounded in the shared-perception approach to ethical assessment.

For the purpose of this study, an adaption of the ethical climate questionnaire was used. The focus of the revised instrument will center on the three factors of ethical criteria: Egoism, Benevolence, and Principled. According to Cullen, Victor, and Bronson (1993), “ethical climates may be distinguished in terms of maximizing one’s own self-interests, maximizing joint interests, or adherence to universal principles” (p. 668). Four items for each of the three ethical criteria were selected to be used in this study. A seven-point Likert-type scale was used which ranged from (1) strongly disagree to (7) strongly agree.

**RESULTS AND ANALYSIS OF DATA**

The purpose of this study was to investigate the relationship between organizational commitment and perceived ethical climate of full-time faculty members at four regional universities located in the United States. An electronic survey with three sections was used to capture data. A seven point Likert-type scale was used on the first two sections to assess varying levels of organizational commitment and perceived ethical climate. The third section included five demographical questions. All full-time faculty members at the four participating institutions, totaling approximately 7,808, were invited to respond. Six hundred seventy-three responses were captured; however, only 594 were used in the analysis of data. There were 79 ineligible responses that included 32 incomplete surveys, 39 who were not full-time faculty members, and 8 who were employed by their institution for less than 1 year. The demographic
The make-up of the participants included 54.2% tenured faculty, 25.6% tenure-track faculty, and 20.2% of contract-based or other faculty.

### TABLE 1 – RESPONDENTS DEMOGRAPHIC INFORMATION BY INSTITUTION

<table>
<thead>
<tr>
<th>Institution</th>
<th>Total Faculty Responses</th>
<th>Male-Female Responses</th>
<th>Mean Years at Present Institution</th>
<th>Mean Total Years as Faculty Member</th>
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<tbody>
<tr>
<td>A</td>
<td>130</td>
<td>73/57</td>
<td>15.7</td>
<td>22.4</td>
</tr>
<tr>
<td>B</td>
<td>164</td>
<td>100/64</td>
<td>16.2</td>
<td>22.7</td>
</tr>
<tr>
<td>C</td>
<td>155</td>
<td>61/94</td>
<td>5.9</td>
<td>9.3</td>
</tr>
<tr>
<td>D</td>
<td>145</td>
<td>49/96</td>
<td>6.2</td>
<td>10.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>594</strong></td>
<td><strong>283/311</strong></td>
<td><strong>11.0</strong></td>
<td><strong>16.0</strong></td>
</tr>
</tbody>
</table>

**Group Assignments**

Respondents were grouped into one of the four ethical climate type categories based upon their highest cumulative score. The ethical climate questionnaire is a continuous measurement whereby all respondents were required to answer four questions for each climate type based upon a seven point Likert-type scale. Therefore, total scores ranged from a possible high of 28 to a possible low of 4 for each climate type. Respondents’ observations were grouped based on which of the three ethical climate types received the highest cumulative score. If the cumulative score for two climate types was equal, then the observation was assigned into one of the two groups randomly. With 594 completed responses, 168 respondents were grouped into the benevolent ethical climate, 166 respondents were grouped into the egoism climate, and 260 respondents were grouped into the principled climate.

**Reliability**

“Reliability is the extent to which a variable or set of variables is consistent in what it is intended to measure” (Hair, Anderson, Tatham, & Black, 1998, p. 3). Cronbach’s alpha was used as a measure of reliabilities for all constructs (Cronbach, 1951). Each of the scales had a reliability of at least internal consistency (Pedhazur & Schmelkin, 1991). See Table 2.
TABLE 2 - RELIABILITIES

<table>
<thead>
<tr>
<th>Scale</th>
<th>Chronbach’s Alpha</th>
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<tr>
<td>Total Commitment</td>
<td>.78</td>
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<tr>
<td>Total Benevolent</td>
<td>.87</td>
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<tr>
<td>Total Egoism</td>
<td>.70</td>
</tr>
<tr>
<td>Total Principled</td>
<td>.74</td>
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</table>

Research Questions and Analysis

Research Question 1: Is there a significant difference in the organizational commitment of full-time faculty members with regard to type of ethical climate?

Ho1: There is no significant difference in the organizational commitment of full-time faculty members with regard to type of ethical climate.

A one-way analysis of variance was conducted to evaluate the relationship between types of perceived ethical climate and the self-reported levels of organizational commitment. The factor variable the type of perceived ethical climate included three groups: benevolent, egoism, and principled. The dependent variable was the self-reported level of organizational commitment. The ANOVA was significant, \[ F(2, 591) = 73.27, p < .001 \]. Therefore, the null hypothesis was rejected. The strength of the relationship between the type of ethical climate and the self-reported level of organizational commitment as assessed by \( \alpha^2 \) was large (.20) (Green & Salkind, 2008).

Because the overall F test was significant, post hoc multiple comparisons were conducted to evaluate the pairwise difference among the means of the three groups. A Tukey procedure was selected for the multiple comparisons because equal variances were assumed. There was a significant difference in the means between the benevolent ethical climate group and the egoism ethical climate group (\( p < .001 \)) and between the benevolent ethical climate group and the principled ethical climate group (\( p = .001 \)). There was also a significant difference between the egoism ethical climate group and the principled ethical climate group (\( p < .001 \)). The data suggest that when faculty members perceive their organization’s ethical climate to be egoistic, there are lower self-reported levels of organizational commitment than when they perceive the ethical climate to be benevolent or principled. It also appears that when faculty members perceive the organization’s ethical climate to be benevolent, there are higher self-reported levels of organizational commitment than when they perceive the ethical climate to be egoistic or principled. The 95% confidence intervals for the pairwise differences as well as the means and standard deviations for the three ethical climate types are reported in Table 3.
TABLE 3
MEANS AND STANDARD DEVIATIONS OF ORGANIZATIONAL COMMITMENT
SCORES WITH 95% CONFIDENCE INTERVALS OF PAIRWISE DIFFERENCES

<table>
<thead>
<tr>
<th>Ethical Climate Types</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Benevolent</th>
<th>Egoism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benevolent</td>
<td>168</td>
<td>61.23</td>
<td>9.65</td>
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</tr>
<tr>
<td>Egoism</td>
<td>166</td>
<td>47.31</td>
<td>11.50</td>
<td>11.12 to 16.72</td>
<td></td>
</tr>
<tr>
<td>Principled</td>
<td>260</td>
<td>55.58</td>
<td>11.25</td>
<td>1.49 to 6.56</td>
<td>7.35 to 12.44</td>
</tr>
</tbody>
</table>

Research Question 2: Is there a significant difference in the organizational commitment of full-time faculty members with regard to gender?

**Ho2:** There is no significant difference in the organizational commitment of full-time faculty member with regard for gender.

An independent-samples t test was conducted to evaluate whether the mean scores for organizational commitment differ based on gender. The self-reported level of organizational commitment was the dependent variable and the group variable was gender type. The test was significant, \[t(592) = 4.09, p = < .001\]. Therefore, the null hypothesis was rejected. The \(\eta^2\) index was .03, which indicated a small effect size (Green & Salkind, 2008). Female participants (M = 57.50, SD = 11.82) tended to report higher levels of organizational commitment than their male counterparts (M = 53.47, SD = 12.19). The 95% confidence interval for the difference in means was (-5.96 to -2.09).

**Key Findings**

The purpose of this study was to determine if a relationship exists between a faculty member’s perception of his or her organization’s ethical climate and the self-reported levels of organizational commitment and job satisfaction. Specifically, this research assessed the perception of 594 full-time faculty members working at four regional universities across the United States. It is important to note that the findings of this study may not be generalizable to other populations due to two key constraints: 1) The return rate for this study is approximately 8.6%, and (2) the faculty respondents consisted of 80% tenured or tenure-track faculty. The following conclusions, however, were based upon the findings from the data of this study:

1. The mean total organizational commitment scores of full-time faculty members were significantly different among ethical climate types. Faculty members who perceive their organization to have a benevolent ethical climate reported higher total commitment scores than those who perceive the climate to be principled or egoistic. This finding is
supported in previous research (Cullen et al., 2003; Victor & Cullen, 1988). Benevolent climates center on fostering friendship, team interest, and social responsibility amongst organizational members. This pertains most closely to the affective commitment or the type of organizational commitment that is derived from attachment to the goals and values of the organization, emotional linkage to other members of the organization, and the strength of an individual’s involvement with the organization.

2. Faculty members who perceived their organization to have a principled ethical climate reported lower total organizational commitment scores than those in the benevolent group but higher total organizational commitment scores than those who perceived the climate to be egoistic. This is also supported by previous research findings (Cullen et al., 2003; Steers, 1977, Victor & Cullen, 1988). Principled ethical climate groups describe those workers who have a professional set of standards, laws, or codes associated with their trade. They also describe individuals who usually have an extensive educational background. Steers (1977) found that “more highly educated people . . . would be less committed to the organization and perhaps more committed to a profession or trade” (p.53). Therefore, it would not be inconceivable to find that professionals who perceive their ethical climate to be principled may in fact be more committed to their profession than they would be to the employing organization.

3. Those participants who perceive their organization’s ethical climate to be egoistic have the assumption that self-interest, company profit, and efficiency are the most prevalent values embodied by the organization. Previous research found that egoistic climates are negatively related to organizational commitment (Cullen et al., 2003; Victor & Cullen, 1988). The present study further supports those previous findings.

4. The difference in the mean total organizational commitment score of male and female participants was significant. Females tended to reported higher levels of organizational commitment than their male counterparts. One reason for this difference may pertain to the autonomy over work schedules. Previous research has found that women who perceived their organization to offer flexible work hours reported higher levels of organizational commitment and job satisfaction than their counterparts (Scandura & Lankau, 1997). Flexible work hours are deemed an important contributor to successful work and life balance for most women. The occupation of being a professor includes a significant amount of autonomy over work schedules; therefore, women may tend to value this autonomy more than their male counterparts leading to an increase in organizational commitment.
DISCUSSION

Ethical scandals have plagued U.S. business practices in recent times and questions have been raised as to the impact leaders have on providing ethical guidance. Brown et al. (2005) defined ethical leadership as the demonstration of appropriate conduct through personal actions and interpersonal relationships. Maxwell (2005) described leadership simply as influence. Therefore, in order to have influence with one’s followers, a leader must be viewed as an attractive, credible, and legitimate role model (Maxwell, 2005).

Rosser, Johnsrud, and Heck (2003) found that educational leaders play a vital role in the growth of organizations, competing with other institutions, and meeting shareholders expectations. Most critically, however, it should not be overlooked as to the role these educational leaders play establishing the culture and climate, most specifically the ethical climate, at institutions of higher education. Decision making processes, creations of values, establishment of organizational norms, modes and methods of communication, perceptions of fairness, trust, honesty, are all significant contributors to perceived ethical climate that are in the control of the administrators.

The study of ethical leadership is built upon the foundation of social learning. Social learning proposes that leaders will influence the ethical behavior of others through modeling (Brown et al., 2005). It is the leader’s responsibility to model the ethical behavior that he or she wants from followers. Wimbush and Shepard (1994) found that subordinates mimic supervisors’ behavior because it is supervisors who hold the subordinates accountable for their actions.

The findings from the present research imply that when faculty members perceive their organization’s ethical climate to be egoistic they will subsequently report lower levels of commitment. Lower levels of organizational commitment are linked to higher levels of absenteeism and turnover, increased withdrawal behaviors and negative attitudes, as well as lower levels of productivity and creativity (Glick, 1992; Hanisch & Hulin, 1991; Hutton & Jobe, 1985). When educational leaders identify the leadership behaviors that impact organizational commitment and job satisfaction of employees, they also gain better insight into specific areas that may mitigate negative work outcomes.

If administrators want to boost the commitment levels of their faculty members, it is imperative that educational leaders behave in manners that encourage an organizational climate of benevolence. Creating an open process of communication and shared governance is one matter that could increase the perception of a benevolent ethical climate. Administrators may find that by establishing an ethical climate based upon benevolent principles may in turn produce positive operational outcomes.

Establishment of an organization’s ethical climate, however, is not limited to administrators. Peer-to-peer relationships also provide critical insight into workplace norms and
the current organizational climate. A new research stream is starting to focus on this relationship. Whereas mentoring programs, professional networking, shared research interest and publications could be factors that contribute to a benevolent ethical climate, faculty on faculty bullying is gradually gaining researchers’ attention. This new research stream could be a serious contributor to an egoistic ethical climate. Employees who work in egoistic climates perceive that self-interest is promoted and reinforced even at the expense of hurting other people. Organizations that promote self-interest within their social norms can experience higher levels of deviant workplace behaviors, lower forms of group cohesion, higher turnover intentions, and a reduction in the organizational commitment of their membership.

CONCLUSION

Faculty members are the front-line employees at any institution of higher education. The job tasks they perform everyday have a direct impact on the organization’s ability to meet stakeholder expectations. Whether that stakeholder is the student, local municipalities, neighboring businesses, the federal government, or society at large, all successful endeavors will begin at the hands of the front-line faculty members.

Administrators are managers in the organizations of higher education. Therefore, the decisions they make directly impact the perception of the existing ethical climate. Administrators should work to build an ethical climate of benevolence focusing on teamwork, social responsibility, and concern for the greater good. According to this research those efforts may lead to more committed employees. Administrators may also find that when their employees are more committed operational objectives are easier to achieve due to higher productivity, increased creativity, lower turnover, and decreased deviant workplace behaviors. They may also find that organizational benefits that arise from fostering an ethical climate of benevolence may reach much further than their own department or college.

Ethical climate is one of the newest streams of organizational climate research. Ethics, however, have been studied from the time of the great philosophers. For centuries humankind has been inherently drawn to the notion of understanding ethical behavior. As more and more researchers begin to realize the important implications that ethical climate has on the organizational objectives, further research will continue to expand our intellectual horizons into uncharted academic territories.

REFERENCES


SEPARATING RESPONSES TO CHANGE OUTCOMES FROM RESPONSES TO CHANGE PROCESSES: IS IT THE DESTINATION OR THE JOURNEY?
W. Scott Sherman, Texas A&M University-Corpus Christi, scott.sherman@tamucc.edu

ABSTRACT
This paper extends the idea that organizational change is both process and outcome to suggest that responses to change outcomes and processes also differ, and that responses to change outcomes rely more on decision-making and responses to change processes rely more on sense-making. The paper also examines how separating response to change outcomes and response to change processes provide additional insights for change management, and offers research and practical implications. Keywords: Response to change; Sense-making; Organization change

INTRODUCTION
The concept of responses to change has been described as muddled (Ford & Ford, 2009). One reason the concept may be muddled is that prior research has not made a distinction between reactions to the change destination, the outcome of the change process, or how individuals respond to change is the individual reacting to the journey, the change process?

This paper extends the idea that organizational change is both process and outcome (Beckhard & Harris, 1987; Van de Ven & Poole, 1995) to suggest that responses to change (Armenakis, Harris, & Mossholder, 1993; Ford & Ford, 2009) may be better understood, studied, and managed if separated into responses to change outcomes and responses to change processes. This distinction may aid firms to better manage change efforts and researchers to better study responses to change. Prior research on responses to change has not made such a distinction.

This paper’s thesis is individual responses to change include two related and separate components: the individual responses to change outcomes, the result of the change effort, and the responses to change processes, the steps undertaken to accomplish the change. Further, this paper suggests that change management may be more successful if responses to change outcomes and responses to change processes are both addressed by the change agent.

The paper begins addressing these issues by reviewing the existing response to change literature, the distinction between change outcomes and change processes, how the responses to change outcomes and change processes differ, and how these differences may affect managing change. The paper concludes with the research and managerial implications of separating these concepts.
LITERATURE REVIEW

The literature on responses to change dates back more than 60 years. Lewin initially referred to the concept as organizational resistance to change (Lewin, 1951). However, organizations do not resist change; individuals within organizations resist change (Beckhard & Harris, 1987), and resistance to change is viewed in this paper as an individual phenomenon. The term resistance to change has been supplanted in the recent literature by the term “responses to change” to include all types of responses to change, supporting, resisting, or neutral (Ford & Ford, 2009). The term “responses to change” is used in this paper to refer to how individuals respond to change efforts.

The existing literature on responses to change ranges from positing that some ubiquitous “they” exists intent on sabotaging change efforts to understanding responses to change as normal and potentially beneficial (Ford & Ford, 2009; Ford, Ford, & Amelio, 2008; Kerber & Buono, 2005). O’Toole (1995) identified 33 explanations of responses to change ranging from fear to sleepwalking. Piderit (2000) viewed responses to change in cognitive, emotional, or behavioral terms. The following discusses the response to change literature within these three categories.

Cognitive responses to change are focused on natural reactions to challenges to the status quo (Ford, Ford, & Amelio, 2008). One example is the Force Field approach (Lewin, 1951), which analyzes the net effects of forces promoting and resisting change. Systems theory, another cognitive approach, posits organizations respond to change by attempting to meet existing objectives within shifting environments (Beer, Eisenstadt, & Spector, 1990; Kotter, 1990; Senge, 1990). Organizational economics suggests responding to change is a normal reaction to temporary losses of efficiency before superior new routines become evident and is a normal, cognitive reaction (Miner, 1994; Nelson & Winters, 1982). The cognitive approach has been further subdivided into mechanistic, social, and conversational views (Ford & Ford, 2009).

Early discussions on emotional responses to change approaches viewed such responses as “primarily a motivational problem” (Coch & French, 1948: 51). Reasons for emotionally-based responses to change include loss of status (Coch & French, 1948), or increased emotional discomfort because of increased ambiguity (Zander, 1950). Later writers viewed emotional responses in less-judgmental terms and as a problematic condition produced by the “timeless interplay of the forces of creation and destruction” of change processes (Cashman, 1998:88).

Initial work on behavioral responses to change primarily viewed such responses as dysfunctional (Drazin & Joyce, 1979; Ford & Ford, 2009) because employees questioning or not speedily adopting new procedures delayed accomplishing firm goals (Coch & French, 1948; Kotter &
Schlesinger, 1979; Lawrence, 1954; Zander, 1950). More recent discussions view responses to change as attempts to highlight poor change management techniques, badly defined implementation goals, or employee frustration and anxiety (Dent & Goldberg, 1999; Piderit, 2000); signals that employees feel changes violate implicit or explicit commitments (Rosseau, 1990; Strebel, 1996); normal reactions to repeated change interventions (Abrahamson, 2000); politically-motivated responses created by altering the “current power relationships” (Pinto, 1998:77); and/or options to address political undercurrents within firms (Pfeffer, 1992).

The literature addressing managing responses to change takes a cognitive approach with a focus on increased participation and education to reduce resistance as a response to change (Coch & French, 1948; Lawrence, 1954; Lewin, 1951). More recent discussions suggest that a cognitive assessment of the organization’s “readiness for change” may help minimize resistance as a response to change (Armenakis, Harris, & Mossholder, 1993). A more complex approach suggests firms manage responses to change by the appropriate choice of directed, planned or guided change methods based on business complexity and socio-technical uncertainty moderated by organizational change capacity and change process urgency (Kerber & Buono, 2005).

**Summary of organizational literature review**
The literature overtime has progressed from primarily viewing responses to change as dysfunctional resistance to viewing responses to change as a normal and healthy way to express concerns with poor change management. The discussion of how to best manage responses to change have focused on education and training to improve readiness for change or better selection of change intervention method based on environmental and organizational context.

However, the existing literature on change responses does not distinguish between resistance to change outcomes – what the change is attempting to accomplish – or the change processes – how the change is accomplished. This lack of distinction may contribute to responses to change remaining a muddled concept (Ford & Ford, 2009). Some change outcomes, e.g. more efficient organizational processes, may be desirable while the needed change processes, e.g., re-training, may be viewed as undesirable, costly and/or painful. Those involved in the change effort may be attracted to the change outcomes and resist the change processes, or vice versa. The next section will explore the difference in change outcome and change processes and how differing responses to the change outcomes and processes could improve change management.

**SEPARATING RESPONSES TO OUTCOMES AND RESPONSES TO PROCESSES**
This paper extends the distinction between organizational change as outcome and organization change as process (Beckhard & Harris, 1987; Van de Ven & Poole, 1995). Change outcomes and processes are not independent phenomena; they are the same phenomenon expressed in either static or dynamic terms. The distinction is similar to how light may be viewed as either matter – photons – or energy – light waves – depending on whether the observation is focused on the static composition of light or the dynamic nature of light as it moves (Einstein & Enfeld, 1938). Understanding light as photons was critical to the development of semiconductors and charge-coupled devices (CCDs), and understanding light as energy waves was critical to development of x-rays and spectrometry. However, light cannot be studied without understand the relationship between light’s static nature as matter and light’s dynamic nature as energy.

The distinction between organization change outcomes and organization change processes parallels organizational justice including an outcome element – distributive justice – and a process element – procedural justice – elements. Distributive justice represents the perceived equity of the outcomes of organization decision-making, and reflects satisfaction with organization justice outcomes. Procedural justice represents the perceived equity of the processes organizations use to make decisions and reflects satisfaction with the organization decision-making processes (Folger, 1990; Folger & Greenberg, 1983; Greenberg, 1986). The perceived equity of distributive and procedural justice may differ – a decision outcome may be viewed as equitable while the processes used to make those decisions are viewed as inequitable, or vice versa, because of differential evaluations of outcomes and processes.

Change outcomes and processes are similarly linked with the outcomes representing a static state of being linked to the dynamic change processes moving the organization from one state to another. The two are different in origin and nature and neither can be studied independent of the other. Figure 1 illustrates the relationship between change outcomes and change processes.
RESPONSES TO CHANGE OUTCOMES VERUS CHANGE PROCESSES

Prior response to change literature has not clearly differentiated responses to change outcomes from responses to change processes. Responses to change outcomes are based on relative comparison of the outcome state, its positive and its negatives, versus the positive and negatives of prior states of being. Responses to the change processes involve the calculus evaluating the positives and negatives of movement between states versus not moving from the current state or alternate means of moving between states. The responses to change outcomes and responses to change processes may differ if one is desirable and the other is undesirable, or vice versa.

Responses to change outcomes are individual evaluations of the comparative attractiveness of proposed end-states compared to the current end-state. This comparison is driven by a teleological view of organization change that assumes change efforts are intended to produce a higher-level desired end-state (Van de Ven & Poole, 1995). Comparisons of relative outcomes are based on cost-benefit comparisons (Lawrence, 1954; Piderit, 2000), using "the analytical tools of mathematical economics" (Lewin, 1951). Comparison of the relative value of perceptions is subjective and affected by shifting cognitive framing of the surrounding environment to help explain the need for change (Bartunek, 1984). The calculus also is affected by individual assessments of cost-benefit tradeoffs and relative desirability.

Responses to change processes are more dynamic because they are produced by the flowing and kinetic “progression of events” (Van de Ven & Poole, 1995:512) as individuals move through the change process. Individual responses to change processes normally are based on interpreting environmental cues through individual schemas based on prior experience (Weick, 1979). Responses to incremental levels of change are driven by seeking out which previously-learned routines work best in the changed environment (Nelson & Winter, 1982). However, previously-learned routines may not be sufficient when the change is significant and non-incremental that the changes cannot be explained in terms of prior experiences, creating a need for sense-making (Weick, 1993). Sense-making is a cognitive process that individuals rely on when perceived environmental cues differ so significantly from what is expected that the “flow of action has become unintelligible in some way” (Weick, Sutcliffe, & Obstfeld, 2005:409). Sense-making
focuses on providing a plausible, working interpretation of a situation based on past experiences and structures that allow action to continue. The need for a plausible explanation of what is occurring is so critical in sense-making that plausibility is more important than accuracy.

Sense-making affects responses to change processes because it allows individuals to continue to act in unfamiliar environments by constructing and reconstructing plausible explanations of what is happening. Sense-making can also be retrospective re-appraisal after the fact to understand what occurred (Weick, et. al, 2005). Sense-making’s role is more apparent in environment so volatile that the “very ground is in motion” (Emery & Trist, 1965:23). Sense-making may allow searches for cues from past experiences, institutional frameworks, and organizational plans and patterns to make sense of the situation and develop plausible explanations that allow action to continue, and plausibility becomes more important than accuracy (Weick, et. al, 2005).

The role of sense-making also plays a role in less-disruptive changes. Existing schemas may appear to be sufficient with no need for sense-making if the change is consistent with existing environmental cues. However, the kinetic nature of change processes often requires sacrificing “something familiar and predictable” (Tannenbaum & Hanna, 1985:196). Change processes – even ones that produce relatively small levels of change --- are filled with little dyings (Tannenbaum & Hanna, 1985). The result is that “(a)ny real change implies the breakup of the world as one has always known it, the loss of all that gave one an identity, the end of safety” (Baldwin, 1961:147). The need for sense-making may be present in less-disruptive change efforts, although the resulting sense-making efforts may be less obvious.

The above discourse suggests that responses to change outcomes appear to be guided primarily by rational cost-benefit analysis that evaluates the relative desirability of current versus desired end-states, and responses to change processes are more likely to be guided by sense-making intended to provide a plausible explanation and allow action to continue. Both rely on cognition, albeit different evaluations with different assumptions and priorities. The key differences between responses to change outcomes and processes are summarized in Table 1.

<table>
<thead>
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<th>Table 1</th>
<th>Differences in Responses to Change Outcomes and Change Processes</th>
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<tr>
<td><strong>Basis of Response</strong></td>
<td><strong>Outcomes</strong></td>
</tr>
<tr>
<td>Cognitive Process</td>
<td>Changes in State</td>
</tr>
<tr>
<td>Long-term Focus</td>
<td>Cost-Benefit Analysis</td>
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<td></td>
<td>Goal-seeking</td>
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Responses to change outcomes and change processes are linked because they describe the static and dynamic nature of the same phenomenon. A change outcome’s desirability is partially affected by its change process costs and benefits. Costly change processes may reduce the desirability of related change outcome. Also, the range of plausible explanations of change processes may be affected by the perceived attractiveness of change outcomes. Highly desirable change outcomes may make change process explanations more plausible, e.g., placing self at risk is more plausible if done to protect family members.

**DISCUSSION**

The above suggests that differentiating response to change outcomes from response to change processes may allow better understanding of how responses to change. The two differ in focal point – end-state versus activity – and in mechanics, with one being a cost-benefit analysis driven by accuracy and the other being an attempt to maintain action driven by plausibility. The net result is that responses to change outcomes and processes for the same change effort may differ significantly in nature and type of response and how each is best managed.

**Response to change outcomes**

The multi-faceted nature of modern change programs may produce several different layers of outcomes, and the responses to each outcome may vary, creating added layers of complexity. Response to change outcomes’ calculus is primarily cognitive and has some emotional element because change outcomes normally represent some level of loss or change (Baldwin, 1961; Tannenbaum & Hanna, 1985). Also, individuals may escalate their commitment to support change outcomes even when those outcomes are failing courses of action (Brockner, 1992).

The resulting key to managing responses to change outcomes is clear communication of the underlying cost-benefit analysis and the factors that make up that calculus. Specifically, what are the desired outcomes, what are the costs and benefits of achieving those outcomes, and are the costs and benefits of alternative outcomes, including maintaining the status quo. The response is parallel to earlier calls for communication and education to create a readiness for change (Armenakis, Harris, & Mossholder, 1993), except the focus is on presenting the change outcome as the best rational choice given all options and all decision-making factors.
Responses to change processes

Responses to change processes are more complex than responses to change outcomes because sense-making mechanisms that underlie responses to change processes are more subjective, iterative, and ambiguous than relatively objective and linear decision-making. Responses to change are subjective in that the interpretations that form the basis of sense-making are products of both collective and individual past experiences that are meshed with organizational structures and strategies and may vary based on differences in experiences, structures, and strategies. Sense-making in responses to change processes is iterative in that collective and individual interpretations in one cycle of sense-making contribute to the environmental cues that shape successive rounds of sense-making. The iterative process may be jumpy and erratic as earlier plausible explanations are rejected and new plausible explanations are generated to allow action to continue, or more gradual as successive iterations progressively build on earlier explanations that retain their plausibility. Sense-making in responses to change outcomes is ambiguous because the subjective and iterative processes combined with the plausibility-seeking nature of sense-making permits high levels of equivocality as the process quickly moves forward and accuracy and the precision attendant to accuracy are not primary objectives (Weick, et al., 2005).

The subjective, iterative, and ambiguous nature of sense-making affects cognitive, emotional, and behavioral elements of responses to change as individuals cognitively re-assess what is plausible, emotionally establish and re-establish individual and collective identities of who to trust and how to react, and attempt to identify what behaviors are needed to re-establish understanding and continued action in idiosyncratic, repetitive and loosely-defined situations (Berscheid & Ammazzalorso, 2003; Weick, et. al, 2005).

The result is multiple plausible, less-than-accurate, and conflicting individual assessments of the same change process situation, e.g., an individual employee does not understand the change process and makes a plausible and inaccurate assessment that the change agent is incompetent and acts on that assessment. The change agent counters by labeling the individual employee’s response as dysfunctional resistance to change. The two sides view each other as incompetent or dysfunctional when the core reality lies within differences among differing plausible scenarios and a distant and veiled accurate reality. The resulting issues are evident in Lawrence’s comment that individual responses to change processes are “most baffling” (1954:49).

The key to managing these responses to change processes is to understand the sense-making process without having a need to control sense-making in a process more consistent with gentle herding than tight steering by providing sense-making cues that will minimize the volatility of plausible explanations.
Implication for change agents
A key concept for change agents to understand is that responses to the same change may produce different responses depending on whether the source of the reaction is the change outcome or the change process. It is critical that the change agent listen

An important key to managing responses to change outcomes is its cognitively-oriented, rational, decision-making nature. Steps to achieve this include communicating how outcomes were selected or educating stakeholders on the issues involved in selecting outcomes (Lawrence, 1954), and recognizing the emotional nature of accepting new outcomes by letting go of former ones (Tannenbaum & Hanna, 1985). Individuals may grieve the losses produced by change, and grieving may include the bargaining, anger, denial, depression, and acceptance stages normally associated with death and dying (Tannenbaum & Hanna, 1985). Grieving is a normal response to organization change (Argyris & Schön, 1978; Coch & French, 1948; Piderit, 2000), and may be facilitated by determining what from the past should be retained, what can be disposed of, and what should be retained (Tannenbaum and Hanna, 1985).

Change agents attempting to influence responses to change process need to understand the fluid and dynamic nature of sense-making and its individual, iterative, and ambiguous nature. Attempts to manage these responses need to be individual, repetitive, and provide the means to reduce ambiguity. One means to reduce the ambiguity inherent to sense-making is for change agents to provide sense-giving cues (Gioia & Chittipeddi, 1991). Sense-giving cues are an active attempt to re-establish meaning, identity, and reality through sequential, repeated, and reciprocal processes of interacting with individuals facing the uncertainty and ambiguity that follows a gap between expectation and perception and generates sense-making efforts. Change agents can provide sense-giving cues by actively envisioning and communicating what the unexpected change in environmental and organizational cues mean, interactively and reciprocally working with individuals to clarify a collective meaning, and supporting individual efforts to act in response to the collective interpretation (Gioia & Chittipeddi, 1991). Sense-giving cues provide a starting part for the individual to create a sense of what is occurring that may be both plausible and accurate and counter the subjective nature of sense-making, reduce the need for repeated iterations of the process, and reduce ambiguity by providing a basis for understanding.

Prior literature suggests creating sense-giving cues, especially discussions regarding assessing an organization’s “readiness to change” and include self-efficacy and group-efficacy manipulations to encourage positive responses to change processes (Piderit, 2000; Armenkasis, et al, 1993). Sense-giving cues may include using enactive mastery, vicarious experience, and verbal
persuasion to encourage increased individual self-efficacy (Eden, 1984, 1988), and creating, communicating, and empowering others to act on a collective vision with a sense of urgency (Kotter, 1996). However, improper use of such manipulations may overwhelm rather than overcome individual and organizational concerns, allowing theses issues to re-emerge downstream as risks for change agent and recipient (Sherman & Garland, 2007).

Implications for research
Separating response to change outcomes from processes may facilitate organization change research by increasing clarity about what is being researched. Separation also may allow answering the question of whether change research should approach organization studies from an assumption of stability or from an assumption of change (Tsoukas & Chia, 2002) with a resounding “yes”. Better analysis may be possible by viewing change from an integrated perspective that permits acceptance of the relatively stable nature of the change outcome combined with acceptance of the fluid nature of the change process. Such an integrated approach may raise the discussion over responses to change from the “us-them” view of the early literature (Dent & Goldberg, 1999) to pursuing a higher level understanding suggested by F. Scott Fitzgerald’s observation that “The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function” (Fitzgerald, 1936).

Caveats
Separating response to change outcomes from response to change processes is not as tidy in the real world as the above may suggest. Change processes produce outcomes and change outcomes are products of a series of processes. The above discussion is a conceptual model of how to better examine responses to change by considering responses to change outcomes and processes as separate phenomena. However, overlap will and does occur. Individuals may respond to the change processes because they are still grieving the potential losses presented by the change outcome, and not as a direct response to the change process. Such responses may be desirable as a signal that the limits of current adaptive defenses have been reached (Klein, 1976), and that the process of holding on, letting go, and moving on is not complete (Tannenbaum & Hanna, 1985). A potential intervention in these cases may be a ritual honoring the loss produced by the change outcome and legitimizing the associated grieving process to promote moving on.

The separation of responses to change outcomes from processes is further complicated by the difficulty of determining whether the response to change is intentional and being interpreted correctly. What may appear as an intentional response to change may be a habitual response (Drazin & Joyce, 1979). Habitual responses are learned from prior experiences and substituting new behaviors is difficult because habitual behaviors are guided by embedded, tacit knowledge.
(Nonaka & Takeuchi, 1995). Confusing such habitual behaviors with more conscious responses to change may result in circular miscommunication cycles, and lead to unnecessary and unwarranted escalations of blame. Social construction also plays a role in complicating the issues of identifying responses to change because what may be labeled as oppositional responses is dependent on the observer’s social construction of “oppositional” (Ford & Ford, 2009).

Understanding responses to change outcomes and processes also may require going beyond what is initially presented and “unpacking” the responses to change outcomes and processes to understand how the responses are products of the change recipient’s surrounding environment and history (Klein, 1976). Less-than-desired or less-than-optimal responses to change outcomes or processes may be signals or “red flags” that something is not quite right. These “red flags” are similar to the human body’s use of pain to communicate that some internal function would benefit from external attention (Lawrence, 1954). Unpacking red flag responses “usually has something of great value to communicate about the nature of the system which the change agent is seeking to influence” (Klein, 1976:122-123). Unpacking these issues requires change agents to go beyond what is on the surface, identify what issues are at the heart of the response, and not dismiss, ignore, or over-ride these concerns (Klein, 1976).

CONCLUSION AND SUMMARY

The paper proposes that response to change outcomes and processes are two distinct issues facing change agents. Responses to change outcomes are reactions to the perceived end state of the change intervention and responses to change processes are reactions to the process steps being taken to achieve a specific change. Earlier efforts did not separate response to change outcomes and processes and viewed response to change as a unitary construct.

A key advantage of the above delineation between response to change outcomes and response to change processes is that it may enable change agents to better understand that individuals may oppose change efforts because of undesirable outcomes, processes, or both. It is important that change agents understand that the change processes are often undesirable and perceived as punishment. Harvey noted that “if people aren’t resistant to change, what are they resistant to? … They are resistant to being punished, or in a more Skinnerian sense, they are resistant to being subjected to aversive stimuli” (1980:36). Knowing that responses to outcomes and responses to processes may differ and using that knowledge to plan change efforts may aid change agents better manage change efforts, responses to change, and make both less painful for all.

Summary
This paper is an attempt to extend the discussion of responses to change to suggest that responses to change outcomes and processes are two separate issues and individual responses to change outcomes and processes may vary. This paper is intended as an extension of the conversation initiated by Ford and Ford (2009) with the hope that it furthers the discussion on responses to change in a positive manner. This paper is limited in that it is based on prior research, and discussion. The ideas in this paper are ripe for empirical exploration using quantitative, and qualitative analyses to permit a more robust understanding of the efficacy, interdependence, and interaction of responses to change outcomes and processes, akin to the recently published work by Sonenshein (2010). It is hoped that the paper achieved its goal of encouraging further study and discussion of organization change.

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THE GLASS CEILING IN FORTUNE 500 COMPANIES

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ABSTRACT

Since World War II, women in the U.S. have joined the workforce in increasingly larger numbers. The clear assumption would be that by this time, they have slowly moved out of the kitchen and into the board room. This paper outlines the continuing inequalities of women to men in the C-Suite, specifically in Fortune 500 companies, why there has been little to no progress in this area and what measures might be able to be put into place to put women on a more equal footing with men when it comes to powerful positions in powerful companies.

INTRODUCTION

In 1991, the U. S. Department of Labor defined glass ceiling as "those artificial barriers based on attitudinal or organizational bias that prevent qualified individuals from advancing upward in their organization into management-level positions" (Report on the Glass Ceiling Initiative U.S. Department of Labor, 1991). Over the last thirty years, although it is true that more women have moved into the C-Suite, it is abundantly clear from the data provided, that women are not equally represented at the upper echelons of business, and still earn less than their male counterparts (Gallagher, 2012).

Ironically, research by Catalyst Corporation has shown that Fortune 500 companies with the highest proportion of women in senior management positions financially outperform those with fewer women, in both return on equity and total shareholder return (Land, 2010).

Leadership Styles

There are two distinct leadership styles that are typically tied to gender. Most men use transactional leadership, which is a style characterized by offering rewards for productivity and denying rewards for a lack of productivity. Transformational leadership is usually associated with women. This type of leadership aims to stimulate and inspire followers to reach beyond what they thought possible and elicit extraordinary results. It looks to achieve true commitment and involvement from the follower by involving his or her self-worth in the work (Tuuk, 2012).
Changes in the marketplace and workforce over the last few decades have resulted in the need for leaders to become more transformational and less transactional if they are to remain effective. This doesn’t mean that women cannot or do not use a transactional style of leadership, nor does it mean that men do not use transformational style, only that the majority of CEOs practice different styles of leadership based on gender (Buckalew, Konstantinopoulos, Russell, & El-Sherbini, 2012).

Transformational leadership implies a certain level of humility. There is little to no ego involved and it is fine to be somewhat vulnerable and ask for help. A certain amount of flexibility is involved in this type of leadership. This type of leadership style also instills integrity, which is basically “walking the talk.” Integrity leads to transparency in dealings with others, therefore generates trust (Inam, 2013).

One of the reasons transformational leadership is so relevant today is that, over the years, trust in senior leaders has declined. Poor communication, perceived lack of caring, inconsistent behavior, and perceptions of favoritism were among the issues cited that has eroded trust (Hastings, 2011).

**Corporate Culture**
Corporations need to identify the most persuasive strategies for communicating with men about gender initiatives. Assess the effectiveness and impact of learning and development programs designed to provide men with the information and skills they need to champion gender initiatives. (Prime & Moss-Racusin, 2009).

Men are expected to be tough in both body and in spirit. Physical toughness means never shrinking from the threat of physical harm; while displaying emotional toughness requires that men conceal such emotions as fear, sadness, nervousness, and uncertainty. These traits are typically attributed to women.

Some barriers for men when it comes to gender diversity are apathy, fear, or ignorance. Some men fear that if they include women in the workplace, then there will be more competition, and their jobs may be threatened. However, the biggest barrier to gender diversity is that the majority of men do not even see that there is an issue.

**Women’s Individual Mindsets**
Sheryl Sandberg, the Vice President of Global Online Sales and Operations for Google, wrote a controversial book, “Lean In: Women, Work and the Will to Lead. The book is about business leadership and development, issues with the lack of women in government and business leadership positions, and feminism. She also poses the theory that a woman’s upbringing and social mores contribute to creating her own glass ceiling. “We hold ourselves back in ways both big and small, by lacking self-confidence, by not raising our hands, and by pulling back when we should be leaning in,” she writes, and the result is that “men still run the world.” (Sandberg, 2013)

Women can lose pay and power when they go out on maternity leave. And programs that would help alleviate some stressors of being a businesswoman with a family; more affordable childcare, flexible work schedules, onsite day care centers have seen little to no movement in the U.S. in recent years (Kurtzleben, 2012).

What the Future Holds
If an organization can make the shift from transactional leadership to transformational leadership, it will have a leg up on the competition. However, this would mean that the organization accepts the theory that a gender diverse C-suite is what is needed to make that happen. A company that makes the choice to invest in women today will have a competitive edge and will thrive in the 21st century. Those that wait will be left behind or be scrambling to catch up (Gurchiek, 2012)

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THE PATIENT PROTECTION AND THE AFFORDABLE CARE ACT: DOES “OBAMACARE”? OR NOT?

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ABSTRACT

As healthcare cost rise this has lead healthcare reform to be a forefront political issue in Washington. While most organization are eager to reduce and minimize cost, especially now, in times of fiscal uncertainty and subsequently shifting healthcare cost to employees indirectly squeezing their income to mitigate the organizations expense. We propose taking a close look at the Patient Protection and The Affordable Care Act (PPACA) of 2010 also known as “ObamaCare” identifying the major components to conclude if this healthcare overhaul benefits the American people and not baring too much cost on corporations.

INTRODUCTION

The focus of this research paper is the Patient Protection and the Affordable Care Act, identifying the major components to recognize who benefits individuals and/or companies and what this means for the American healthcare system as we know it. We can date universal health care reform attempts back to the late 1800’s. President Roosevelt during the Progressive Era supported health insurance due to his beliefs a poor and sick country would not strive (Gottschalk, 2011). During Roosevelt’s presidential appointment the American Association of Labor Legislation (AALL) were the pioneers for health insurance (Huntoon et al., 2011).

From inception the American Federation of Labor (AFL) and Private insurance industry opposed the AALL. This was a time when collective bargaining was not legally endorsed and the AFL was concerned with unions maintaining strength; afraid a government-based system would take the role the unions were and should be playing (Stephen, 2011). In the 1930’s, focus shifted from stabilizing income to financing and expanding access to medical care. At this time, medical expenses for employees became more of a threat than wage loss from illness. A greater portion of families’ budgets was allocated to medical related issues (World Health Organization, 2012)

In the 1930’s, focus shifted from stabilizing income to financing and expanding access to medical care. At this time, medical expenses for employees became more of a threat than wage loss from illness. A greater portion of families’ budgets was allocated to medical related issues (World Health Organization, 2012).
It was the 1938 election that brought a conservative occurrence to Washington and all further social policy agenda became extremely challenging. The Wagner Bill transitioned from proposals of federal aid grants to Wagner-Murray-Dingell Bill of 1943 to national health insurance coverage underwritten via payroll tax. This bill was put before Congress every year for 14 years straight, but failed to receive Congressional approval (Shaffer, 2013).

In the 1970’s, with the support of a payroll tax increase and general federal revenues aided three healthcare reform proposals. President Nixon, in 1974, proposed an comprehensive health insurance reform which sought to make employers offer private healthcare insurance instead of Medicaid via state-run insurance coverage available to all utilizing a cost sharing approach based on income level. President Ford proclaimed in the midst of the worst recession since the Great Depression, he then stated he would veto any overhaul to a health insurance reform.

Since the Employee Retirement Income Security Act of 1974 (ERISA) inception there has been several amendments to the law one notability is the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA). COBRA offers employees who have quit working or received a new job and still would like to keep their former insurance coverage. This Act gives terminated employees and individuals who lost benefits due to reduction in hours the opportunity to keep coverage for 18 months of the employers’ group health insurance plan. (Maher, 2011) Though, the employee would have to assume up to 102 percent of the health insurance premium cost. (Luhby, 2013).

Healthcare reform was the cornerstone of the Clinton agenda in his first term in office (Lee 2011). The goal was to seek health care for all Americans. The Clinton health care plan was heavily criticized for being too bureaucratic. The excessively complex bill consisted of over 1,000 pages of mandated closely regulated Health maintenance Organizations (HMOs) calling the shots on a very tight leash. (Lee 2011). President Bush had a less aggressive approach to health care reform in America. A Patients’ Bill of Rights took the floor in Congress; the idea was to outline patients’ rights pertaining to their health care.

A unified national healthcare insurance coverage failed in America for several reasons. One major aspect that a national health care reform failed is largely in part of the influence of special interest groups, the dogma of socialist and communist regime. Most notably, the entrepreneurial spirit of Americans and the free market approach to business aided in the unsuccessful attempts of a universal national healthcare coverage plan.

The cost associated with health insurance and health care is rising at an astronomical pace. Inflation is estimated to raise about 3% per year and wages traditionally raise parallel to those rates (CDC, 2012). Health care premiums has seen an 87% increase from 2000 to 2006 according to statistics (Kaiser Family Foundation, 2012). The majority of Americans with health insurance are under group plans with their employers who assume the majority cost of the insurance provided. Low-income families seek Medicare/Medicaid while a few affluent sole proprietors purchase their own coverage.
Despite criticism COBRA was a major breakthrough giving particular Americans some relief if they are terminated or lost health insurance in part to cut hours with their employer. Portability is still a significant issue for those who 18-months’ grace period runs out or if the individual issues do not fit in within the guidelines covered under COBRA umbrella. Under current policy health insurance is tied to the job not the individual. This does assist individuals life chooses or occurrences such as, employment time-off, retirement, and injuries/disabilities.

The accessibility of health insurance is a factor if most cannot afford it. Also, healthcare insurers are not required to cover pre-existing medical conditions and in most case are authorized to drop patients for costly medical conditions.

**SUMMARY**

We can conclude that this is a largest push for health care reform what we have seen in the history. This legislation has very good intentions, which make for a progressive effort to protect the uninsured and underinsured. This model does not stop there it sought out to aid policyholders ensuring they receive the best care at the best price. This reform is heavily dependent that the healthy stay in the insurance pool if not healthcare insurers will feel the impact than subsequently the people will feel the push from the insurers and the whole system will fall apart

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EXAMINING THE RELATIONSHIP BETWEEN AGE, TIME STRESS AND OCCUPATIONS

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ABSTRACT

This study aims at investigating the relationship between age, time stress and occupations. Aging employees are valuable resources given their experience and education, filling critical leadership and management positions. Time stress is more evident than ever, especially in work-family balance. This study uses survey research to determine the relationship between age and time stress in two occupational groups, emergency responders (n = 254) and non-emergency responder employees (n = 281). Time stress was measured using an existing, validated scale. Control variables were also included in the survey. Preliminary findings show a significant difference between age groups when analyzed by occupation.

INTRODUCTION

An aging labor force population in the United States (US) is due to a variety of factors including the birth of baby boomers—individuals born between 1946 and 1964, a slowing of birth rates since 1964, and delayed retirement often due to economic reasons (Callanan and Greenhaus, 2008; Toosi, 2004). Beyond contributing to the labor force numbers, aging employees are valuable resources given their experience and education and fill critical leadership and management positions (Callanan and Greenhaus, 2008; Dahm, 2000; Peterson and Spiker, 2005; Toosi, 2004). Previous studies show strong positive associations between knowledge levels and adult age (up to 60 years of age) emphasizing the contributions of an aging workforce (Kanfer and Ackerman, 2004). Industrial and organizational psychologists report that employees who place more emphasis on time pressures and constraints also tend to report more physical and psychological symptoms due to high time demands and constraints (Landy et al., 1991). Employees who work long hours, but feel unable to create a fit between work and non-work activities, tend to experience more conflict and high distress (Barnett and Gareis, 2000). According to the Families and Work Institute, employees are experiencing more time pressures than ever before in both family and personal time context. In summary, the number of hours worked contribute to workplace stressors (Karasek and Theorell, 1990). The question is can any difference in experienced time stress be explained by occupational context?

THE STUDY

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Sample and Measure

The study includes both emergency and non-emergency responder employees to compare differences in experienced time strain. Time Strain is measured using a subscale from the Parker and DeCotiis (1983) job stress scale. Additional demographic variables were collected.

Analysis and Preliminary Results

We test for relationships between the variables to determine similarities and differences between the two occupational groups using several statistical methods to test for curvilinear relationships. Preliminary results show that time strain and age contribute to job stress, and appears to be occupational based.

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SMALL BUSINESS AND CORPORATIONS: A PROPOSED AFRICAN RELATIONSHIP FRAMEWORK
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ABSTRACT

Businesses in Africa are characterized as both small businesses (informal and formal) and corporations (local and multinational). Small businesses in Africa rely on frugal strategies (doing more with less) or building relationships with the government and corporate businesses for supply opportunities (Leftwich, Sen & Te velde, 2008). Through activities like the corporate social responsibility, Corporate business and Small business relationships (Formal and informal) can aid small entrepreneur growth. This paper conceptualizes an African small business-corporation relationship based on corporate social responsibility (CSR) and learning initiatives.

Key words: Corporate social responsibility, Relational learning, Business relationships, Business competencies

INTRODUCTION

Corporate social responsibility (CSR) is a key component of major corporations all over the world (Basu & Palazzo, 2008). Such corporate actions emanate from stakeholders’ (Jenkins, 2005) needs for strategic performance by the organization (Wood, 1991) and a corporate self-drive to enhance its reputation (Fombrun, 2005). In Africa, participation in corporate social responsibility seeks to attain, reduced costs, lower risks, enhanced reputation and strengthened human resources (Forstater et al., 2010). There is a positive economic growth in many African countries (El-Tohamy & Halferty, 2014). Coupled with Africa’s high population and growing working class, the consumer industry is projected to increase by $400 billion by year 2020 (El-Tohamy & Halferty, 2014). As a result, there is an increase in foreign direct investment in Africa (United Nations Conference on Trade and Development, 2013). As multinational corporations invest in Africa, they are engaged in CSR as way to mitigate failures by the local state governments, protect their investments as well as give back to the citizens (Smit, 2013). In addition, the communal nature of most African countries gives traction to the CSR idea and as a result many governments support it. Corporate social responsibility is viewed as one of the facets that African countries can use to alleviate poverty (Forstater et al., 2010). Even though corporate
social responsibility is a key economic component for most African nations, research conducted indicates that the major focus on corporate activity is education, health and environment (Forstater et al., 2010). To increase the focus on CSR that enhances economic actions there is a need to understand the role that CSR plays in relationship (both formal and informal) building between small businesses and corporations.

Through education CSR strategies may enhance the entrepreneurial spirit and relationship building which leads to access to more or larger networks (Forstater et al., 2010). Reforms in health care and the environment can improve the wellbeing of the citizens where the CSR participating companies are located (Forstater et al., 2010). This study develops a conceptual framework which navigates the relationship between small African businesses and corporate social responsibility programs. Guided by the Activity-Resource-Actor theory, the focus is to integrate corporate social responsibility activities carried out by corporations in an African context with possible learning opportunities that can be demonstrated through mobile classrooms to achieve relationships that result into a mutual business advantage between small businesses and corporations. The corporate social responsibility activities in this study include the contact that a corporation establishes with the society with an aim of alleviating social problems and conducting business. Also the goal of small business learning includes educating formal and informal businesses on ways to create networks and build strategic relationships that improve their business.

THEORETICAL FRAMEWORK

Different models have been used to describe the interaction between businesses. Using the Activity-Resource-Actor framework (ARA), this study utilizes the business to business (B2B) relationship context; the interaction between small African businesses and multinational corporations evoking a relationship that is mutually advantageous to both parties. Relationships between businesses are important as both parties seek to lower their costs and be innovative as a way to accelerate growth (La Rocca & Snehota, 2011; La Rocca, 2011). Research conducted by IMP (Industrial market and purchasing group) in the 80’s showed evidence of robust and continuous relationships between businesses built on customer-supplier relationships in the market (Håkansson, 1982; La Rocca & Snehota, 2011; La Rocca, 2011). The IMP framework indicates that interaction between businesses involves people and resources and as a result potential benefits are achieved through possible supplier-customer relations (Håkansson, 1982). An example includes the business relationship between Mpesa (a money transfer service) in
Kenya and other small businesses that are unaffiliated with mobile telephone business. With its successful money transfer business known as Mpesa, Safaricom (the parent company) created relationships with small businesses such as pharmaceutical shops, gas stations and retail outlets to serve as money transfer centers in addition to its stand-alone money transfer kiosks. These relationships encouraged business growth and also increased customer traffic into these businesses. Such a relationship may involve millions of dollars of transactions between the entities. However, this interaction is complex and needs to be defined in terms of content and function (Simões & Mason, 2012; La Rocca, 2011). Such business relationship complexities and their expected consequences are expounded by the ARA framework (Håkansson, 1982).

Based on the three layers defined by ARA the importance of business relationships is exemplified. First, business’s interactions requires an activity link; they are connected in how they carry out their supplier and buyer production, logistics, administration, deliveries and information handling (La Rocca & Snehota, 2011; La Rocca, 2011). Second organizations have resource ties. Businesses connect to increase cost efficiency by sharing tangible resources, such as plant equipment or intangible resources, such as knowledge, through created interfaces (Håkansson & Waluszewski, 2002; La Rocca & Snehota, 2011; La Rocca, 2011). Finally business relationships can be identified through actor bonds. This involves the mutual commitment, trust, appreciation and influence on each other (Simões & Mason, 2012; La Rocca, 2011). Through actor bonds businesses coordinate better activity links and also resource ties which affect the strength of the relationship as well as strategic learning (Håkansson & Johanson, 2001).

The three layers are interdependent and one layer can stimulate the development of another. Using this framework the study conceptualizes an African model built on relationships between small businesses and corporations permeating through the CSR activities. By encouraging corporate social responsibility programs that allow activity links (corporate social initiatives) and resource ties (market knowledge sharing), the ties between small businesses and the corporation develops to one of commitment, trust, appreciation and influence (actor bond) on each other. Research shows that occurrence in one relationship can have a ripple effect on the indirectly connected business relationships (Håkansson & Snehota, 1995). Therefore, empowering the African small business sector to develop corporate relationships leads to success stories that evoke a chain effect to other aspiring small business and their affiliates. This study creates an initial conceptual path that defines the relationship framework based on corporate social responsibility and small business (Håkansson & Snehota, 1995). This path is significant in that it
provides the foundation for the design of a study to test the relationships proposed in the African Small business-Corporation model. Findings can assist researchers and leaders in organizations as they pursue the aspect of African entrepreneurship. The relationship starts from contact to the corporate social responsibility activity then moving through mobile class learning activities between the small businesses and corporation. The relationship finally culminates building formidable bonds.

CORPORATE SOCIAL RESPONSIBILITY AND SMALL BUSINESS-CORPORATION RELATION

Corporates social responsibility is driven by three factors: the stake holders, organizational performance and organizations self-drive (Basu & Palazzo, 2008). Corporations in Africa team up with the government and non-governmental organizations to identify ways in which they can make a difference (Smit et al, 2013). Some of the major impact areas that corporations have rendered support include infrastructure, transparency initiatives, spin-off industries, education, health care and unemployment (Forstater et al., 2010). Given the critical economic development role that corporations play through their CSR functions, small businesses in Africa can take advantage by participating in the activities and as a result establish relationships. The corporate social responsibility programs are further enhanced though organizations that support such initiatives. as the multinational corporation, Coca Cola, through their corporate initiative, 5by20, has partnered with small women entrepreneurs in Kenya to provide training in business skills including building networks and financial support. Through such corporate initiatives small businesses in Africa can establish and enhance relationships that otherwise could not be achieved independently.

Using the corporate social responsibility as an activity link, an initial contract on how both the corporation and small business would like the relationship to be partnered is a key part of their operation interaction (Stanworth, 1995). Given that the corporation may possess more resources, the corporate social responsibility actions may include providing small business suppliers for the organization. For example, organizations such as Development Alternative Inc. include a development conscious strategy for Unilever South Africa by encouraging its workers to be entrepreneurs and in turn Unilever would be a committed buyer to their established businesses (Development Alternative Inc, 2012). Such initiatives provide support for small business and lay the foundation for building important business relationships. To enhance operation capability more so for the small businesses who are suppliers in this case, corporations may seek to improve their core competence by offering advice on areas that need improvement. Where core
competences in this case spans individual business ability to perform distinctive activities, these activities constitute organizational routines and processes such as quality and knowledge acquisition (Teece, Pisano, & Shuen, 1997). Improving Core competence involves the corporation assessing which operations the small business supplies and, how they can use CSR related programs to bring them up to standard. Partnering with non-governmental organizations, corporations can improve the operational standards of African small businesses through training that helps them reach certification and compliance levels. Such operational guidance positively affects the activity links in the production, logistics, administration, deliveries and information handling of the small businesses (La Rocca, 2011).

Once an initial relationship is established factors such as increased operational activity, communication and high level of performance between the two parties strengthens the relationship. Communication relation between the small business and the corporations are based on perception of the relationship (Oosterhuis, 2009). How both parties’ views the relationship depends on how easily and effectively they communicate issues that are routine, operational, or innovative in nature (Moberg et al., 2004). Corporation and small businesses can use different forms of communication; for example through government bodies, non-governmental organizations and directly (e.g. using face to face meetings, emails or telephone). Level of communication also depends on existing relationships; that is cooperation that is operation based may increase frequency of communication as compared to innovation (Oosterhuis, 2009). Therefore, for the small business- corporation relationship to grow to reasonable levels of corporate social responsibility business activity based on feedback and routine operation to encourage improvement are needed. Nevertheless, we would expect frequency of activity to be decided by both partners.

Proposition 1: Corporate social responsibility is positively related to small business growth in Africa
Proposition 2: Corporate social responsibility is directly related to small business – corporation relational ties in Africa
Proposition 3: The greater the activity between corporations and small businesses the greater the benefit for both parties.

SMALL BUSINESS AND CORPORATION RELATIONAL LEARNING INITIATIVES
Ability to connect to corporations for a small business in Africa is crucial in the process of business growth. Using educational activities supported through corporate social responsibility programs, corporations may teach small scale business suppliers ways in which to supply goods and services to both public and private sector organizations, either directly or indirectly (Shah & Ram, 2006). Some of the challenges that majority of small businesses experience includes lack of capability to deliver products of high-quality, low-cost, and high-consistency that corporate buyers need (Chen, 2011).

To overcome some of these challenges, corporations through corporate social responsibility programs may provide business counseling to growing small businesses that is vital for them as they aim to create relationships and collaborative engagements. Using mediums such as mobile class rooms and highlighting success stories corporations can enhance their relationships with small business. Success stories provide motivation for other small business and also create storytellers (Chen, 2011) who enhance networking, team building, and coaching among the small business. Through such success stories small business are encouraged to start business and persue supporting corporate social responsibility relationships. a part of the corporate responsibility in education mobile class rooms is to use the access to small business that are in rural areas where training is given, to enhance and raise their standards which allows them to create business relations with corporations. Apart from the corporate social programs geared towards small businesses, corporations need to evaluate their programs and discern areas in which they would like to improve so as to strengthen their relationships with small businesses (Adams, De Silva, & Razmara, 2013). Using Moore’s (2010) five level standards (level’s 0-5), African based corporations should use SWOT analysis to weigh their strengths (i.e. ways in which small business register to participate), weaknesses (i.e. lack of cultural knowledge when dealing with country specific businesses), opportunities (i.e. increasing budget and expanding the corporate social responsibility initiative) and expected threats (i.e. precarious outlook in challenging economy).

Strengths include the tangible actions the organization is doing to promote small business relations; weaknesses are the areas that the organization may have overlooked that are necessary in small business relationship success; opportunities are areas in the initial relationship that the corporation has the capability and room for improvement and threats include overwhelming circumstances that may impede the corporate social responsibility program that the organization has little control (Moore, 2010) . Evaluation of their programs strengths and weakness creates corporate standards that govern the relationship while implementation of the opportunities and preparing for threats creates environment for the small business to thrive. Considering ways in which corporate social responsibility can enhance learning for small businesses, using tools such
as mobile class rooms and success stories initiatives creates bonds for initial relationship contact. Moore’s five level standard allows a self-reflection on the part of the corporation to enhance corporation and small business relationships. With the many challenges facing small business that stem from low capacity and resources, learning through corporate social responsibility initiatives provides a path way as well as necessary resources that pushes them to next level. Therefore, using relationship analogy a small business contact and information gathering on how to connect to corporate supplier is established through learning based corporate social responsibility programs.

Proposition 4: For African small business participants in the corporate social responsibility programs, the greater their participation, the stronger the success to their initial relationship ties with corporations.

Proposition 5: For African corporate participants in Moore’s five level standards program, the greater their participation, the greater the success to their initial relationship ties with small business.

Figure 1 below depicts the proposed relationship among the constructs being explored. It is a conceptual model that illustrates the connection between Small Business-Corporation relationships that is enhanced by corporate social responsibility actions.

**FIGURE 1**

Small Business- Corporation Relationship Framework

CONCLUSION AND DISCUSSIONS
The relationship research between African Small business and Corporation is limited. In addition, existing research focuses on Western small business context and how they relate to other bigger corporations. This paper makes an important contribution by presenting an initial African relationship framework that connects effective interactions between small businesses and corporations. Using corporate social responsibility activity and learning initiatives that describe the connections necessary for the actor’s relationship, the study’s framework generates a two-step relationship building based on corporate social responsibility activities and learning initiatives. The corporate social responsibility level highlights the basic need for connection to corporate markets for small business. In addition the learning initiative level articulates how the relationship grows with teaching interaction between the MBE’s and corporation. Finally, the relationship tie is a place of trust and commitment built between the small business and corporations. The study applies the supplier-buyer literature to the model. Using the literature the paper attempts to bring synergy to the process of African Small business-Corporation relationship. From a theoretical perspective, the paper offers contribution to the buyer-supplier relationship literature by focusing on African business relationships.

The focus on Small business-Corporation relationship assumes that small business are capable and ready to take advantage of the opportunities available through the supplier development programs. Unfortunately, this may not be the case because a large number of small businesses in Africa have problems accessing capital, inability to attract qualified talent to run their businesses, and are relatively small size (Krause, Ragatz, & Hughley, 1999). Therefore, a more detailed empirical analysis of the framework in the future would not only contribute to a future buyer-supplier theory endeavor but also identify the supply ready small business that can sustain the relationship levels described.

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“I AM AMONG YOU” USING BIBLICAL METAPHORS AS MODELS OF AUTHENTICALLY ENGAGED LEADERSHIP

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ABSTRACT

In his book, *Building the Bridge as You Walk on It*, Robert Quinn identifies what he calls the fundamental state of leadership (FSL). Leading from the fundamental state of leadership is a call to lead with spirit, presence and authenticity. Doing so requires leaders to be authentically engaged with their followers, and authentic engagement cannot occur at a distance. Authentic engagement requires a leader to be among those they are leading. In this paper I will explore the idea of authentic engagement by exploring two biblically-based metaphors to provide an image of what authentically engaged leadership involves: shepherds and servants.

“And there arose also a dispute among them as to which one of them was regarded to be greatest. And He said to them, “The kings of the Gentiles lord it over them; and those who have authority over them are called ‘Benefactors.’ But it is not this way with you, but the one who is the greatest among you must become like the youngest, and the leader like the servant. For who is greater, the one who reclines at the table or the one who serves? Is it not the one who reclines at the table? But I am among you as the one who serves” (Luke 22:24-27, New American Standard Bible (NASB); emphasis added).

There has been a growing call for authentic leadership in the popular press (George, 2004; 2007) and among scholars as well (Gardener, Avolio, and Walumbwa, 2005). Authentic leaders lead with spirit and presence, operating from what Quinn calls the fundamental state of leadership (FSL; Quinn, 2004). Leaders who are operating in the fundamental state of leadership have transcended their ego and are able to put the welfare of others ahead of their own. They allow themselves the discomfort of seeking real feedback from others, while also examining their own hypocrisy. By being externally open and internally directed, these leaders seek to increase their integrity by constantly confronting their own lack of integrity. They are purpose-centered and demonstrate an unwavering commitment to the clearly defined results they seek to achieve. These leaders are authentically engaged, bringing their integrated, whole self to their activities which they perceive as a calling and a labor of love (Quinn, 2004). Leaders who are authentically engaged...
engaged are continuously aware of and working to close the gaps between their self interests and the best interests of those they seek to serve.

The idea of leading with authentic engagement also emphasizes the need to be among those we lead. Authentic leaders understand that leadership is a process that takes place in the context of a relationship and cannot be conducted at a distance. Authentic leadership is up close and personal. Recent developments in social identity theory validate this need. According to this approach, followers favor leaders who they perceive to embody the group’s identity and share the group’s social reality (Van Knippenberg, 2012). This high level of identification enhances the group’s trust in the leader’s intentions to pursue the group’s best interest. This leads to attributions that the leader is operating from an altruistic motive pattern (Kanungo & Mendonca, 1996). Sharing identities and understanding a group’s reality cannot be accomplished remotely. The leader must be among those he or she is leading.

The importance of authentic engagement by leaders who are among those they lead has intuitive appeal in addition to the support of the recent developments in social identity theory. Yet, visualizing the practice of authentic engagement is difficult. One approach to overcoming this difficulty is to use metaphors as word pictures to help comprehend this image of leadership. The use of metaphors for understanding complex phenomena has been examined extensively by Gareth Morgan (1989; 1997; 2006). Metaphors stimulate creativity and can assist us in perceiving previously unidentified similarities, patterns, and relationships. They sharpen our observations by highlighting certain features and diminishing the emphasis of others. As with the application of metaphors to organizations, there is no single “master image” which fully embraces the totality of leadership (Bennett, 2004; Minear, 1960). The nuances of the leadership process cannot be captured through one theory, or one metaphor.

Each metaphor provides a picture that allows us to view the whole from a somewhat different perspective. Yet, these pictures only represent one aspect of the process. While the picture created by a metaphor may be “worth a thousand words,” it is still only one picture. Other pictures are surely possible. Thus, while metaphors are helpful tools for understanding complex phenomena, they also act as filters that prevent us from seeing additional aspects of reality (Laniak, 2006). A comprehensive understanding can only be approached by combining and comparing the varying perspectives that compete for our attention (Bennett, 2004). Therefore, we must be prepared to work simultaneously with different models if we are to do justice to the various aspects of the complexity of leadership (Dulles, 1987).
In this paper I will explore the idea of leading with authentic engagement by borrowing Gareth Morgan’s approach of using multiple metaphors. Specifically, I will draw on two of the dominant metaphors for leadership that appear in the Old and New Testaments: shepherds and servants. While other leadership metaphors are present in scripture, these are particularly useful for examining the ideas of leading with presence and authenticity. By fusing these two biblically-based metaphors to address the complexity of leadership, I am seeking to provide a picture of what authentic engagement by leaders looks like. The examination of these biblical metaphors of leadership will begin with the image of leaders as shepherds. Shepherding is the dominant leadership metaphor in the Old Testament and it is extended into the New Testament. In the New Testament, the shepherd image is supplemented by Jesus’ emphasis on servant-leadership.

Each of these images will be discussed in detail. While these are generally presented as positive images of leadership, there are cases of these leadership roles being abused. Specifically, there are biblical accounts of shepherds who have gone astray and abused their leadership roles. These negative examples will also be examined because the contrast provides further insight into what the positive practice of shepherdimg and serving should look like.

THE LEADER AS SHEPHERD

The most familiar biblical image of spiritual leadership is the shepherd. In fact, the function of the leader as shepherd is the foundational role even for those who have been assigned more formal roles and titles as priests, prophets, and kings. Scripture offers Moses and David as prototypes for shepherd leadership. In each case, serving as a shepherd was an important developmental activity, and that experience guided them as they assumed their leadership roles. The emphasis on the shepherd image is continued in the New Testament as Jesus refers to Himself as the “good shepherd” (John 10:11) and instructs Peter to “feed my sheep” (John 21:15-17).

The core responsibilities of shepherds were to provide protection, provision, and guidance. This inter-related role set of shepherd as protector, provider and guide provides an overview of shepherd-leadership. The peaceful image of the shepherd who “makes me lay down in green pastures” and “leads by still waters” (Psalm 23) portrays these responsibilities, yet distorts the ruggedness of the shepherd’s role. The actual tasks of the shepherd are determined by the dynamic, ever-changing, daily needs of the flock under their care (Laniak, 2006).
Sheep are not only dependent creatures; they are also singularly unintelligent. They are prone to wondering and unable to find their way to a sheepfold even when it is within sight. Shepherds protected their flocks from the elements and predatory wolves. They provided for the flocks by leading them to fertile pastures, and they guided the flocks away from dangerous terrains. The conditions of shepherding in ancient Palestine were very different from modern practices. The sheep were not fenced in and were left to fend for themselves. They were totally dependent on shepherds for protection, raising, watering, shelter and tending to injuries. Without the guidance and protection provided by the shepherd, the sheep would not survive.

Sheep spend most of their time grazing in pastures, eating and drinking, but if they become lost, they are helpless to find adequate food and water. Left to themselves, sheep will indiscriminately eat both healthful and poisonous plants, or overgraze and ruin their own pasture. They need to be led to water that is not impure and stagnant, not too hot or too cold, and water that is not moving too rapidly since that will frighten them into not drinking so then they die (MacArthur, 2004).

Sheep are in need of other assistance as well. Their wool produces a large volume of oily lanolin that permeates their fleece. This attracts a great deal of dirt, grass, and windblown debris which clings to it. Since they have no ability to clean themselves, sheep will remain soiled until the shepherd shears them. Between these shearings, that dirty, stinking accumulation must be cut away from under their tails or they cannot eliminate waste, become sick and even die. Sheep are also naturally passive and virtually defenseless against predators, and when attacked their only recourse is to flee in panic. Thus, the shepherd must be continually on guard to defend and rescue the sheep from attack (MacArthur, 2004).

The helplessness of sheep helps to explain the qualities of good shepherds, who are depicted in the Bible as models of those who lead with care and compassion. It was the task of the shepherd to lead sheep from nighttime protection in a sheepfold to safe places of grazing and watering. Shepherds were the providers, guides, protectors and constant companions of sheep. They were also figures of authority and leadership to the animals under their care. Shepherds are inseparable from their flocks, and their work is demanding, solitary and sometimes dangerous. Implicit in the description of the activities of these good shepherds is the idea that they were present, among the flock, and not leading from a remote location.

The image of leaders as good shepherds becomes clear in contrast with biblical passages that describe bad shepherds. The prophet Ezekiel delivers a scathing critique of shepherding gone wrong:
“Thus says the Lord GOD, ‘Woe, shepherds of Israel who have been feeding themselves! Should not the shepherds feed the flock? You eat the fat and clothe yourselves with the wool; you slaughter the fat sheep without feeding the flock. Those who are sickly you have not strengthened, the diseased you have not healed, the broken you have not bound up, the scattered you have not brought back, nor have you sought for the lost; but with force and with severity you have dominated them. They were scattered for lack of a shepherd, and they became food for every beast of the field and were scattered. My flock wandered through all the mountains and on every high hill; My flock was scattered over all the surface of the earth, and there was no one to search or seek for them. Therefore, you shepherds, hear the word of the LORD: ‘As I live,’ declares the Lord GOD, ‘surely because My flock has become a prey, My flock has even become food for all the beasts of the field for lack of a shepherd, and My shepherds did not search for My flock, but rather the shepherds fed themselves and did not feed My flock; therefore, you shepherds, hear the word of the LORD: ‘Thus says the Lord GOD, ‘Behold, I am against the shepherds, and I will demand My sheep from them and make them cease from feeding sheep. So the shepherds will not feed themselves anymore, but I will deliver My flock from their mouth, so that they will not be food for them’” (Ezekiel 34: 2-10, NASB).

Zechariah delivers a similar critique: “For the teraphim [leaders] speak iniquity and the diviners [leader] see lying visions, and tell false dreams. They comfort in vain... the people wander like sheep. They are afflicted, because there is no shepherd” (Zechariah 10:2). For Zechariah, these self-interested leaders had become worthless because they used deceptive speech, lying visions, false dreams and vain comfort. Thus, the people had been abandoned in the wilderness.

This passage depicts bad shepherds as those who have failed to execute the fundamental responsibilities of providing protection, provision, and guidance. These shepherds have abdicated their responsibilities and abandoned the flock. They are self-centered in seeking their own benefit, while ignoring the welfare of those they should be leading. As a consequence the sheep are scattered and left vulnerable.

Perhaps it is these shepherds who had abdicated their responsibility that Jesus had in mind when He described Himself as the “good shepherd:”
“Truly, truly, I say to you, he who does not enter by the door into the fold of the sheep, but climbs up some other way, he is a thief and a robber. But he who enters by the door is a shepherd of the sheep. To him the doorkeeper opens, and the sheep hear his voice, and he calls his own sheep by name and leads them out. When he puts forth all his own, he goes ahead of them, and the sheep follow him because they know his voice. A stranger they simply will not follow, but will flee from him, because they do not know the voice of strangers.”

The thief comes only to steal and kill and destroy; I came that they may have life, and have it abundantly. I am the good shepherd; the good shepherd lays down His life for the sheep. He who is a hired hand, and not a shepherd, who is not the owner of the sheep, sees the wolf coming, and leaves the sheep and flees, and the wolf snatches them and scatters them. He flees because he is a hired hand and is not concerned about the sheep. I am the good shepherd, and I know My own and My own know Me, even as the Father knows Me and I know the Father; and I lay down My life for the sheep” (John 10: 1-5; 10-15, NASB; emphasis added).

In this passage Jesus draws a contrast between himself as the good shepherd and others: thieves, hirelings, and wolves. This significance of this contrast becomes even sharper when we realize that life for the predator requires the death of the flock. Yet, life for the flock entails the death of the shepherd (Laniak, 2006). Jesus’ self-description as the good shepherd emphasizes two critical elements of shepherd leadership that must be embraced by those who seek to emulate him. First, Jesus explains that the self-sacrifice, “laying down one’s life for others,” is the model expression of love. In this phrase, Jesus emphasizes his intentional and purposeful decision to submit to death for the sake of those he loves.

A second emphasis in this discourse is the intimate knowledge that exists between the shepherd and the flock. In verses 1-5 of John 10, Jesus points out that the sheep know the shepherd’s voice and can distinguish it from the voice of a stranger. This intimacy is picked up again in verse 14 where he emphasizes the mutuality and reciprocity that exists between the good shepherd and their flock: “I know my own and my own know me.”

In referring to himself as the “good” shepherd, Jesus uses the Greek word *kalos*. *Kalos* refers to an attractive quality, something noble or ideal that is to be emulated (Laniak, 2006). As such, Jesus could be described as the model leader who provides an example to be imitated. The
apostle Paul certainly understood this as indicated by his recurring exhortation to imitate Christ (1 Corinthians 4:16, 11:1; Ephesians 5:1; 1 Thessalonians 1:6, 2;14).

Peter also sought to emulate this approach to leadership and encouraged other to do so as well. Therefore, I exhort the elders among you, as your fellow elder and witness of the sufferings of Christ, and a partaker also of the glory that is to be revealed, shepherd the flock of God among you, exercising oversight not under compulsion, but voluntarily, according to the will of God; and not for sordid gain, but with eagerness; nor yet as lording it over those allotted to your charge, but proving to be examples to the flock.

And when the Chief Shepherd appears, you will receive the unfading crown of glory. You younger men, likewise, be subject to your elders; and all of you, clothe yourselves with humility toward one another, for God is opposed to the proud, but gives grace to the humble. Therefore humble yourselves under the mighty hand of God, that He may exalt you at the proper time, casting all your anxiety on Him, because He cares for you. (1 Peter 5: 1-7, NASB; emphasis added)

In this passage Peter exhorts his fellow elders to “shepherd the flock of God among you.” He also addresses the issues of motives to assure that these elders follow the good model of shepherding. He encourages them to lead with an attitude of willingness, not compulsion. The shepherd must be diligent rather than lazy, intrinsically motivated rather than forced to be faithful, and passionate about this privileged duty rather than indifferent. Then he reminds these shepherd leaders that their motive is to be pure and to avoid the self-centered nature of seeking personal gain from their role. This command echoes the critiques of bad shepherds made by Ezekiel, Jeremiah and Zechariah. With a direct connection to Jesus teaching on servant leadership (Matthew 20:20-28; Mark 10:35-45; Luke 22: 24-27), Peter tells these shepherds that they are not lord their authority over those “allotted to their charge.” Rather, they are to clothe themselves with humility and offer themselves as an example to the flock.

The idea of being among those they are leading was emphasized by both Paul and Peter. In his first letter to the Thessalonians Paul repeatedly refers to the fact that he was among the Thessalonians:

“... just as you know what kind of men we proved to be among you for your sake. You also became imitators of us and of the Lord, having received the word in much tribulation
with the joy of the Holy Spirit, so that you became an example to all the believers in Macedonia and in Achaia...

But we proved to be gentle among you, as a nursing mother tenderly cares for her own children. Having so fond an affection for you, we were well-pleased to impart to you not only the gospel of God but also our own lives, because you had become very dear to us.”

(1 Thessalonians 1:5; 2: 7-8, NASB; emphasis added)

The phrase “among you” indicates that Paul was in the midst of the Thessalonians, taking a place of equality (Whittington, Kageler, Pitts, & Goodwin, 2005). Rather than separating from them based on his position, he lived among them. Far from trying to achieve some personal or financial gain from them, he became one of them and lavished affectionate care upon them (Morris, 1991).

The positive aspects of the shepherd metaphor are used throughout the New Testament to provide guidance for leaders. In his final instructions to Peter, Jesus uses the imagery of feeding and attending a plot to describe Peter's apostolic and pastoral task (John 21:15-17). Paul exhorts the elders to watch carefully over themselves, as well as the flock entrusted to them. They are also warned about those who would seek to ravage it (Acts 20:28-29). These elders are also admonished to perform their pastoral task willingly, out of a genuine desire to serve rather than for monetary reward, and to focus on being examples to the flock instead of rulers over it (1 Peter 5:3-4). Furthermore, this shepherd-leadership is to be done “among the flock,” not at a removed distance.

In keeping with the shepherd’s roles as leader and provider, biblical pastoral writings often picture civil and religious leaders as shepherds and the people as sheep. As shepherds, leaders are called to nurture and protect. Paul uses the word pastors (poimen) when identifying the various foundational leadership roles for the church (Ephesians 4:21). These pastors are shepherds who are charged with the leadership of the flock. As the caregivers of the community, they focus on the protection and spiritual maturity of God's flock, cultivating a loving and spiritually mature network of relationships, making and developing disciples. This includes creating environments where followers can grow, mature, and thrive.

Extending the shepherd metaphor to other organizational settings, nurturing also includes individualized consideration (Avolio, 2010) for each follower’s personal and professional development. Shepherd leaders use delegation as a developmental tool. As shepherds called to
protect the flock among them, these leaders must also work hard to understand the competitive and economic forces that threaten their organizations. This requires foresight and appropriate adjustment. Because the “flock” is dependent on the diligent execution of this role, failure to do so represents an ethical failure on the part of the shepherd-leader (Whittington & Maellaro, 2006).

THE LEADER AS SERVANT

Multiple metaphors for leadership are used throughout scripture. These include parents, kings, priests and prophets. Implicit in each of these images is the idea of service. Regardless of formal title, position, or authority each leadership role was intended to serve the people. Parents serve their children by protecting them, nurturing their physical, emotional, and social development, and preparing them to leave the home and assume the responsibilities of an engaged member of the larger community. The king serves by providing an orderly structure and protecting the people internally from crime and externally from attack. The priest serves by connecting people with their God and with each other. He tells the story of the people and thus creates and perpetuates the culture of the organization or community. The prophet serves by reminding the people of commandments they are violating and by challenging the status quo when there is a need for change. The prophet also serves by providing a vision that paints an appealing alternative to the existing situation. The shepherd serves by protecting the flock from attack, and leading the flock to green pastures and clean water. The shepherd also performs a variety of tedious tasks to maintain the health of the flock.

While the idea of servant is implied throughout these metaphors, the leader as servant is made explicit by Jesus. Two Greek words are used by Jesus to express the idea of servanthood: diakonos and doulos. When emphasizing the task, responsibility, or being under authority, He used the word doulos. But when the emphasis was placed on the attitude of humility and love that should inspire the acts of personal service, the word used is diakonos (Bennett, 1998, 2004).

The word diakonos literally means “to wait at table” by rendering service during a meal (Bennett, 2004). It is often connected to Jesus teaching on humility as a necessary characteristic of those who seek to lead, or “become great” (Mark 9:35; Luke 22: 24). The disciples concern over their own position was a recurring theme and they often debated about who was the greatest among them. This concern seems to have been most important to James and John and was even reinforced by their mother who made a personal request of Jesus that he “command that in Your
kingdom these two sons of mine may sit one on Your right and one on Your left” (Matthew 20:20-21).

Each time this debate arose, Jesus addressed their selfishly ambitious desires in a similar fashion by telling the disciples, and their mother, that if you want to become great you must become a servant. He contrasts this style of leadership with the Gentile leaders who lord their position over their followers and exercise authority over them. In each case Jesus also points out that even he did not come to be served, but to serve and give his life as a ransom for many (Matthew 20: 25-28; Mark 10:35-45).

Luke records another of these debates that arose on the night of the last supper (Luke 22: 24-27): “And He said to them, “The kings of the Gentiles lord it over them; and those who have authority over them are called ‘Benefactors.’ But it is not this way with you, but the one who is the greatest among you must become like the youngest, and the leader like the servant. For who is greater, the one who reclines at the table or the one who serves? Is it not the one who reclines at the table? But I am among you as the one who serves” (Luke 22: 24-27, NASB; emphasis added).

In an effort to provide a more explicit lesson on this matter, Jesus performed the most menial of tasks on the night of the last supper by washing the disciples’ feet. This was an important task normally done by the lowest servant in the house. In a culture that took its meal by reclining at a table where one person’s feet were usually close to another’s face, washing the dirt and grime off of feet that had been walking on unpaved roads was a crucial courtesy. Yet, the disciples were so caught up in the debate about who among them would be the greatest; they failed to perform this common courtesy - even though a basin of water was readily available. Recognizing this oversight as a teachable moment, Jesus rose from the table, removed His outer garments, took up a towel and began washing the disciples feet (John 13: 1-20).

In both his responses and his object demonstration Jesus was not seeking to rebuke the disciples’ desire for greatness or denying the need for authority (Bennett, 2004). He was however challenging the prevalent idea that greatness and leadership were tied to positions of status, honor, and power. In contrast to this perspective, Jesus was teaching them an attitude of humility was to be the primary motive underlying every action.

The second word that is translated as servant is *doulos*, which is also sometimes translated as slave. While *diakonos* focuses on the attitude of humility, *doulos* focuses on being under the authority of another (Bennett, 1998). In this sense, Jesus speaks of both service rendered to God
as well as service rendered to people. The service rendered to God reflects a submission to God as the supreme authority. The service rendered to others is an expression of love and humility (Bennett, 2004).

In calling the disciples to consider themselves as servants, Jesus was not calling them to be servants in the general sense of reporting to a master who ranks over them in a hierarchical relationship. Rather he is challenging them to serve one another. While serving a master is expected, serving a peer is more difficult. According to Jesus, the disciples are to be so consumed with building each other up that they lose their focus on personal ambition, glory and honor. Instead of focusing on being over, Jesus encourages them to be under by demonstrating humility and withdrawing from the competition for status and power (Bennett, 1998).

With his emphasis on shepherds and servants as models for leadership, Jesus inverts the world’s view of leadership. His emphasis on the need for personal humility is echoed in contemporary calls for leaders who can demonstrate this along with professional will (Collins, 2001). Indeed, humility is the primary characteristic of those who would implement the shepherd and servant models of leadership. Paul offered this as an overarching principle in his letter to the Philippians: “Do nothing from selfishness or empty conceit, but with humility of mind regard one another as more important than yourselves; do not merely look out for your own personal interests, but also for the interests of others” (Philippians 2:3-4, NASB).

The emphasis on humility is also clear in Peter’s instructions to leaders:

“… all of you, clothe yourselves with humility toward one another, for God is opposed to the proud, but gives grace to the humble. Therefore humble yourselves under the mighty hand of God, that He may exalt you at the proper time” (1 Peter 5: 5-6, NASB; emphasis added).

In a direct connection with Jesus’ teaching there has been a growing interest in servant-leadership as viable model for contemporary organizations. Contemporary approaches to servant leadership are rooted in the work of Robert Greenleaf (1977) who distinguishes between those who would be “leader-first” and those who are “servant-first.” For Greenleaf these two are extreme types that form the anchors of a leadership continuum. The defining difference between the two is the concern taken by the servant-first to make sure that others’ highest priority needs are being served. Accordingly, servant leadership flows from a deep-rooted, natural inclination to serve and the conscious choice to lead comes after the desire to serve.
This distinctive nature of servant leadership is captured in Greenleaf’s (1977: 13-14) “test” for those who would be identified as servant leaders:

“The best test, and most difficult to administer, is this: Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? And what is the effect on the least privileged in society; will they benefit, or, at least, not be further deprived.”

METAPHORS AS SCRIPTS

The usefulness of metaphors for understanding leadership can be evaluated by linking metaphors with the cognitive process approach to leadership (Gioia & Poole, 1984; Lord & Maher, 2002; Lord & Brown, 2004; Wofford, Goodwin, & Whittington, 1998). Cognitive processes include the various scripts and schemas that are used as guides to a leader’s approach to their leadership role. Metaphors may also be operating within a follower’s cognitive structure and influence how they perceive a particular leader’s behaviors and characteristics.

The servant and shepherd metaphors presented in this paper can also be seen as scripts for leadership behavior. A script is “a schematic knowledge structure held in memory that specifies behavior or event sequences that are appropriate for specific situations” (Gioia & Poole, 1984, p.449). Scripts are antecedents to leader behavior and the scripts associated. Furthermore, the scripts associated with transactional leadership have been found to be significantly different from those associated with transformational leadership (Wofford, Goodwin, & Whittington, 1998).

The metaphors a leader uses to describe their role will function as scripts for their behavior, providing a general guideline for their performance in that role. Leaders who are operating from a leadership script based on the servant and shepherd models of leadership will be expected to seek to create environments where followers can thrive (Spreitzer & Sutcliffe, 2007). Leaders who embrace the servant and shepherd models of leadership are also expected to be authentically engaged with those the lead.

Metaphors for leadership may also impact follower perceptions of leadership. According to the information processing perspective, leadership is not located solely in the leader or the follower, rather it involves the interpretation of behaviors, traits, and outcomes produced as interpreted by the followers (Lord & Maher, 1993). In fact, Lord and Maher (1993) define leadership as the
process of being perceived as a leader. This process is influenced by the followers’ leader categories that influence the encoding, storage and retrieval of social information. People often recall information that fits a general scheme, rather than specific information about a person (Rush, Thomas, & Lord, 1977). This is particularly salient in leadership studies based on the social reports of followers. When asked to evaluate a leader, a follower may rely on scripted information, stored in long-term memory as a schema, which may not accurately reflect the actual behavior of the leader they are evaluating. The metaphors that followers retain will reflect the characteristics they use for evaluating a potential leader. As such, these metaphors also may reflect the implicit leadership theories (ILT) of followers (Rush, Thomas, & Lord, 1977). As a subset of more general implicit personality theories, ILTs are sense-making devices that assist individuals' interpretations of complex realities. ILTs also may function heuristically by providing a mechanism that uses past experiences to understand and explain current events and leader behaviors.

To the extent that a would-be leader’s traits and behaviors conform to a follower’s ILT, that person will be viewed as a leader. The greater the variance between a leader’s actual characteristics and the implicit leadership theory of the follower, the less likely that potential leader will emerge as a leader in that situation. Thus, if the would-be leader is operating from the script of a servant, but the follower’s expectation is that leaders reign from on high, relying on formal authority and emphasizing reward and coercion to influence follower behaviors there will be a huge disconnect. There is no stronger example of this than the rejection of Jesus as the Messiah by Jews who were seeking a political king who would overthrow existing civil authority and establish political and legal authority. When Jesus came as a suffering servant who submitted to the existing law of the land and humbled Himself to death on a cross, the image and expectation the Jews held for the long-awaited Messiah was violated and they rejected Him as their leader.

CONCLUSION

In this paper I have offered the biblical images of shepherds and servants as models of authentically engaged leadership. As metaphors these are useful word pictures that can help us “see” what authentic engagement looks like. However, as with all metaphors, they are not just ways of seeing; they are also ways of “not seeing.” When we focus on the characteristics of leadership that are primed by talking about leaders as shepherds and servants, we are intentionally ignoring other dimensions of leadership that would be brought to mind if we used alternative metaphors. A comprehensive understanding of a complex process such as leadership requires the use of multiple images. Additional metaphors of leadership offered in
scriptures include parents, prophets, priests, kings, and apostles. Using any of these would provide additional insight to the roles a leader plays; yet standing alone, each of them would also be incomplete.

The emphasis on shepherds and servants in this paper was intentional because these images offer the best pictures of leaders who are authentically engaged. In each of these metaphors, there is an emphasis on self-sacrifice and other-centeredness. By creating environments where people can grow, develop, mature, and flourish, these leaders understand that the real measure of their effectiveness is changed lives (Whittington, et al, 2005). Leaders who embrace these images of leadership use the power inherent in their positions to provide resources and create environments where people can flourish. This kind of leadership does not take place at a distance. It requires leaders to be authentically engaged by being present - by being among those they lead.

REFERENCES


ANALYZING STUDENT EXPERIENTIAL LEARNING INSIGHTS TO INFORM THE DESIGN OF A CYBERSECURITY COURSE
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ABSTRACT
This study used student insights from an experiential learning activity to determine if learning objectives were met in a new graduate Strategic CyberSecurity course. In the absence of testing as a measure of learning, the researchers applied content analysis to students’ qualitative deliverables to assess learning and evaluate the effectiveness of the course content. The results of the research provided the details necessary to effectively revise the learning objectives and make subsequent changes to course content and delivery methods.

INTRODUCTION
The Study of CyberSecurity is a new area of study that began as a result of the September 11, (911) 2001 tragedy. In planning the 911 attack it is probable that terrorists used the Internet, steganography (Lau, 2003), and other electronic media to plan their attack on the World Trade Center, the Pentagon, and the White House. In coordination with the Department of Homeland Security (DHS), corporations and academia set out to design the study of CyberSecurity to create awareness and educate students about CyberSecurity breaches and countermeasures to help eliminate or minimize risk. CyberSecurity is the body of technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access (TechTarget, 2013).

In 2012 DHS introduced the draft National Initiative for CyberSecurity Education (NICE) workforce framework. This framework focuses on knowledge, skills, and abilities (KSAs) that educators must address to educate, train, and develop a highly qualified workforce in CyberSecurity. DHS provides broad topics of study to be included in the CyberSecurity curriculum; however it does prescribe detailed learning objectives or recommend resources that can be used as learning materials.

The University’s vision is to provide practice-oriented, professional business education for its students. A primary objective for the CyberSecurity Strategy course therefore was to facilitate students’ acquisition of meaningful knowledge and the development of new skills necessary to apply what they learn to new CyberSecurity situations they encounter in the workplace (Dennehy, Sims, & Collins, 1998).

In order to meet the NICE educational requirements and in keeping with the University’s mission, it was decided that the key deliverable for the new course would be the preparation and presentation of a Strategic CyberSecurity Plan. A secondary deliverable would be a Maximizing Learning Application (MLA) assignment whereby students would reflect on their experience of creating the strategic plan so
they would be able to articulate their insights, plan for the application of their learning, and understand
the implications this would have for the organization as a whole.

In preparation for the course, the instructor searched for appropriate learning materials and determined
that there were very few existing sources that addressed Strategic CyberSecurity Plans.

Pursuant to this process, a course syllabus was drafted to establish the learning objectives and course
content that would prepare students to create high level components of a Strategic CyberSecurity Plan.
(Refer to Course Learning Objectives in Exhibit 1). In keeping with the adult learning principle that
adults are most interested in acquiring knowledge they can use immediately (Knowles, 1990; Merriam,
2001) and the University’s mission to provide practice-based education for working adults, the Strategic
CyberSecurity Plan assignment and the MLA reflective assignment were the key deliverables in the
course.

EXHIBIT 1: COURSE LEARNING OBJECTIVES

<table>
<thead>
<tr>
<th>#</th>
<th>Topic</th>
<th>Learning Objective</th>
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<tbody>
<tr>
<td>1.</td>
<td>Insights at Executive Level</td>
<td>Through the completion of the course and experiential learning assignment students will have an understanding of the role and responsibilities of the Chief Security Officer (CSO).</td>
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<tr>
<td>2.</td>
<td>Security Organization Workforce – National Initiative for CyberSecurity Education (NICE)</td>
<td>Through studying the National Initiative for CyberSecurity Education (NICE) and the NICE workforce framework students will have an understanding of the knowledge, skills and abilities that are needed to effectively secure an organization.</td>
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<tr>
<td>3.</td>
<td>Strategic Planning and Policy Development</td>
<td>Students will have an understanding of the many CyberSecurity Policies that are needed within an organization, resources available to assist in developing properly formatted policies, and the process of implementing and monitoring adherence to policy.</td>
</tr>
<tr>
<td>4.</td>
<td>Creating a Cyber Plan for Small to Medium Business</td>
<td>Students will have an understanding of what is to be included and how to create a Strategic CyberSecurity Plan for a small to medium business.</td>
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<tr>
<td>5.</td>
<td>Cyber Awareness (Security Education Training &amp; Awareness - SETA) and Implementation</td>
<td>Students will have an understanding of cyber awareness programs, themes and successful implementation of such plan.</td>
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<tr>
<td>6.</td>
<td>Risk Management</td>
<td>Students will have an understanding of the Risk Management</td>
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</tbody>
</table>
It was important that students achieve a thorough understanding of the complexities and nuances of creating and implementing a Strategic CyberSecurity Plan. In light of this, exams were not administered in this course; as Entwistle and Entwistle contend, “preparation for examinations hinders students’ efforts towards genuine understanding of course material” (Sambell & McDowell, 1998). Consequently, quantitative data that might otherwise have been used to evaluate learning was not available. However, after delivering the course online in the 2013 spring trimester, instructors needed to determine if planned NICE requirements were met and if the learning objectives were achieved. As a way to assure that the intended learning had occurred in the course and subsequently to study the effectiveness of the course as it was initially designed, students’ MLA assignments were analyzed. The results of this study were then used to ascertain what curricular improvements were needed (Hollister & Koppel, 2008).

THE STUDY

This research study was conducted using data gathered from two assignments submitted by students in the first offering of the CyberSecurity Strategy course. Data were analyzed via the content analysis method described below.

Content analysis methodology

The data – which was drawn from the students’ MLA narrative submissions – were collected in the middle and at the end of the term. Fifteen students submitted a total of 28 narratives. We reviewed the narratives at the conclusion of the course using qualitative content analysis (Bachiochi, Rogelberg, O’Conner & Elder, 2000; Mayring, 2000; Weber, 1990). Steps in the analysis process were as follows:

1. Narratives were transferred from the original individual student submissions to a single table of records to be analyzed anonymously.

2. Researchers defined the unit of data to be analyzed as the Insight section of each student’s record.

3. Each researcher individually reviewed the data and created a list of categories, Researchers compared their lists and defined these nine areas as the categories to be used for analysis: BCDR (Business Continuity Disaster Recovery); Policies and Procedures; Cyber Warfare; Mission, Vision, and Values; SETA (Security Education, Training, and Awareness); Regulatory Standards; Risk Management; Volume and Complexity; and CyberSecurity Organization. (Refer to Exhibit 2).
4. An independent coder, who was trained via an instructional document, then categorized the records.

5. Researchers compared the categories they identified with those identified by the coder to verify the reliability of the category assignments. The assigned categories for 23 of the 28 items were consistent among coders, for a match of 82%.

6. Researchers calculated the frequency with which categories were found in the records.

7. Researchers compared the categorized results with the six course learning objectives and determined that three objectives were met; two objectives were not met; and one objective was partially met.

**EXHIBIT 2: CONTENT ANALYSIS CATEGORY DEFINITIONS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCDR</td>
<td>Business Continuity Disaster Recovery</td>
</tr>
<tr>
<td>Policies and Procedures</td>
<td>Integrating IS policies with business policies; taking a proactive approach to IS; broken processes</td>
</tr>
<tr>
<td>Cyber Warfare</td>
<td>Strikebacks</td>
</tr>
<tr>
<td>Mission, Vision, Values</td>
<td>An organization strategy for IS</td>
</tr>
<tr>
<td>SETA</td>
<td>Security Education, Training, and Awareness; includes communications</td>
</tr>
<tr>
<td>Regulatory Standards</td>
<td>Regulatory standards; legal requirements</td>
</tr>
<tr>
<td>Risk Management</td>
<td>Assessment and management of risk; classification of assets; cyber insurance; data breaches</td>
</tr>
<tr>
<td>Volume and Complexity</td>
<td>The need for such a large number of different tasks, topics, and policies to thoroughly address IS issues</td>
</tr>
<tr>
<td>CyberSecurity Organization</td>
<td>Having a designated IS person; IS hiring and employee retention; organization structure that includes IS in the hierarchy</td>
</tr>
</tbody>
</table>

**RESULTS AND DISCUSSION**

In this section we discuss how we used the results of the content analysis to answer our research questions. *RQ 1 – Based on student insights, which course learning objectives were met?* – was answered by using the 23 matched content analysis items to determine the frequency with which items were
mentioned by students in their MLA assignments. Subsequently, the nine content analysis categories were matched to the six original course learning objectives (see Table 1) to determine which learning objectives were met and which ones were not met.

The following is a summary by objective of results obtained through our analysis and a discussion of the actions we plan to take.

**Objective 1 (Insights at the Executive Level) was not met: frequency = 0.**
Action: This objective will be combined with objective #3 and rewritten. Additional course content will be included to emphasize the importance of a systemic approach to CyberSecurity that begins at the executive level and filters down through the entire organization.

**Objective 2 (National Initiative for CyberSecurity Education) was not met: frequency = 0.**
Action: This topic needs to be addressed more comprehensively so students fully understand the NICE KSAs and are able to recognize their own development needs relative to the KSAs. Additionally we want students to learn to think about these KSAs from a broad, leadership perspective when considering the type of CyberSecurity experts that should be employed by the organization.

**TABLE 1: LEARNING OBJECTIVE / CONTENT ANALYSIS COMPARISON**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Summary Objective</th>
<th>Content Analysis Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Insights at Executive Level</td>
<td>NA</td>
<td>0 – Not Met</td>
</tr>
<tr>
<td>#3</td>
<td>Strategic Planning and Policy Development</td>
<td>Policies and Procedures</td>
<td>2 – Partially Met</td>
</tr>
<tr>
<td>#4</td>
<td>Creating a Cyber Plan for Small to Medium Business</td>
<td>Mission, Vision and Values</td>
<td>1 - Met</td>
</tr>
<tr>
<td>#5</td>
<td>Cyber Awareness (SETA) and Implementation</td>
<td>SETA</td>
<td>7 - Met</td>
</tr>
<tr>
<td>#6</td>
<td>Risk Management including BCDR and Threats</td>
<td>Risk Management (5) and BCDR (2)</td>
<td>7 - Met</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regulatory Standards</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Volume and Complexity</td>
<td>2</td>
</tr>
</tbody>
</table>
Objective 3 (Strategic Planning and Policy Development) was partially met: frequency = 2.
Action: This learning objective will be combined with objective 1 as noted above and additional emphasis will be placed on this area of course content.

Objective 4 (Creating a Cyber Plan for Small to Medium Business) was met: frequency = 1.
Action: The MLA assignment instructions asked students to select only one course topic as their most significant learning at the midpoint and end of the term. As such, we think students were not given the opportunity to step back and reflect on their overall learning from the entire course. Therefore the second part of the MLA assignment will be revised. Students will be required to reflect on what they learned from creating the overall strategic plan from a holistic perspective in addition to selecting the individual content items that represented significant learning for them.

Objective 5 (Cyber Awareness and Implementation) was met: frequency = 7.
Action: No changes in the learning objective or course materials on this topic are needed.

Objective 6 (Risk Management including BCDR and Threats) was met: frequency = 7.
Action: No changes in the learning objective or course materials on this topic are needed.

RQ 2 – What changes to learning objectives and/or course content are needed? – was answered by using the content analysis results to determine if any learning objectives should be reworded, if additional learning objectives were required to address essential course content, and if additional course content was required to meet learning objectives. We discovered that some additional changes were needed to sufficiently address all of the pertinent course content and maximize student learning. Students mentioned as their most significant learning three additional topics that do not directly tie back to the course objectives. Following is a brief discussion of these topics and our plans to address them.

Regulatory Standards: frequency = 1.
Action: This topic is addressed more thoroughly in the Cyber Compliance and Legal course. While the topic has relevance in the strategy course, it does not need to be a primary focus. Therefore, regulatory standards will continue to be briefly addressed in this course but a learning objective is not warranted.

Volume and Complexity: frequency = 2.
Action: This topic will be included in the Insights at the Executive Level learning objective when it is combined with objective #3 and rewritten as noted above. Additional learning activities focusing on this topic will be included in course content.

<table>
<thead>
<tr>
<th>Cyber Warfare</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Matched Categories</td>
<td>23</td>
</tr>
</tbody>
</table>
Cyber Warfare: frequency = 2.

Action: This was the topic of a threaded discussion that especially piqued students’ interest and captured their attention. While cyber warfare is clearly a component of CyberSecurity, it does not warrant a dedicated learning objective in this course. It will, however, remain in the course as the topic of a threaded discussion.

CONCLUSION

The content analysis research methodology utilized in this study is applicable to all courses with an experiential learning assignment that includes the four phases of Kolb’s (1984) model. By using the content analysis methodology to evaluate the insights students gained after reflecting on an experiential learning activity, we were able to determine the accuracy of course learning objectives and the effectiveness of course content in meeting those objectives. When course learning objectives are met the course content on these topics is considered complete. When the objectives are not met, they must be reconsidered and revised as necessary. Additionally, course content must be redesigned accordingly to ensure the objectives are met. The results of this research provided the instructors invaluable information and the details necessary to ensure student learning is accomplished and maximum experiential learning results are achieved.

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ABSTRACT

Previous research suggests that certain financial conditions and governance configurations favor migration to private ownership. These studies focused on two time periods, during which there was a flurry of transactions taking companies private. With the economic downturn starting in late 2007 and the tightening of credit markets, the number of public-to-private (PTP) transactions decreased substantially. Nevertheless, over 100 PTP filings were made in the U.S. between 2008 and 2011, suggesting that some companies continued to perceive the benefits of private ownership. This paper compares companies that went from publicly owned to privately held status before and after the recession of 2008. We hypothesized that the type and structure of firms going private between 2008-2011 would be different than those that went private before 2008. Yet, hypothesized relationships regarding organization size, change in market value, executive pay and ownership concentration were not predictive of the decision to go private in the earlier or later time period. However, our findings regarding board structure and institutional ownership suggest that internal dynamics do matter and shape the organizational variables that affect corporate restructuring under different external conditions.

INTRODUCTION

Changing its ownership from being traded on public equity markets to being privately held is one of the important strategic decisions a firm can make, one with far-reaching consequences. A typical public-to-private or PTP transaction involves a small number of investors who purchase stock of a public corporation through either a merger or tender offer. In a merger, a new private company is formed, the old public company is merged into it, and existing shareholders not involved in the transaction receive cash for their shares. A tender offer involves the acquisition group’s offer to purchase shares directly from the public. Following either the merger or tender offer, the governance structure of the company is transformed from one that separates management and ownership to a configuration in which management and ownership interests are less differentiated (Cummings, Siegel & Wright, 2007; Vogi, 2005). The lack of access to equity markets results in decreased liquidity, and financing for future projects or expansion must generally come through borrowing. Valuation of the firm becomes difficult, as a public market for shares no longer exists. Given the weight of this decision, a stream of research has developed and identifies several factors that might affect what is known as “going private” (e.g., Gleason, Payne & Wiggenhorn, 2007; Valenti & Schneider, 2012).
The first wave of going private activity first occurred in the 1980s and was characterized by the use of leveraged buy-outs (LBOs). Many of these transactions were management-led buyouts, dominated by corporate insiders, either officers, directors, or both (Jones & Hunt, 1991). The buyout process resulted in a highly leveraged capital structure of the newly private firm (Blair, 1993; Bruner & Paine, 1988), with the transaction largely financed by junk bonds. A second wave occurred in the early to mid 2000s, fueled by readily available credit and a backlash against increased government regulation faced by public companies (Block, 2004; Engel, Hayes & Wang, 2007). Although they were often incentivized to support the deals and were involved in the process, the role of managers and other insiders was not as prominent as it had been in the 1980s, (Nielsen, 2008). Instead, going private activity in the 2000s was dominated by the role of private equity companies and their private equity funds in encouraging and facilitating the transactions (Folkman, Froud, Johal & Williams, 2007). The new equity was then acquired as an investment by their own and possibly other private equity funds (Kelly, 2007; Subiotto, 2006).

Previous research has found that the decision to go private was often related to the firm’s financial condition as well as its internal governance mechanisms. Studies have generally been in agreement that the firm’s market value has a negative relationship with its decision to convert to privately held status (Andres, Betzer & Weir, 2007; Bharath & Ditmar, 2010; Rao, Waters & Payne, 1995; Renneboog & Simons, 2005; Weir, Laing & Wright, 2005a, b). The potential for improved financial performance for equity investors of the newly private firm through its greater leverage, longer-term timeframe (Kahan & Rock, 2007) and the possible value-adding expertise of its private equity owners (Cressy, Munari & Malipiero, 2007; Schneider & Valenti, 2011) often prompted the PTP process (Braun & Latham, 2007).

Further, as is evidenced by its cyclical nature, macro-level forces were key influences in the decision, most notably, economic and regulatory forces. As many PTP firms tend to use a high degree of leverage to finance their transactions, credit availability affected a company’s ability to go private; making credit market conditions a pertinent factor (Bharath & Ditmar, 2010). Regulation both in the U.S. and Europe aimed at improving corporate governance and making executive compensation more transparent has proved burdensome and costly. Since these regulations affect publicly held corporations to a much greater extent than private ones, they became a significant influence in the recent era of PTP transactions (Block, 2004; Engel, et al., 2007).

With the credit crisis which began in the second half of 2007, private equity firms halted $114 billion in buyouts (Thorton, 2008), and global private equity buyouts in the first half of 2008 totaled 974 deals or $124.7 billion, down 76% from the prior year (Holman 2008). These conditions persisted through the first half of 2012 (Doney & Reston, 2012) causing lenders to become overly cautious about financing proposed opportunities (Wright, Jackson & Frobisher, 2010). In addition, despite variance in the degree to which private equity firms rely upon debt
financing of their portfolio firms (Hoskisson, Shi, Yi & Jin, 2013), a shortage of debt makes it difficult for them in general to refinance or sell their current companies (Thorton, 2008) and hurts their ability to take other firms private.

Yet, despite the credit difficulties, some firms did indeed go private post the crisis, as is to be expected given the varying strategies of private-equity firm deal makers (Bacon, Wright, Ball & Meuleman, 2013). We address the research question of whether or not organizational antecedents differ between firms that went private before 2008 and those that went private thereafter, from 2008 to 2011, during the height of the great recession. While a seemingly simple question, it has great implication for management theory regarding to the role of internal context in affecting the generalizability of empirical findings. The paper starts a review of the current literature identifying organizational and institutional forces in affecting the decision to go private. Several hypotheses are then developed and tested regarding the situational variables that might differ between corporations which went private before 2008 and those that engaged in the transition between 2008 and 2011.

A discussion and suggestions for a future research agenda conclude the paper. As managers and researchers move forward and consider the antecedents as well as the broader consequences of private status (e.g., Bacon et al., 2013; Jones & Hunt, 1991; Morrell & Clark, 2010; Nielsen, 2008; Schneider & Valenti, 2010), this paper provides greater understanding of the PTP decision and the context in which it is made.

**FACTORS AFFECTING THE DECISION TO GO PRIVATE**

Agency theory has largely provided the intellectual basis of the going private decision (Froud & Williams, 2007). It promotes going private as a means for controlling the agency costs associated with public companies and their separation of management and control (Rogers & Holland, 2002). For example, in public corporations agency costs might be incurred because free cash flows are used by managers in ways that do not earn positive net cash flows for shareholders, such as excessive compensation and unprofitable diversification (Jensen, 1986). Agency theorists posit that managers’ interests become aligned with those of the shareholders when they own a substantial portion of the firm’s equity (Jensen & Meckling, 1976), which is a characteristic of newly private firms, and they are therefore more likely to make decisions to maximize long-term shareholder wealth (Demsetz, 1983). Going private is associated with the benefits of greater alignment of managerial interests with those of owners through use of incentive compensation, and better monitoring of management (Weir, et al., 2005b). In addition,
the newly private firm’s governance structure may encourage it to become more entrepreneurial (Klein, Chapman & Mondelli, 2013).

Jensen’s (1986) suggestion that free cash flows (i.e., the ability to generate cash flows without opportunities for reinvestment) create agency costs that must be controlled led to the conclusion that firms with substantial free cash flows were more likely to go private. Studies of firms that went private during the 1980’s confirmed this supposition (Lehn & Poulsen, 1989; Opler & Titman, 1993; Rao et al., 1995), but this factor became less prevalent in the later wave of the 2000’s (Bharath & Dittmar, 2010; Weir et al., 2005b). Further the premiums paid to shareholders in PTP transactions were significantly associated with undistributed cash flows (Lehn and Poulsen 1989). Higher dividend yield was also found predictive of the likelihood of going private (Bharath & Dittmar, 2010; Maupin, 1987; Rao et al., 1995).

In addition to agency theory, managerial economists point to internal financial conditions as organizational predictors of going private. Empirical studies covering both eras of PTP transactions identify a number of common explanations surrounding the decision to go private, finding some internal financial explanations. The prevalent internal financial factor that appears critical in the going-private decision is low market value. Market value has been measured using market to book ratio (Bharath & Dittmar, 2010; Rao et al., 1995), price-earning multiple (Maupin, 1987; Rao et al., 1995), market capitalization and enterprise value (Weir et al., 2005a), return on equity (Gleason et al., 2007), Q-ratios or market capitalization deflated by total assets (Weir et al., 2005b), and mean adjusted share price (Andres, et al., 2007). The findings are generally in agreement that under-valuation of the company makes it an attractive PTP candidate (Renneboog & Simons, 2005).

Low market value indicates that the firm has fewer investment opportunities, as low market-to-book ratios reflect poor investor perception of future positive reinvestment (Gleason et al., 2007). Inadequate valuation may also be the result of information asymmetries, as outsiders do not possess the same level of information as insiders (Andres et al., 2007). In either case, the ability of the firm to raise additional capital through issuance of stock is limited, as the cost of raising capital in the public markets becomes too expensive. This also limits the firm’s future growth opportunities, supporting studies finding a negative relationship between growth and going private (Rao et al., 1995). Depressed stock values also result in diminished stock option values, making the PTP transaction attractive to managers (Block, 2004; Maupin, 1987). Studies testing whether financial distress would lead to private status produced mixed results. An early study found strong evidence that the potential for financial distress reduced the likelihood of going private (Opler & Titman, 1993). Later researchers found the reverse (Gleason et al., 2007), and
surmised that firms that were close to bankruptcy would be taken private because managers or takeover investors could purchase shares at a low premium, restructure the firm, and realize profits. While Weir and his colleagues (Weir, Laing & Scholes, 2008) found that firms going private were more likely to have less debt and be more diversified, they nevertheless concluded that at least in the UK, financial distress costs were not critical to the decision to go private. It is thought that additional reason for going private is the tax benefits associated with the newly private firm’s greater debt (Cumming, et al., 2007; Renneboog, Simons, & Wright, 2007).

The environment has long been acknowledged to be a key influence in theory regarding strategic decision making; it is multifaceted, comprised of factors relating to market characteristics, government regulation, technological innovations, and other conditions that affect an organization (Aldrich, 1979). We adapt the perspective of corporate strategy as, in part, being in response to and reflecting the organization’s environment, as described by Miles and Snow: “Successful organizations achieve strategic fit with their market environment and support their strategies with appropriately designed structures and management processes” (1984: 10). Accordingly, the importance between fit and the external environment is critical in management research (Child, 1997; Lawrence & Lorsch, 1967). Moreover, according to upper echelon theory, environmental factors affect managerial decision-making insofar as they limit manager’s discretion and autonomy (Hambrick & Abrahamson, 1995; Hambrick & Finkelstein, 1987).

Environmental forces that impact the PTP decision consist of the economic forces of credit and capital market conditions, and regulatory forces as they affect public-firm compliance costs, place pressure on the equity component of executive incentive compensation, and affect the degree to which private equity firms are able to promote going private activity. The low-cost and availability of credit fueled the going private in both the 1980s and later in the 2000s. When the availability of bank loans is large, the likelihood of going private increases, due to the importance of financing for the transaction (Bharath & Dittmar, 2010). Moreover, publicly held companies wishing to finance new projects outside of equity markets may be reluctant to take on additional debt, because of the fear of negative public-market reaction to increased corporate leverage. When credit is otherwise available, this fear serves to encourage a corporation to go private, as leverage can sometimes increase potential investment return for owners, and debt-financed private-equity takeovers are one way to leverage corporate assets to that end. Going private deals in the US are often conditioned on the private equity firms’ ability to obtain debt financing (Regner, 2006).

Research indicates that recent motivations to go public include avoidance of the increased costs of regulatory compliance (GAO, 2006; Holstein, 2006; Regner, 2006) and time restraints (Block, 2004) associated with being public subsequent to the passage of the Sarbanes-Oxley Act (SOX) of 2002. In a study of going private transactions between 1998 and 2005, Engel and colleagues
(Engel, et al., 2007) found that the frequency of the transactions increased after the passage of SOX. Public companies in the U.S. and Europe are thought to face so much scrutiny and are beholden to so many stakeholders that they often cannot do what is necessary for a troubled business – such as layoffs, restructurings, and capital investment – as it might not generate profit for years. According to a study conducted by Foley & Lardner LLP (Hartmann, 2007) nearly one in four respondents then reported that they were considering going private transactions as a result of corporate governance and public disclosures reforms. Compliance with SOX also brought about liability considerations. Corporate CEOs and CFOs must now personally certify the accuracy of all financial statements and are subject to criminal liability for improper diligence. Block (2004) pointed out the additional time constraints caused by assuring regulatory compliance, such as attendance at committee meetings, establishing governance polices, securing board approvals before issuing press releases and filing reports with the SEC.

**POST RECESSION ANTECEDENTS OF PRIVATE EQUITY TRANSACTIONS**

After 2007 the number of PTP transactions declined substantially and continued to decrease through 2012 (Doney & Reston, 2012). Yet, market forces did not completely halt the previous trend, as a fair amount of firms did go public in 2008 through 2011. Internal firm conditions might have been significant enough to warrant the change despite difficulty in obtaining credit, and some private equity firms – namely, those that rely less on debt financing of their portfolio firms (Hoskisson, et al., 2013) – likely continued their conversion activity albeit at a lesser rate. While it is anticipated that many of the factors determined to be antecedents of the decision to go private prior to 2008 continued to spur PTP transactions, their effects might be more or less influential post the credit crisis and recession. Internal resources of the firm may have enabled some firms to go private despite a difficult credit market. Other firms may have experienced more severe conditions that precipitated the decision to go private. In yet other firms, the distribution of power among executives and directors may have extended their influence to convince shareholders to tender their shares in a PTP transaction. This study, then, examines what, if any, differences exist through a comparison of PTP transactions between 2003 and 2007, the height of the second going private boom, and those between 2008 through 2011, during the trough of the great recession.

**Firm Size**

Martin and Schrum (2007) found that during the going private wave of the 2000s, among other factors, the firms most likely to go private were smaller. For example, the attraction of going private was more pronounced for smaller companies in part due to the greater impact of compliance costs on them. The Foley & Lardner study (Hartmann, 2007) reported that the average cost of compliance for companies with under $1 billion in annual revenue increased more than $1.7 million to approximately $2.8 million with enactment of the Sarbanes-Oxley Act,
representing a 171 percent increase between fiscal years 2001 and 2006. For the same companies, external audit fees increased 311 percent over the same period (Hartmann, 2007). For companies with less than $75 million in market capitalization, audit fees accounted for $1.14 of every $100 in revenues, compared to $1.13 for companies with market capitalization over $1 billion (GAO, 2006). Further, volatile markets and diminished investor confidence also affected many firms, particularly smaller companies (Cannon, 2003).

As smaller companies may be more inclined to consider going private when the cost of debt financing is relatively inexpensive, credit market disruption will have a greater negative effect on the number of PTP transactions of smaller companies. Indeed, difficult financial market conditions may have a general greater negative effect on smaller public companies. For example, smaller companies have more difficulty in raising public capital through equity financing (Tunick, 2003; Koenig, 2004). Not only are smaller companies constrained in their access to credit (Winkler, 1999), but they are often less able to finance operations through debt in tight credit markets (Cannon, 2003). Further, as fears rise as to whether highly leveraged private firms will have problems servicing their debt; financial institutions will either abandon the market or tighten their terms and covenants, precluding many of the smaller conversions (Wright, Renneboog, Simons & Scholes, 2006). Limited ability to raise funds through debt financing will also make backers more selective in their investment decisions, preferring one or two big deals to several smaller transactions (Dolbeck, 2008).

**Hypothesis 1:** The size of firms who went from public to private status between 2008-2011 will be larger than firms who went from public to private status prior to 2008.

**Market Value**

Changes in capital markets have encouraged many public corporations to reconsider the advantages of private ownership and thus contributed to the public-to-private transaction trend (GAO, 2006). During the second study period of 2008-2011, deflated stock prices significantly decreased the market value of many companies. Under these difficult circumstances, insiders cannot sell large blocks of stock without further negatively affecting stock price (Bernstein, 2007). This situation illustrates the classic dilemma described by Jensen and Meckling (1976) as the agency cost of capital, where the sale of shares to outsiders causes depression in price, reflecting the conflict of interests between owners and managers in the public firm. Thus, decreased market valuation of public companies and its associated reduction in access to public capital encourage companies to go private. Research has confirmed that decrease in analyst
coverage, falling institutional ownership and low stock turnover all contributed to the decision to go private (Mehran & Peristiani, 2009). However, after 2007, when credit became more difficult to obtain and market values declined across public financial markets, the declines in a company’s market value would have to be significantly more severe than in the past in order for management to seek and obtain private status through a PTP transaction.

**Hypothesis 2:** Declines in firm value and share prices are less likely to predict PTP transactions between 2008-2011 than prior to 2008.

**Executive Ownership Concentration**

Concentration of ownership or block ownership is a measure of shareholder power; as the concentration of shares increases, shareholders can increasingly exercise significant control over management to insure that the value of their shares is protected (Hill & Snell, 1988). The presence of holders of large blocks of stock often signifies greater voting power and the ability to exercise some degree of control over management (Sundaramurthy, Rechner & Wang, 1996). In addition, high ownership concentration diminishes the benefits of being public, and thus may encourage the decision to go private (Bharath & Dittmar 2010). Some researchers studying the PTP phenomenon note that concentration of ownership is favorably related to the likelihood of going private because the controlling shareholders are likely to be part of the acquisition group, reducing the percentage of non-participating shareholders who must be bought out (Koenig, 2004).

Subsequent to the credit crisis, the ability to secure financing in order to buy out existing shareholders became more difficult. This factor would tend to have less impact on controlling managers, i.e., those with concentrated ownership blocks, who wish to take the company private, as they often intend to become owners of the new private corporation and this reduces the amount of needed debt financing. Previous studies support the position that high ownership stakes by the CEO (Weir, et al., 2005b) and management (Maupin, 1987) will facilitate the PTP transaction. We suggest that executives who have large stakes in their firms will tend to benefit from going private and will use their ownership power to encourage the decision. This will be an even more prevalent antecedent after 2007, when outside credit became less available.

**Hypothesis 3:** Ownership concentration among executives of firms who went from public to private status between 2008-2011 will be larger than firms who went from public to private status prior to 2008.

**CEO Compensation**
After the passage of the Sarbanes-Oxley Act of 2002, many companies reacted by considering a PTP transaction partly in order to avoid transparency issues with respect to executive compensation. In addition, SOX contains an absolute prohibition against loans to executives. As companies often forgave these debts, these corporate loans amounted to millions of dollars of additional income to executives (Valenti, 2004). Other parts of the Act further set a tone of limiting executive compensation, including payback or clawback provisions that require a return of executive compensation in the event of a material financial restatement or misconduct (Fraidin, Genser & Hoverman, 2005); and the delineation of blackout periods, in which executives and directors cannot trade their firm’s equity (McGuiness, 2003). We could therefore expect that immediately after the passage of SOX, there would be a positive relationship between firm’s executive compensation and going private. Accordingly, most public firms concerned about shielding their high executive compensation would have done soon after the passage of SOX, so that the relationship between CEO pay and going private would wane over time.

Hypothesis 4a: CEO pay in firms that went private between 2008-2011 will be less than for firms who went private before 2008.

Yet, the regulatory environment has further tightened regarding executive compensation reporting. Under SEC rules effective for proxies filed in 2007, referred to as Compensation Discussion and Analysis (CD&A), the disclosure tables required in proxy statements must provide additional compensation and benefits data than previously required (Dalton & Dalton, 2008; Williamson, Hodgkins, Struve & Della Rocca, 2006). Grants of stock options must now be reported as of their date of the grant. Public companies must also show the dollar value of supplemental retirement plans and severance terms as well as a total compensation figure for each affected executive. Policy changes aimed at greater and more stringent disclosure of executive compensation in public firms (Dalton & Dalton, 2008; International Financial Law Review, 2007) suggest a greater positive relationship between it and firms going private during 2008-2011 compared to the earlier era.

In addition, with the passage of time, public concerns over executive compensation might have slightly dissipated, as is evidenced by steady increases in CEO pay. Brown and Lee (2011) noted that the use of cash compensation, which includes both salary and bonus, increased steadily from 2000 to 2005 and sharply increased in 2006; they also found that the use of restricted stock grew steadily since 2003. Between 2006 and 2011, CEO base pay began to increase to an average of $1.5 million by 2011 (Valenti, 2013). Based on this general trend, it would be expected that CEO compensation of companies going private in 2008 through 2011 would on average be higher than in 2003 through 2007.
Hypothesis 4b: CEO pay in firms who went private between 2008-2011 will be greater than firms who went private prior to 2008.

Board of Directors Size and Composition

Boards of directors play an important role in setting the strategic direction of an organization. Thus, it makes sense that certain attributes of the board – such as size and composition – would impact its influence on corporate decisions, including going private (Braun & Latham, 2007). For example, while large boards are generally viewed as possessing a depth of expertise on which to draw strategic guidance, Golden and Zajac (2001) suggest that small boards might better facilitate strategic change. Board composition is also an important determinant of board effectiveness (Lorsch & MacIver, 1989). Research has largely focused on whether outsider- or insider-dominated boards have a greater influence on corporate strategy, with somewhat mixed results. Firms whose boards are comprised of mostly outsiders are more likely to instantiate strategic changes, such as corporate restructuring (Johnson, Hoskisson & Hitt, 1993; Pearce & Zahra, 1992).

As previously discussed, in the years following the credit crisis, the difficulty in obtaining financing will be a major obstacle in the ability to go private. Firms wishing to do so would therefore need the advice and support of their boards, and directors would need to be actively involved in soliciting funds. Larger boards have been associated with a firm’s ability to obtain external financing and leverage from the external environment (Pfeffer, 1972). Because the board of directors is the shareholders’ legal representative, it has been proposed that independent or outside directors would be in a better position to promote strategic orientations that benefit owners (Kosnik, 1987; 1990). The percentage of outside directors on corporate boards has increased significantly over the past 15 years, suggesting that corporations have heeded the advice of governance experts (Linck, Netter & Yang, 2008). Thus, we would anticipate that board structure for PTP firms after 2007 would be larger, bringing more resources and connections to the board, and more dominated by outsiders, again with greater connections to financing opportunities.

Hypothesis 5: The size of boards will be larger for firms who went private between 2008-2011 than for firms that went private prior to 2008.

Hypothesis 6a: The percentage of outside directors on the board will be higher for firms who went private between 2008-2011 than for firms who went private prior to 2008.

An alternative prospective suggests that inside directors provide better strategic direction than outsiders. Based on stewardship theory (Donaldson & Davis, 1994), this perspective suggests that insiders have better knowledge of the company and thus make more effective decisions than board members who are
not as familiar with the company. Inside directors spend most of their time working at the firm and thus have specialized knowledge not available to outsider directors; as a result they spend much of their time at board meetings educating the outsiders and providing them with more detailed information (Baysinger & Hoskisson, 1990). In addition, their inside information can enhance top management commitment to pursue more risky, yet potentially profitable, investments (Baysinger, Kosnik & Turk, 1991). In the years immediately following the great recession, the influence of inside directors to make strategic changes might have been more pronounced. Accordingly, the relationship may be as follows:

**Hypothesis 6b:** The percentage of insider directors on the board will be higher for firms who went private between 2008-2011 than for firms that went private prior to 2008.

### Institutional Investment

Finally, the role of institutional investors in the decision to go private is important to examine. An institutional investor is defined as a highly regulated financial intermediary that invests in equities on behalf of its beneficial owners (Schneider, 2000). Institutional investors, including pension plans, mutual funds, insurance companies, investment companies, and banks have a high degree of investment sophistication and make substantial investments in corporate stock. In the US, institutional investors comprise approximately 73% of the ownership in the largest 1,000 publicly held corporations (Aguilar, 2013).

An institutional investor’s reaction to the prospect of a publicly held portfolio firm going private might depend on the investor’s continued commitment to remain invested in the company. These investors are not homogenous, but exhibit diversity in terms of several investment criteria, including timeframe (Johnson & Greening, 1999; Ryan & Schneider, 2002; 2003). If the institutional investor is long-term oriented and wants to remain invested in the company, it may be concerned with the decision to go private. After the credit crisis, institutional investors would be more likely to oppose the deal, for fear that over-leveraging could bankrupt the firm. And, as fiduciaries of other people’s money, institutional investors are likely to take a more proactive approach to protecting their investments (David, Kochhar & Levitas, 1998). We therefore expect that immediately after the great recession, institutional owners will use their voice and engage in activism with their portfolio firms to discourage going private.

**Hypothesis 7a:** The percentage of ownership by institutional investors will be lower for firms who went private between 2008-2011 than for firms who went private prior to 2008.

While the active investor hypothesis posits that institutional investors actively monitor managerial actions (Sundaramurthy, Rhodes & Rechner, 2005), another view notes that institutional investors are myopic and focus solely on short-term returns (Bushee, 1998). In addition, state and municipal pension funds do not have managers with the background and experience to evaluate a firm’s long-term strategy (Wohlstetter, 1993). Further, compared to hedge funds, the beneficial owners of mutual funds in particular are able to liquidate their holdings at any point in time, creating pressure on fund managers...
toward more immediate rather than long-term returns (Schneider & Ryan, 2011). Given that shareholders who do not intend to remain owners of the newly privatized company often receive a generous premium when they tender their shares in the transaction, institutional investors with significant ownership concentration may be able to influence and even encourage the PTP transaction, to benefit from the premium. This may be more true after the great recession, when investors were anxious to divest themselves of holdings that they no longer viewed as profitable yet were suddenly offering a premium. Thus, we offer the following opposing hypothesis:

**Hypothesis 7b:** The percentage of ownership by institutional investors will be higher for firms who went private between 2008-2011 than for firms who went private before 2008.

**RESEARCH DESIGN AND METHOD**

We first identified U.S. public firms that filed with the Security and Exchange Commission (SEC) a Schedule 13E3/A, which indicates a firm’s decision to go private, between 2008 and 2011 using the Lexis/Nexis database. This produced 172 U.S. based companies who made one or more filings; a total of 95 of these companies had sufficient data available to test our hypotheses. We then selected a sample of 95 companies from a data base that had been previously created representing companies that had filed a Schedule 13E3/A during the period from 2003 to 2007. This older data base was created using random sampling. Companies in both data sets were comprised of a broad cross-section of industries as indicted by their SIC codes.

The dependent variable in the analysis was dichotomous, 1 if the filing occurred after 2007, otherwise 0. Data for all hypotheses were collected either using Compustat or from individual company proxy statements filed with the SEC. Company size was measured using both total assets and the number of employees in the year of the Schedule 13E3/A filing. Changes in market value and share prices were based on data from the year of the filing and the previous two years. Ownership concentration among managers, board size and composition, CEO compensation, and institutional ownership were based on the most recent proxy statements in the SEC Edgar database in the year prior to the Schedule 13E3/A filing. Several measures of control variables were entered into the models, to take into account the constructs of corporate performance and CEO power.

**RESULTS**

Before estimating the models, we performed independent sample t-tests to determine whether there were any significant differences in firms between the two time periods, and the results are reported in Table 1. Significant differences existed only with respect to the percentage of outside directors and the percentage of institutional ownership variables.

Table 1: Results of t-tests of Independent Samples
Due to the dichotomous dependent variable, binary logistic regression was used to test each of the seven hypotheses. Several models were estimated using different measures of performance and CEO power (control variables) and company size (one of our independent variables). The model using EBIT, CEO tenure, market value, and assets produced the best goodness of fit measures and are thus reported here.

Tables 2 and 3 provide the means, standard deviations, correlations, and regression results. Consistent with the t-test results, the coefficient of the percentage of outside directors was negative and significant at p<.05, thus supporting Hypothesis 6b, that the presence of inside directors would predict a PTP transaction more so during the later period. The coefficient of the percentage of institutional ownership was positive and significant at p<.05 thus supporting Hypothesis 7b. None of the other hypotheses were supported.

**DISCUSSION**

Until recently, a frequent goal of many private company owners and managers was to take their company public and obtain the increased status and rewards from the infusion of capital, albeit while likely having to reckon with the vagaries associated with being part of a public equity market. Now, some suggest that the balance between the agency costs and incremental benefits of going public is undergoing a fundamental change that will transfer ownership from diversified public shareholders to private ownership or quasi-public ownership (Gilson & Whitehead, 2008). However, our results suggest that as environmental conditions change, some differences emerge in the internal antecedents that affect the decision to go private, so that sweeping generalizations
regarding trends are not accurate. Specifically, our research recognizes that select antecedents, namely a greater proportion of internal directors and greater institutional investment, are significant to the going private decision post the recession compared to prior to it.

Table 2: Means, Standard Deviations and Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>MEAN</th>
<th>S.D.</th>
<th>EBIT</th>
<th>CEO Tenure</th>
<th>Market Value</th>
<th>Assets</th>
<th>Change in Price</th>
<th>Change Market</th>
</tr>
</thead>
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<tr>
<td>EBIT</td>
<td>31.05</td>
<td>182.83</td>
<td>1.000</td>
<td></td>
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<td>CEO Tenure</td>
<td>31.01</td>
<td>24.67</td>
<td>.060</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Market Value</td>
<td>6.94</td>
<td>36.50</td>
<td>-.120</td>
<td>-.006</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td>5.07</td>
<td>3.15</td>
<td>-.328</td>
<td>.016</td>
<td>-.270</td>
<td>1.000</td>
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</tr>
<tr>
<td>Change in Price</td>
<td>-3.08</td>
<td>39.51</td>
<td>-.124</td>
<td>.070</td>
<td>.125</td>
<td>.037</td>
<td>1.000</td>
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<tr>
<td>Change Market</td>
<td>.7322</td>
<td>49.54</td>
<td>.126</td>
<td>.005</td>
<td>-.075</td>
<td>.002</td>
<td>-.816</td>
<td>1.000</td>
</tr>
<tr>
<td>Owner Concentr</td>
<td>.6065</td>
<td>1.44</td>
<td>.031</td>
<td>-.039</td>
<td>-.007</td>
<td>.081</td>
<td>-.109</td>
<td>.074</td>
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<td>CEO Comp</td>
<td>5.30</td>
<td>1.31</td>
<td>.072</td>
<td>-.048</td>
<td>-.268</td>
<td>-.059</td>
<td>-.086</td>
<td>.056</td>
</tr>
<tr>
<td>No. of Directors</td>
<td>7.2</td>
<td>2.40</td>
<td>.055</td>
<td>-.007</td>
<td>-.047</td>
<td>-.348</td>
<td>.049</td>
<td>-.069</td>
</tr>
<tr>
<td>Percent Outsiders</td>
<td>.6898</td>
<td>.1494</td>
<td>-.060</td>
<td>.097</td>
<td>.104</td>
<td>-.146</td>
<td>.170</td>
<td>-.142</td>
</tr>
<tr>
<td>Percent Inst Inv</td>
<td>.2108</td>
<td>.5075</td>
<td>.163</td>
<td>.086</td>
<td>-.082</td>
<td>-.107</td>
<td>.151</td>
<td>-.184</td>
</tr>
</tbody>
</table>

Nevertheless, many of our hypotheses were not supported. We had hypothesized that with limited availability of external financing, firms, on average, would be larger with greater resources to fund the transaction post the recession. In fact, the means of size of both samples,
measured by assets and employees, were remarkably similar, suggesting no change in the size of firms opting to go private over the study period. One possible explanation is that smaller firms, although less flush with cash, may also have fewer minority investors to buy out, and, therefore, their needs for financing were less. Market concentration among executives was higher in the later period, although not significantly so, slightly suggesting that firms were more internally owned; if those owners intended to be investors after the transaction, the need for additional leverage would be reduced.

Table 3: Results of Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald*</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)*</th>
<th>95% C.I. for EXP(B)</th>
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<tr>
<td></td>
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<td></td>
<td></td>
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<td>Upper</td>
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<td>EBIT</td>
<td>.058</td>
<td>.053</td>
<td>1.197</td>
<td>1</td>
<td>.274</td>
<td>1.060</td>
<td>.955</td>
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<td>1.176</td>
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<td>CEO Tenure</td>
<td>.003</td>
<td>.020</td>
<td>.020</td>
<td>1</td>
<td>.887</td>
<td>1.003</td>
<td>.964</td>
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<td></td>
<td></td>
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<td>1.043</td>
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<tr>
<td>Market Value</td>
<td>.091</td>
<td>.130</td>
<td>.497</td>
<td>1</td>
<td>.481</td>
<td>1.096</td>
<td>.850</td>
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<td>1.413</td>
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<td>Assets</td>
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<td>.267</td>
<td>.008</td>
<td>1</td>
<td>.928</td>
<td>1.024</td>
<td>.607</td>
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<td>1.730</td>
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<td>Change in Price</td>
<td>-.011</td>
<td>.016</td>
<td>.509</td>
<td>1</td>
<td>.476</td>
<td>.989</td>
<td>.958</td>
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<td></td>
<td></td>
<td></td>
<td>1.020</td>
</tr>
<tr>
<td>Change Market Value</td>
<td>.000</td>
<td>.000</td>
<td>.173</td>
<td>1</td>
<td>.677</td>
<td>1.000</td>
<td>1.000</td>
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<td></td>
<td></td>
<td></td>
<td>1.000</td>
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<tr>
<td>Ownership Concentr.</td>
<td>.008</td>
<td>.265</td>
<td>.001</td>
<td>1</td>
<td>.975</td>
<td>1.008</td>
<td>.599</td>
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<td></td>
<td></td>
<td>1.696</td>
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<tr>
<td>CEO Compensation</td>
<td>-.176</td>
<td>.146</td>
<td>1.444</td>
<td>1</td>
<td>.229</td>
<td>.839</td>
<td>.629</td>
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<td>1.117</td>
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<tr>
<td>Number of Directors</td>
<td>-.039</td>
<td>.076</td>
<td>.261</td>
<td>1</td>
<td>.609</td>
<td>.962</td>
<td>.829</td>
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<td>1.116</td>
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<tr>
<td>Percent Outsiders</td>
<td>-.2215</td>
<td>1.177</td>
<td>3.543</td>
<td>1</td>
<td>.060</td>
<td>.109</td>
<td>.011</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>103.067</td>
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<tr>
<td>Constant</td>
<td>.156</td>
<td>.172</td>
<td>.820</td>
<td>1</td>
<td>.365</td>
<td>1.168</td>
<td></td>
</tr>
</tbody>
</table>

N=190
Chi Sq=29.241
R Sq=.143 (Cox and Snell); .190 (Nagelkerke)
-2LL=234.155
Hosmer and Lemeshow=.734
Percent Predicted=65.7
*Wald test statistic
**Odds ratio
It was also hypothesized that decreases in share price and market value of companies after the recession would have to be more severe to prompt the PTP decision. The mean of share price change was -$3.08 in the later period, which reflects the overall market downturn during those years. However neither the change in overall market value nor share price between the two periods was significant. Since the later period included 2010 and 2011, when markets began to recover, stock market price volatility may explain the lack of significance between the means.

CEO compensation was slightly less in the later period, contrary to previous studies observing a continued increase in overall CEO pay from 2003 to 2011 (Brown & Lee, 2011; Valenti, 2013). However, the difference between the means of the two study periods was not significant, suggesting that concerns about executive pay transparency was not a driving factor. It is also possible that, rather than to shield already-high compensation, firms in both time periods went private in order to compensate their CEO and other executives more lavishly, given the increased equity incentive compensation associated with going private (Millson & Ward, 2005) and the opacity regarding its reporting to the public (Journal of Applied Corporate Finance, 2007). Private equity ownership avoids issues regarding executive compensation including executive loans, and allows the PTP firm to offer executives attractive ownership positions in the company without the need for public disclosure (Economist, 2007; Treasury & Risk, 2007).

Our final hypotheses considered the effects of board structure and institutional ownership on the decision to go private. For both, we offered competing hypotheses. In the case of board size, no significant difference was found between the two study periods. Thus, while credit may have been more difficult to obtain, it did not appear that companies going private in the later period attempted to mitigate those difficulties by co-opting more members on their boards. Instead, companies may have been more selective in choosing a strategically select membership, such as directors with ties to financial institutions, law firms, and joint venture firms.

We did find, however, that insider representation on the board was positively associated with going private in the later period. This suggests that first-hand knowledge of the firm’s situation may have been critical in pushing the change to private ownership forward and gaining the approval of the board and shareholders. It also suggests that momentum towards a high percentage of external, non-related board members as a good governance practice (Fama & Jensen, 1983; Garcia-Meca & Sanchez-Ballesta, 2010) might mean fewer PTP transactions in the future. Similarly, PTP transactions post-recession were distinguished by a larger percentage of institutional ownership, which may suggest that a combined influence of powerful, concentrated owners and insiders was necessary to effectuate the deal during this period.
While only two of our hypotheses were confirmed, this study is to the best of our knowledge one of the first to examine PTP activity after the economic downturn. Further research is called for to examine other the internal conditions and events that can trigger a change to private status in light of ever-changing environmental dynamics. For example, a finer-grained examination of board membership might support a resource-based argument that firms that are able to co-opt external resources are in a better position to effectuate structural changes. Other governance structures such as executive incentives might also be predictive of a going private decision. While the future trend toward private ownership remains uncertain, the field provides a rich environment for researching the intersection of internal and external forces, organizational change, and decision-making.

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SUSTAINABILITY MEASUREMENTS:
AN EVALUATION OF P&G’S SUPPLIER COLLABORATION APPROACH
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Marcia Daley, Clark Atlanta University, MDaley@cau.edu
Lynne Patten, Clark Atlanta University, LPatten@cau.edu

ABSTRACT
The purpose of this paper is to evaluate Procter & Gamble’s (P&G) efforts to develop a supplier focused sustainability scorecard using the supplier collaboration approach. The process took 18 months and was focused on developing a sustainability scorecard that incorporated significant input and feedback from its core suppliers. This paper will use the collaboration theoretical framework to evaluate P&G’s supplier collaboration approach to developing the supplier sustainability scorecard. Much of the information for this case analysis was gleaned from one-on-one interviews with key executives from P&G who were involved in the development of the scorecard. This paper will also assess the organizational impact for suppliers and suggest future considerations.

INTRODUCTION
Over the past few years, there has been a noticeable increase in the interest of sustainability by many organizations. The driving force behind this increased interest are government regulations, global warming concerns, spikes in oil prices, and the perception that sustainability can provide firms with a competitive advantage (Hopkins & Blanco, 2010). Companies have begun to recognize that the supply chain plays an important role in the success of an organization’s sustainability efforts (Krause, Vachon, & Klassen, 2009) and managing these networks effectively has the potential to also provide buying organizations with a competitive advantage (Choi & Wu, 2009).

Procter & Gamble (P&G) has made great strides in the area of sustainability and been committed to sustainability for more than 50 years. With annual sales in the billions, P&G is a well-established leader in the consumer products industry. Much of this success can be attributed to product innovation, the brand management structure, creative marketing, and a strong human resources strategy. Since 2007, it has earned more than $40 billion in cumulative sales from innovative sustainable products (P&G Sustainability Report, 2011). In a push for global sustainability, P&G developed the Supplier Environmental Sustainability Scorecard. This is a comprehensive analytical tool, that according to Rick Hughes, P&G’s Chief Procurement
Officer, “…will help drive improvement across all industries” (Anonymous, 2010). Developing an analytical tool is not unique for P&G. However, the development of this scorecard used a highly collaborative approach, which was much more complex than its traditional approach of developing tools internally.

Much of the information on the development of the scorecard was gleaned from a 2 day visit at the company’s headquarters and 2 subsequent telephone interviews with key executives from P&G who were involved in the development of the scorecard. This paper will use the collaboration theoretical framework to provide an assessment of the model used by the executives at P&G. In this effort, the following questions will be addressed in this paper:

1. Was the process used by P&G aligned with the theoretical framework on supplier collaboration?

2. What benefits were derived from using a supplier collaborative model to develop the Supply Chain Environmental Sustainability Scorecard?

3. Did the benefits of the collaboration process outweigh the cost of time and use of organizational resources?

**EVALUATION OF P&G’S SUPPLIER COLLABORATION APPROACH**

P&G has made substantial efforts to infuse sustainability throughout its entire supply chain. Additionally, it has developed a sustainability department, invested billions of dollars in sustainable products, and is focused on continuing to increase its sustainability efforts. Part of this effort was the development of the Supply Chain Environmental Sustainability Scorecard. It was a major initiative that took more than 18 months, hundreds of man hours, and thousands of dollars to complete.

The evaluation that follows will focus on 3 key areas. This includes alignment to the supplier collaboration approach, benefits emanating from this process, and costs associated with the use of the collaboration approach. In addition, this evaluation will use a case study approach that relies on data gleaned from 1) more than 8 hours of one-on-one interviews with key executives at P&G, 2) company literature regarding sustainability, and 3) training webinars and materials from the sustainability development process. While there are many ways to evaluate the supplier collaboration efforts used to develop the scorecard, the authors selected the case based approach...
because it can provide a unique perspective on the intricacies of the process, which can help to bring out rich insights and provide a more in-depth analysis on what can be learned.

LIMITATIONS AND FUTURE RESEARCH
Further consideration would likely include some feedback from the suppliers that took part in the collaboration efforts. This would help to gain a more in-depth understanding of the effectiveness of the supplier collaboration approach that was used by P&G and would help to provide a better understanding of the supplier collaboration approach from the perspective of the supplier. Although the focus of the scorecard was to improve P&G’s sustainability outcomes, P&G’s suppliers may not share the same perspective regarding sustainability, the usefulness of the scorecard, or the need to invest incremental resources in order to participate in the development of the scorecard.

CONCLUSION
This paper provided an assessment of Procter & Gamble’s efforts to develop a supplier focused sustainability scorecard. Informed by the collaboration theoretical framework, the supplier collaboration approach used by P&G to develop the supplier sustainability scorecard and the organizational impact of this collaborative approach was evaluated. Overall, the evaluation suggests that the supplier collaboration approach was successful at helping the company to engage its suppliers and develop a comprehensive supplier sustainability scorecard. However, the process was quite lengthy and likely strained the resources of participating suppliers.

APPENDIX I
Supply Chain Environmental Sustainability Scorecard
### SC Environmental Sustainability Scorecard

<table>
<thead>
<tr>
<th>Core Measure</th>
<th>Unit of Measure</th>
<th>2012 (Current Year)</th>
<th>2011 (Past Year)</th>
<th>Comments</th>
</tr>
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<tr>
<td>(Electric) Energy Usage</td>
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<td></td>
<td></td>
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<tr>
<td>(Fuel) Energy Usage</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(Input / Withdrawal) Water Usage</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Output / Discharge) Water Usage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous Waste Disposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hazardous Waste Disposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kykto Greenhouse Gas Emissions Direct (Scope 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kykto Greenhouse Gas Emissions Indirect (Scope 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Volume/Output (in and Factor % to approximate Scope 1)</td>
<td></td>
<td>90</td>
<td>100</td>
<td>90</td>
</tr>
</tbody>
</table>

### P&S Sustainability Ideas & Incentives Supported

<table>
<thead>
<tr>
<th>N.A.</th>
<th>Description</th>
</tr>
</thead>
</table>

### Fines & Sanctions

| USD and # (absolute) | C | C |

### Environmental Mgt. System

| Yes, Partial or No | C | C |

### Data Protocol

| N.A. | Description |

### Optional Measure

| Renewable Energy | N.A. |
| Kykto Greenhouse Gas Emissions Indirect (Scope 2) | N.A. |
| Potential Waste Material Recycled, Reused, Recovered | N.A. |
| Transportation Fuel Efficiency (Transportation Suppliers Only) | N.A. |
| N.A. | 10,000 miles |

### Other

<table>
<thead>
<tr>
<th>N.A.</th>
</tr>
</thead>
</table>
APPENDIX II

Core Measures & Definitions

Below are the thirteen core measures and definitions on the P&G Supply Chain Environmental Sustainability Scorecard.

1. Electric Energy Usage - Total direct net energy usage from electricity that the operation, site, or enterprise needs to operate from all sources, regardless of use.

2. Fuel Energy Usage - Total direct net energy usage from fuels that the operation, site, or enterprise needs to operate from all sources, regardless of use.

3. Water Usage (Input/Withdrawal) - Quantity of water entering the site, from all sources, needed for operations.

4. Water Usage (Output/Discharge) - Quantity of water leaving the site, from all sources, needed for operations.

5. Hazardous Waste Disposal - Amount of hazardous waste land filled or incinerated without energy recovery.

6. Non-Hazardous Waste Disposal - Amount of all other waste land filled or incinerated without energy recovery. Includes waste data from solid waste.

7. Scope 1 - Scope 1 greenhouse gas emissions as defined by the WRI/WBCSD GHG Protocol.

8. Scope 2 - Scope 2 greenhouse gas emissions as defined by the WRI/WBCSD GHG Protocol.

9. Annual Volume/Output - The annual volume or output that produced the environmental measures in rows 10-17.

10. P&G Sustainability Ideas & Initiatives - Description (Attach additional detail as needed).

11. Fines & Sanctions - Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.
12. Environmental Mgt. System - Externally verified environmental management system to track compliance with permits, water quality, and to conduct environmental risk assessments?

13. Data Protocol - What protocols were followed in your company's sustainability data collection process?

APPENDIX III

Optional Measures & Definitions

Below are the six optional measures and definitions on the P&G Supply Chain Environmental Sustainability Scorecard.

1. Renewable Energy - Total energy used that comes from both biogenic fuels (wood, biomass) and modern alternative energy sources (solar, wind, water). Excludes fossil fuels and nuclear.

2. Kyoto Greenhouse Gas Emissions Indirect (Scope 3) - Scope 3 greenhouse gas emissions as defined by the "Corporate Value Chain (Scope 3) Accounting and Reporting Standard and "Product Life Cycle Accounting and Reporting Standard.

3. Potential Waste Material Recycled, Reused, Recovered - All potential waste material generated that is not disposed into landfills or incinerators without energy recovery.

4. Transportation Fuel Efficiency - Grams of CO₂ per ton-km of product transported from supplier site to customer site(s).

5. Industry Certification - As requested and defined by RO/Buyer (e.g., % of Tier 1, 2, & 3 classification for Forestry products).

6. Other - As requested and defined by RO/Buyer.
REFERENCES


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IS CEDAW EFFECTIVE IN PROMOTING HEALTH CARE EQUITY IN DEVELOPING COUNTRIES? EVIDENCE OF ITS POSITIVE INFLUENCE
Karen L. Middleton, Texas A&M University-Corpus Christi, Karen.Middleton@tamucc.edu
Deniz Gevrek, Texas A&M University-Corpus Christi, Deniz.Gevrek@tamucc.edu

ABSTRACT
We investigate the association between female health outcomes and ratification of the United Nations Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) using a panel data set of UN-member Low-Income Countries (LICs) and countries that are eligible for the Heavily-Indebted and Poor Countries (HIPC’s) initiative for years 1980-2011. Our preliminary empirical results suggest that CEDAW ratification is associated with lower rates of Total fertility and Infant mortality in the LICs and HIPCs. It is also associated with a reduced Maternal Mortality Rate in the LICs. The results are robust to controlling for predominant religion in a country, GDP growth rate, population growth rate, female to male sex ratio and region.

INTRODUCTION
The United Nations Millennium Development Goals (MDGs) are two years away from their completion deadline. Much of the MDG focus has been on the improvement of women’s and children’s lives, for example, universal primary education (MDG2), reductions in child mortality (MDG 4), and the improvement of maternal health (MDG 5) (United Nations (UN, 2012). Outcomes have been mixed, especially in the developing regions of the world (Atun, et al., 2013; Easterly, 2008; Fawole, et al., 2012; UN, 2012). Gendered social inequities in education, physical mobility, and codes of conduct are thought to have contributed to the equivocal findings (Friel & Marmot, 2011; Sen, Ostlin, & George, 2007). Some have suggested that the differences in outcomes can be attributed to differences in the adoption rates and implementation methods of international agreements (Boyle, 2000; Halliday & Osinsky, 2006; Hill, 2010; Hintjens, 2008). Marked differences in acceptance and execution are often found across nation states that deviate in the tightness or looseness of their cultures (Gelfand, et al., 2011; Toh & Leonardelli, 2012).

Loose cultures are thought to be more likely to uphold the global movement for gender equity and equality as typified by the adoption of laws fashioned by international institutions (e.g., the United Nations)(Hill, 2010; Shinohara, 2009). Loose cultures permit a broad range of behaviors and are more tolerant of those who deviate from the established norms. Any deviations from the accepted norms earn lighter punishment and fewer sanctions. Examples of regions that epitomize the loose culture perspective are highly ranked in the Global Gender Gap Index overtime (Hausmann, Tyson, & Zahidi, 2012). The overall index is composed of four principal measures that focus on women’s economic participation and opportunity, educational attainment, health and survival, and political empowerment. The North American region, a region characterized by countries embracing the loose culture perspective, has steadily reduced gender gaps in the four areas since 2006 when the first study was completed.
Tight cultures are more likely to take a country-specific approach to the adoption and implementation of international law (Hursch, 2012). Tight cultures often uphold rigid norms that are very clear, and deviance is heavily punished with severe sanctions (Gelfand, et al., 2011; Toh & Leonardi, 2012). These societies are exemplified by a rigid set of beliefs about the role of women in society, supported by the assumptions of male dominance and traditions of leadership as masculine (Charrad, 2011; Moghadam, 2002, 2004; Paruzzolo, Mehra, Kes, & Ashbaugh, 2010).

Entrenched patriarchal values and systems serve to restrict women’s human rights and their place in society. Regional examples include the Middle East, Asia and the Pacific, Latin America and the Caribbean, and sub-Saharan Africa as characterized by their lower Global Gender Gap Indices performances since 2006 (Hausmann, et al., 2012). This study seeks to understand the effects of socio-cultural determinants on women’s and girls’ health in emerging and developing nations. Our research question of interest is “Does the adoption and implementation of international agreements influence the outcomes of female healthcare in nation-states with divergent cultures?”

REVIEW OF THE LITERATURE

Women’s Life Expectancy at Birth

Average life expectancy has grown from 48 years in the early ‘50s to almost 68 years currently (UNFPA, 2011). Life expectancy is forecast to range from 66-97 years with a median age of 44 years across countries through 2100 (UN, 2004). The latest studies have shown that life expectancy numbers are rising for both women and men, although highly localized differences occur (OECD, 2011; Salomon, Wang, Freeman, Vos, Flaxman, Lopez, & Murry, 2012; UN, 2012). Women have gained slightly more years than men, and that divergence is expected to continue (Stevens, Mathers, & Beard, 2013). Countries with the lowest healthy life expectancies for both men and women are found in sub-Saharan Africa, with females in Afghanistan being an even lower exception.

Maternal and Infant Mortality

The gains in healthy life expectancy have principally been achieved through the reductions of child and adult mortality (Salomon, et al., 2012). The annual rate of decline in maternal mortality (MMR) from 1990 to 2008 was 1.3% (Hogan, et al., 2010). Unfortunately, only 23 of 181 countries who signed on to the MDGs are now on track to reach the goal of a 75% decrease by 2015 despite accelerated progress in such countries as Egypt, China, Ecuador, and Bolivia. The MMR in developing regions is actually five times higher than that of developed countries currently (UN, 2012).

Much of the blame can be traced to both structural factors (e.g., increased urbanization, the rise in incomes, and the aging population) (Yang, et al., 2013), and individual factors (e.g., high blood pressure, tobacco smoking including second-hand smoke, and household air pollution from solid fuels) (Lim, et al., 2012,). Incidences of intimate partner violence including rape and homicide have increased, escalating their encroachment on women’s and girls’ health and safety (Bott, Guedes, Goodwin, & Mendoza, 2012; Fulu, Jewkes, Roselli, & Garcia-Moreno, 2013; Stockl, Devries, Rotstein, Abrahams, Campbell, Watts, & Moreno, 2013). These findings suggest that it is more important than ever to support female health needs throughout the life cycle (Samb, 2010).
The most surprising news is that infant mortality rates (IMR) are actually increasing (UN, 2012). Recent studies show the deaths are largely attributed to neonatal complications (e.g., preterm birth problems, intrapartum-related complications, and sepsis or meningitis) and infectious diseases (Liu, et al., 2012). Fully 98% of newborn deaths occur in high-fertility regions to families who live in the depths of great poverty (Save the Children, 2013). Sub-Saharan Africa and parts of the Arabian peninsula, south Asia, and Latin America where some of the poorest countries are located are projected to have the most rapid population growth going into 2050 (Ezeh, Bongaarts, & Mberu, 2012; UNFPA, 2012a). Simply investing in the poorest of children under five years of age in low-income, high-mortality countries could help to reduce the IMR by an estimated 60% (United Nations (UNICEF), 2009?).

Some countries that have already successfully introduced universal health care systems resulting in improved outcomes for women and children, especially those in socio-economically disadvantaged groups (Atun, et al., 2013; Kongsri, Limwattananon, Sirilak, Prakongsai, & Tangecharoensathien, 2011; Langer & Catino, 2006). Others are still struggling to initiate effective and low-cost health interventions (Baird, Ma, & Ruger, 2011; Burki, 2013; Pronyk, et al., 2012, Murry, et al., 2012; Sambo, Kirigia, & Ki-Zerbo, 2011).

One action that has the potential to reduce MMR and IMR is access to safe and effective contraception. It is estimated that it would cost $8.1 billion dollars to meet the demand for the 222 million women and girls who have family planning needs (United Nations Population Fund (UNFPA), 2012a). The lack of safe, high quality family planning information is clearly connected to reduced abortion rates. Sadly, the decline in induced abortions rates has recently stalled, while the incidence of unsafe abortions has continued to rise (Sedgh, Singh, Shah, Ahman, Henshaw, & Bankole, 2012; Singh, Sedgh, & Hussain, 2010).

Recent studies have noted that acceptability of obstetric services for women and girls is often influenced by social custom (Dodoo & Frost, 2008; Fawole, 2012; Silal, Penn-Kekana, Harris, Birch, & McIntyre, 2012). Husbands, or other senior family members who often control the family’s finances, also make health decisions that only serve to confirm the low status of women and girls (Barcellos, Carvalho, & Lleras-Muney, 2012; Lester, Benfield, & Fathalla, 2010; UNFPA,2012a).

Children and Adolescent Health

The under five mortality rate is a key indicator of infant and child health (Guillot, Gerland, Pelletier, & Saabneh, 2012). The good news is that the under five child mortality rates fell by more than one third from 1990 to 2010, and that rate is accelerating in the developing nations of the world (UN, 2012). Diarrhoea and pneumonia are still the leading cause of childhood deaths, despite the fact that global rates are falling (Walker, et al., 2013). A higher percentage of the deaths occurred in children 2 years of age or younger (diarrhea at 72% and pneumonia at 81%). The highest instances of the diseases and childhood mortality occur in southeast Asia and Africa.

The number of adolescents is at an all-time high globally (UNFPA, 2012c). Still, research shows that the overall health of adolescents has shown less improvement than that of children under five (Sawyer, Afifi, Bearinger, Blakemore, Dick, Ezeh, & Patton, 2012). Much of the disparity may be linked to excess fertility, unwanted births, and unsafe abortion (Channon, Falkingham, & Matthews, 2010).

There are marked differences in the adolescent maternity rates in rural and urban
locations (UNFPA, 2012c). The birth rates for adolescents in rural areas are nearly twice that of urban areas in some cases. Early, forced marriages and unwanted pregnancies contribute to difficult living conditions for young women (Burki, 2013). There is a strong correlation between early marriage and high levels of coercive force in early sexual initiation (World Health Organization (WHO), 2005, 2011). Early marriage and the threat of maternal mortality rises with the higher number of pregnancies experienced because of the inability to fully recover between pregnancies. Other research suggests that adolescents do not attend prenatal care as often as is recommended throughout their pregnancy (Ryan, Casapia, Aguilar, Silva, Joseph, & Gyrkos, 2009). It is not surprising that there are reported sex differences in mortality, particularly in Southern Asia, Northern Africa/Western Asia and Western Africa, where female death rates are higher than male death rates (Dyson, 2012; Sawyer, 2012).

**METHODS**

**The Sample**

This study utilizes a panel data set we created for the 63 UN-member *Low-Income Countries* (LICs) and 34 countries that are eligible for *Heavily Indebted Poor Countries* (HIPCs) Initiative of the International Monetary Fund for a period of 32 years from 1980 to 2011. The LICs are those countries, in which output per capita, averaged over the previous five years, is lower than the corresponding time-varying low-income. The HIPCs are a subsample of the LICs (See Table 1 for the full list). The IMF and the World Bank launched the HIPC Initiative in 1996 to make sure that no poor country faces an unmanageable debt burden. Bluedorn et al., 2013 suggest that “To be considered for HIPC assistance, a country must be facing an unsustainable debt burden that cannot be addressed through traditional debt-relief mechanisms and must have established a track record of reform and sound policies through IMF- and World Bank-supported programs (p. 27).” Sixty-one countries out of 64 LICs ratified CEDAW between 1980 and 2011.

**TABLE 1**

<table>
<thead>
<tr>
<th>Afghanistan</th>
<th>Muslim</th>
<th>Ghana</th>
<th>Christ</th>
<th>Nigeria</th>
<th>Muslim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Muslim</td>
<td>Guinea</td>
<td>Muslim</td>
<td>Pakistan</td>
<td>Muslim</td>
</tr>
<tr>
<td>Angola</td>
<td>Christ</td>
<td>Haiti</td>
<td>Christ</td>
<td>Papua New Guinea</td>
<td>Christ</td>
</tr>
<tr>
<td>Armenia</td>
<td>Christ</td>
<td>Honduras</td>
<td>Christ</td>
<td>Paraguay</td>
<td>Christ</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Muslim</td>
<td>Indonesia</td>
<td>Muslim</td>
<td>Philippines</td>
<td>Christ</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Muslim</td>
<td>Iraq</td>
<td>Muslim</td>
<td>Rwanda</td>
<td>Christ</td>
</tr>
<tr>
<td>Benin</td>
<td>Christ</td>
<td>Kenya</td>
<td>Christ</td>
<td>Senegal</td>
<td>Muslim</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Christ</td>
<td>Kyrgyzstan</td>
<td>Muslim</td>
<td>Sierra Leone</td>
<td>Muslim</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>Christ</td>
<td>Laos</td>
<td>Buddh</td>
<td>Somalia</td>
<td>Muslim</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Muslim</td>
<td>Lesotho</td>
<td>Christ</td>
<td>Sri Lanka</td>
<td>Buddh</td>
</tr>
</tbody>
</table>
Table 1 also shows the predominant religion in each of these LICs and HIPCs. The religion data were obtained from the CIA’s World Fact book (https://www.cia.gov/library/publications/the-world-factbook/index.html) and the PEW Research Center (http://features.pewforum.org/grl/population-percentage.php). Predominant religion refers to the religion group with the highest percentage, which may or may not be the majority religion. For instance, Afghanistan Muslims make up 99% of the population, making them both the majority and the predominant religious group. On the other hand, Benin Christians, Muslims and Others make up 42%, 24% and 33% of the population respectively, making it impossible to label any religious group as the majority, but it is clear that Christians are the predominant group.

The data on female health outcomes and some of the other explanatory variables are extracted from the World Bank’s data website (http://data.worldbank.org/) and the UN web site (http://www.un.org/en/databases/). The six women’s and girls’ health outcomes we examined are: Total fertility rate (TFR), Adolescent fertility rate (AFR), Infant mortality rate (IMR), Female life expectancy at birth (FLEB), Maternal mortality ratio (MMR) and Neonatal mortality rate (NMR). In this study we examine the relationship between CEDAW ratification and health outcomes by including an indicator variable for CEDAW ratification that takes on a value of 1 for the years a country ratified CEDAW and thereafter. Our analysis controls for two dummies for religion that serves as a proxy for the influence of...
the nation-state (predominantly Muslim and predominantly Other, and the control group is the predominantly Christian countries), real GDP growth, nine region dummies, population growth, and female to male sex ratio in the set of explanatory variables.

The real GDP growth is included to account for the economic conditions, quality of life, standard of living and general health conditions in a country. Our empirical model especially controls for religion in order to see if predominant religion plays any role in the relationship between CEDAW and women’s and girls’ health outcomes. We include the female to male sex ratio and population growth in our regression as well. This study also controls for the region of a country by including nine region dummies, which are used to approximate time-invariant aspect of region-specific culture.

Summary Statistics

Tables 2 and 3 show the means and standard deviations of all variables for the LICs and HIPC.s, respectively, in five columns: Column one shows the summary statistics for the full sample of countries in each group; Column 2 shows the summary statistics for those two countries that have not ratified CEDAW; Column 3-5 show the summary statistics for those countries that ratified CEDAW for the entire period of 32 years, for those years after ratification of CEDAW, and for those years the countries did not ratify CEDAW, respectively.

### TABLE 2
Summary Statistics for Low-Income Countries (LICs)

<table>
<thead>
<tr>
<th></th>
<th>Full sample of LICs</th>
<th>Not ratified CEDAW</th>
<th>Ratified CEDAW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>All years</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>5.1 (1.6)</td>
<td>6.04 (0.68)</td>
<td>5.1 (1.6)</td>
</tr>
<tr>
<td>Adolescent fertility rate</td>
<td>92.3 (52.8)</td>
<td>70.9 (6.97)</td>
<td>92.9 (51.2)</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>78.4 (34.9)</td>
<td>88.9 (6.97)</td>
<td>78.0 (35.2)</td>
</tr>
<tr>
<td>Female life expectancy at birth</td>
<td>58.1 (10.1)</td>
<td>52.4 (5.28)</td>
<td>58.2 (10.2)</td>
</tr>
<tr>
<td>Maternal mortality ratio</td>
<td>502.8 (361)</td>
<td>919 (95.5)</td>
<td>489 (358)</td>
</tr>
<tr>
<td>Neonatal mortality rate</td>
<td>32.6 (12.1)</td>
<td>42.3 (7.98)</td>
<td>32.4 (12.9)</td>
</tr>
<tr>
<td>Ratified CEDAW (%)</td>
<td>96.8 (1.7)</td>
<td>-</td>
<td>100 (0)</td>
</tr>
<tr>
<td>Predominant religion (% of sample)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>42.8</td>
<td>100</td>
<td>40.1</td>
</tr>
<tr>
<td>Christian</td>
<td>46.0</td>
<td>0</td>
<td>47.5</td>
</tr>
</tbody>
</table>
### TABLE 3
Summary Statistics for Heavily Indebted Countries (HIPC"

<table>
<thead>
<tr>
<th>Region Dummies (%)</th>
<th>Northern Africa</th>
<th>Sub-Saharan Africa</th>
<th>Southern Africa</th>
<th>Caribbean &amp; Central America</th>
<th>South America</th>
<th>Middle East</th>
<th>Eastern Asia</th>
<th>Oceania</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth</td>
<td>3.4 (7.3)</td>
<td>3.7 (5.0)</td>
<td>3.4 (7.3)</td>
<td>4.0 (7.2)</td>
<td>1.5 (7.6)</td>
<td>3.4 (7.3)</td>
<td>4.0 (7.2)</td>
<td>1.5 (7.6)</td>
<td>3.4 (7.3)</td>
</tr>
<tr>
<td>Population growth</td>
<td>2.02 (1.3)</td>
<td>1.98 (1.3)</td>
<td>2.0 (1.4)</td>
<td>1.9 (1.4)</td>
<td>2.4 (1.0)</td>
<td>2.0 (1.4)</td>
<td>1.9 (1.4)</td>
<td>2.4 (1.0)</td>
<td>2.0 (1.4)</td>
</tr>
<tr>
<td>F/M Sex ratio</td>
<td>1.01 (.03)</td>
<td>1.00 (.02)</td>
<td>1.01 (.04)</td>
<td>1.01 (.03)</td>
<td>1.01 (.05)</td>
<td>1.01 (.04)</td>
<td>1.01 (.03)</td>
<td>1.01 (.05)</td>
<td>1.01 (.04)</td>
</tr>
</tbody>
</table>

Note: This table shows sample means and standard deviations (in parentheses).
Predominant religion (% of sample)

<table>
<thead>
<tr>
<th>Religion</th>
<th>100</th>
<th>34.4</th>
<th>29.7</th>
<th>48.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muslim</td>
<td>38.4</td>
<td>34.4</td>
<td>29.7</td>
<td>48.1</td>
</tr>
<tr>
<td>Christian</td>
<td>55.9</td>
<td>59.3</td>
<td>63.4</td>
<td>47.3</td>
</tr>
<tr>
<td>Other</td>
<td>5.8</td>
<td>6.2</td>
<td>6.8</td>
<td>4.6</td>
</tr>
</tbody>
</table>

GDP growth (3.3 (7.4) 3.7 (5.0) 3.2 (7.5) 3.6 (7.9) 1.8 (5.6))

Population growth (2.43 (1.3) 1.98 (1.3) 2.5 (1.3) 2.3 (1.4) 2.7 (0.7))

F/M Sex ratio (1.01 (.03) 1.00 (.02) 1.01 (.03) 1.01 (.02) 1.01 (.05))

Region Dummies (%)

<table>
<thead>
<tr>
<th>Region</th>
<th>100</th>
<th>34.4</th>
<th>29.7</th>
<th>48.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Africa</td>
<td>17.6</td>
<td>15.6</td>
<td>12.4</td>
<td>25.6</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>67.4</td>
<td>6.9</td>
<td>71.5</td>
<td>60.3</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>North America</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Caribbean &amp; Central</td>
<td>8.8</td>
<td>9.3</td>
<td>11.9</td>
<td>1.9</td>
</tr>
<tr>
<td>America</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South America</td>
<td>2.9</td>
<td>3.1</td>
<td>2.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Middle East</td>
<td>2.9</td>
<td>3.1</td>
<td>1.2</td>
<td>8.8</td>
</tr>
<tr>
<td>Eastern Asia</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Oceania</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Europe</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

N 1088 64 1024 764 260

Number of countries 34 2 32

Note: This table shows sample means and standard deviations (in parentheses).

Results for Low-Income Countries

Table 2 shows that the total fertility rate (TFR) is 5.1 children per woman and the TFR is much higher at 6 children in LICs that did not ratify the convention. When we focus on the sample of countries that ratified CEDAW, we find that the average TFR is 5.7 children per woman for the years before ratification and it is much lower at 4.8 children after ratification.

The second row of Table 2 shows that the adolescent fertility rate (AFR) is 92.3 for the entire sample of LICs. It is somewhat surprising to note that AFR is lower at 70.9 in countries that did not ratify CEDAW. The third row of Table 2 provides evidence that the infant mortality rate (IMR) is the lowest at 78 in those LICs that ratified CEDAW, while it is higher at 88.9 in the LICs that did not ratify CEDAW. The pre- and post-ratification IMR gap is at 19.7 children (IMR is 92.4 in the pre-ratification period and 72.7 in the post-ratification period).

The Female life expectancy at birth (FLEB) for LICs that did not ratify CEDAW is the lowest at 52.4 years of age. FLEB is much higher at 58.2 for LICs that ratified CEDAW. As expected, the FLEB increases after ratification for those countries that ratified CEDAW. The maternal mortality ratio (MMR) for the LICs that did not ratify CEDAW is the highest at 919 mothers dying. It is much lower...
at 489 in LICs that ratified CEDAW. Remarkably, the MMR has declined from 558 to 479 after ratification for those LICs that ratified CEDAW.

The neonatal mortality rate (NMR) is 32.4 neonates dying before reaching 28 days of age per 1,000 live births for those LICs that ratified the convention. Note that NMR is much higher at 42.3 in LICs that did not ratify CEDAW.

Table 2 points out that the 42.8% of the LICs are predominantly Muslim, 46% of the LICs are predominantly Christian and only 11.1% of those countries are categorized as predominantly other (The “Other” group contains all countries that are predominantly Buddhist, Hindu, Non-religious, and members of other religions).

The average annual GDP growth rate is 3.4% and annual population growth is at 2% in the LICs. The sex ratio is 1.01 for the LICs and it does not vary between the LICs that did and did not ratify CEDAW. The 42.8% of the LICs are in the sub-Saharan Africa, while only 12.6% of countries are each located in Northern Africa and Middle East. Seventy-nine percent of the LICs are located in Europe, while only 1.5% are located in Southern America, 4.7% in the Caribbean & Central America, 3.1% in South America, 9.5% in Eastern Asia, and 4.7% in Oceania.

Results for Heavily-Indebted and Poor Countries

Table 3 shows the summary statistics for the 34 countries that are eligible for the Heavily-Indebted and Poor Countries (HIPCs) initiative. The TFR is 5.9 and it is higher than the TFRs in the LICs sample. Column 1 points out that the TFR is 5.7 children per woman for the years after ratification. It is much higher at 6.6 children before ratification.

The AFR for the HIPCs sample in Table 3 is much higher for every single subgroup when compared to the results in Table 1 (except for the second column in each table, which shows the summary statistics for the two countries that did not ratify CEDAW). When we focus on the HIPCs in Table 3, the IMR almost doubles compared to the LICs sample. Continuing the comparisons of results, we find that the FLEB is much lower in the HIPCs, while MMR and NMR are much higher in the HIPCs than in LICs.

Table 3 shows that only 38.4% of the HIPCs are predominantly Muslim (compared to 42.8% of the LICs), 55.9% of the HIPCs are predominantly Christian (compared to 46% of the LICs) and only 5.8% of those countries are categorized as predominantly other.

The average annual GDP growth rate is 3.3% in the HIPCs and the annual population growth is higher than the LICs at 2.4% in the in the HIPCs. The sex ratio is 1.01 for the HIPCs. 67.4% of the HIPCs are in the sub-Saharan Africa regions, while only 17.6% of the countries are located in Northern Africa, 8.8% in Caribbean & Central America, 2.9% in Middle East, and 2.9% in South America.

Empirical Methodology and Results

This study utilizes the pooled OLS models to examine the association between CEDAW ratification and women’s and girls’ health for the Low-Income countries (LICs) and for countries that are eligible for the Heavily Indebted and Poor countries (HPIC) initiative.
We estimate the following model to study the relationship between CEDAW ratification and female health outcomes:

\[ Health Measure_{ct} = \alpha_1 + \beta_1 CEDAW_{ct} + Z'_{ct}\delta + u_{ct} \]  

(1)

where CEDAW_{ct} is the CEDAW ratification dummy that takes on a value of one if the convention was ratified in country c in year t=1980, 1981...2010, 2011. Health Measure_{ct} is one of six female health measures (TFR, AFR, IMR, NMR, MMR, and FLEB) in country c for year t. Z'_{ct} is a vector of explanatory variables that contains two dummies for religion (predominantly Muslim and predominantly Other as opposed to predominantly Christian), nine region dummies, population growth, sex ratios, and real GDP growth rate. \( u_{c,t} \) is the stochastic error term (the usual assumptions on the \( u_{c,t} \) apply: \( E(u_{c,t}) = 0 \) and \( \text{Var}(u_{c,t}) = \sigma \)).

Tables 4 and 5 present the pooled OLS estimates for six female health outcomes after we control for predominant religion, GDP growth, population growth, sex ratio and region in the LICs and HIPCs respectively. We calculated the robust standard errors by clustering them at the country level in all regressions, and the absolute values of \( t \)-statistics are provided in parentheses.

We find that the CEDAW ratification has similar relationship in both LICs and HIPCs for the TFR and IMR. The CEDAW ratification is associated with decline in the TFR for both groups (LICs = 0.78 children, and HIPCs =0.54 children). CEDAW ratification is also associated with lower IMRs (approximately 15.5 children in LICs and 15.1 children in HIPCs).

**TABLE 4**

CEDAW Ratification and Female Health Outcomes: Pooled OLS results for LICs

<table>
<thead>
<tr>
<th>Low-Income Countries (LICs)</th>
<th>Total Fertility Rate</th>
<th>Adolescent Fertility Rate</th>
<th>Infant Mortality Rate</th>
<th>Female Life Expectancy at Birth</th>
<th>Maternal Mortality Rate</th>
<th>Neonatal Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratified CEDAW</td>
<td>-0.78***</td>
<td>30.01*</td>
<td>-15.45***</td>
<td>1.532</td>
<td>-120.4**</td>
<td>-2.407</td>
</tr>
<tr>
<td></td>
<td>(6.22)</td>
<td>(1.82)</td>
<td>(3.71)</td>
<td>(1.45)</td>
<td>(2.23)</td>
<td>(1.03)</td>
</tr>
<tr>
<td>Muslim</td>
<td>-0.0027</td>
<td>6.892</td>
<td>13.60</td>
<td>-1.260</td>
<td>93.34</td>
<td>5.878**</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.69)</td>
<td>(1.67)</td>
<td>(0.79)</td>
<td>(1.07)</td>
<td>(2.29)</td>
</tr>
<tr>
<td>Other</td>
<td>-0.234</td>
<td>-20.70</td>
<td>-14.15***</td>
<td>4.476***</td>
<td>-183.5**</td>
<td>-5.782**</td>
</tr>
<tr>
<td></td>
<td>(1.17)</td>
<td>(1.08)</td>
<td>(2.88)</td>
<td>(3.12)</td>
<td>(2.24)</td>
<td>(2.01)</td>
</tr>
<tr>
<td>GDP growth</td>
<td>-0.0108*</td>
<td>-0.145</td>
<td>-0.483***</td>
<td>0.0784***</td>
<td>-1.481</td>
<td>-0.150***</td>
</tr>
<tr>
<td></td>
<td>(1.92)</td>
<td>(0.52)</td>
<td>(4.49)</td>
<td>(2.97)</td>
<td>(0.53)</td>
<td>(4.36)</td>
</tr>
<tr>
<td>Population growth</td>
<td>0.301***</td>
<td>12.06**</td>
<td>4.143**</td>
<td>-0.507</td>
<td>22.08</td>
<td>1.887***</td>
</tr>
<tr>
<td></td>
<td>(3.06)</td>
<td>(2.15)</td>
<td>(2.37)</td>
<td>(0.97)</td>
<td>(0.90)</td>
<td>(2.68)</td>
</tr>
<tr>
<td>F/M Sex ratio</td>
<td>-1.176</td>
<td>-130.4</td>
<td>183.6**</td>
<td>-28.15</td>
<td>1033.0</td>
<td>44.60</td>
</tr>
</tbody>
</table>
### TABLE 5
CEDAW ratification and Female Health Outcomes: Pooled OLS results for HICPs

<table>
<thead>
<tr>
<th>Region Dummies</th>
<th>(0.50)</th>
<th>(0.77)</th>
<th>(2.44)</th>
<th>(1.44)</th>
<th>(1.14)</th>
<th>(1.45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan</td>
<td>0.531</td>
<td>22.28</td>
<td>24.71**</td>
<td>-6.602**</td>
<td>178.4</td>
<td>8.941*</td>
</tr>
<tr>
<td>Africa</td>
<td>(1.23)</td>
<td>(0.92)</td>
<td>(2.39)</td>
<td>(2.27)</td>
<td>(1.39)</td>
<td>(1.98)</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>-0.847*</td>
<td>3.610</td>
<td>-6.367</td>
<td>-2.056</td>
<td>52.30</td>
<td>11.04***</td>
</tr>
<tr>
<td>Caribbean &amp; Central America</td>
<td>(1.87)</td>
<td>(0.15)</td>
<td>(0.62)</td>
<td>(0.68)</td>
<td>(0.42)</td>
<td>(2.67)</td>
</tr>
<tr>
<td>South America</td>
<td>-1.125**</td>
<td>-15.54</td>
<td>-12.58</td>
<td>8.742**</td>
<td>-264.8*</td>
<td>-3.989</td>
</tr>
<tr>
<td>Middle East</td>
<td>-0.776</td>
<td>-43.71*</td>
<td>-20.30</td>
<td>10.30***</td>
<td>-401.8***</td>
<td>-6.688</td>
</tr>
<tr>
<td>Eastern Asia</td>
<td>-1.091**</td>
<td>-10.73</td>
<td>11.45</td>
<td>1.459</td>
<td>73.83</td>
<td>4.400</td>
</tr>
<tr>
<td>Oceania</td>
<td>-1.245**</td>
<td>-36.62</td>
<td>-15.53</td>
<td>5.984</td>
<td>-215.7</td>
<td>-6.560</td>
</tr>
<tr>
<td>Europe</td>
<td>-2.65***</td>
<td>-29.84</td>
<td>-45.26***</td>
<td>17.07***</td>
<td>-511.7***</td>
<td>-13.56***</td>
</tr>
<tr>
<td>constant</td>
<td>6.501**</td>
<td>173.3</td>
<td>-113.9</td>
<td>86.00***</td>
<td>-474.0</td>
<td>-17.43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Heavily Indebted Countries (HICPs)</th>
<th>Total Fertility Rate</th>
<th>Adolescent Fertility Rate</th>
<th>Infant Mortality Rate</th>
<th>Female Life Expectancy at Birth</th>
<th>Maternal Mortality Ratio</th>
<th>Neonatal Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratified CEDAW</td>
<td>-0.54***</td>
<td>70.41***</td>
<td>-15.07***</td>
<td>0.746</td>
<td>-102.7</td>
<td>-0.953</td>
</tr>
<tr>
<td>(3.82)</td>
<td>(3.33)</td>
<td>(2.96)</td>
<td>(0.73)</td>
<td>(1.45)</td>
<td>(0.29)</td>
<td>(0.29)</td>
</tr>
<tr>
<td>Muslim</td>
<td>0.163</td>
<td>20.18</td>
<td>10.90</td>
<td>-2.112</td>
<td>115.9</td>
<td>6.816*</td>
</tr>
<tr>
<td>(0.69)</td>
<td>(1.38)</td>
<td>(1.06)</td>
<td>(1.17)</td>
<td>(0.97)</td>
<td>(2.00)</td>
<td>(2.00)</td>
</tr>
<tr>
<td>Other</td>
<td>-0.296*</td>
<td>-10.04</td>
<td>-13.95***</td>
<td>4.830***</td>
<td>-231.0***</td>
<td>-2.937</td>
</tr>
<tr>
<td>(1.89)</td>
<td>(0.39)</td>
<td>(3.44)</td>
<td>(4.84)</td>
<td>(3.54)</td>
<td>(1.19)</td>
<td>(1.19)</td>
</tr>
<tr>
<td>GDP growth</td>
<td>-0.02***</td>
<td>0.0911</td>
<td>-0.623***</td>
<td>0.0819</td>
<td>-2.907</td>
<td>-0.128*</td>
</tr>
<tr>
<td>(3.21)</td>
<td>(0.22)</td>
<td>(3.83)</td>
<td>(1.66)</td>
<td>(1.44)</td>
<td>(1.99)</td>
<td>(1.99)</td>
</tr>
<tr>
<td>Population growth</td>
<td>0.123*</td>
<td>3.930</td>
<td>-0.204</td>
<td>0.626*</td>
<td>-23.97</td>
<td>-0.0851</td>
</tr>
</tbody>
</table>

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Table 4 shows that CEDAW ratification is associated with a 120 decrease in the MMR for the LICs sample, while Table 5 shows that it does not have any statistically significant impact on the MMR for the HIPC sample. Tables 4 and 5 show that for LICs and HIPC samples, the CEDAW ratification does not have any statistically significant relationship with either FLEB or NMR. Unexpectedly, the CEDAW ratification is associated with higher AFRs in both samples (approximately 30 more children in LICs and 70 more children in HIPC). We conducted the estimation exercise of Tables 4 and 5 for the last 5 and 10 years of data to establish the robustness of our results and we find that results do not change when we limited the sample to the last 5 or 10 years of the data. (The results are not reported here to conserve space but are available upon request from the authors.)

We find that LICs and HIPC that are predominantly Muslim have similar health outcomes to the countries that are predominantly Christian except for the NMR. Tables 4 and 5 show that predominantly Muslim countries have higher NMR compared to predominantly Christian countries. Interestingly, we
find that countries that are neither predominantly Muslim nor predominantly Christian group have better IMR, FLEB, and MMR both in the LICs and HIPC samples compared to the predominantly Christian countries. Countries with populations that are neither predominantly Muslim nor Christian also have better NMR outcomes only in the LICs sample and better TFR outcomes only in the HIPCs sample.

The GDP growth is shown to be negatively associated with TFR, IMR, and NMR for both LICs and HIPCs and the GDP growth is positively associated with FLEB, excluding the HIPCs sample. Higher population growth in a country is associated with higher TFR, AFR, IMR, and NMR for LICs and it is associated in HIPCs with higher TFR and FLEB only.

Female to male sex ratio is positively related to IMR in the LICs and HIPCs samples. The ratio is positively related to MMR and NMR, and it is negatively related to the FLEB only in the HIPCs sample.

Our findings suggest that the region of the LICs and HIPCs matters to the female health outcomes. In the LICs sample, our results provide evidence that the countries in Southern Africa, South America, Eastern Asia, Oceania, and Europe have statistically significantly lower TFRs than the reference region (Northern Africa). We also find that countries in Middle East have lower AFR, and countries in Europe have lower IMR. Countries in Caribbean & Central America, South America, Middle East, and Europe have higher FLEB. Countries in South America, Middle East, and Europe have lower MMR, and, finally, countries in Europe have lower NMR.

Table 5 indicates that in the HIPCs sample, countries in Caribbean & Central America have better female health outcomes (except for the AFR) than the countries in Northern Africa. South American countries in the HIPCs sample have better TFR, FLEB, and MMR outcomes than the reference region. On the other hand, HIPCs in Middle East have better TFR and IMR outcomes while they have worse FLEB than the reference region.

One should be extremely cautious about interpreting our findings. Our preliminary results do not imply causality and our use of terms like “relationship” or “affect” should be taken only as a statistically significant correlation. The CEDAW ratification is not a random event that happens exogenously. UN-member LICs and HIPCs purposely choose whether or not to ratify CEDAW. The OLS estimates presented in Tables 4 and 5 are likely to be biased if LICs and HIPCs have some unique characteristics that do not change from year to year and are not observed by the econometrician (unobserved country-specific heterogeneity) and if those country-fixed effects are correlated with the CEDAW ratification. The natural next step is to utilize a panel fixed-effects model to account for unobserved country-specific heterogeneity. However, once the panel fixed-effects model is used, the coefficients on the time-invariant variables such as predominant religion dummies and region dummies cannot be estimated.

**Discussion and Directions for Future Research**

We explored the relationship between the CEDAW ratification and female health outcomes using longitudinal data for 63 Low-Income Countries (LICs), and 34 Heavily Indebted and Poor Countries (HIPCs) for 1980-2011. We studied Total fertility rate (TFR), Adolescent fertility rate (AFR), Infant mortality rate (IMR), Female life expectancy at birth (FLEB), Maternal mortality ratio (MMR), and Neonatal mortality rate (NMR) in the LICs and HIPCs.
We find that CEDAW ratification is associated with lower TFR and IMR in both LICs and HIPCs, while it is associated with lower MMR only in the LICs. Our results indicate that LICs and HIPCs that are predominantly Muslim have similar health outcomes as the countries that are predominantly Christian except for the NMR. Interestingly, countries that are neither predominantly Muslim nor predominantly Other group) have better women’s health outcomes both in the LICs and HIPCs samples compared to the predominantly Christian countries. Our results are robust to controlling for important explanatory variables such as region, predominant religion, GDP growth, sex ratio, and population growth.

Future work may utilize a panel fixed-effects model to account for potential country-specific heterogeneity and may address the causality v. correlation problem we have faced in this study. Studying some other aspects of CEDAW ratification, such as the number of reports submitted after ratification and years passed after countries ratify CEDAW could help us understand the effectiveness of CEDAW and help international policymakers to generate global policies that advance women’s overall wellbeing.

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RELATING EMPLOYEES’ SELF-REFERENTIAL ORGANIZATIONAL TIES TO JUSTICE AND TRUST
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ABSTRACT

Although it is well-known that strong relational ties to the organization provide beneficial outcomes for employers, researchers often study psychological ownership, perceived insider status, and organizational identification in isolation ignoring the degree to which each explains unique variance in outcome variables. Specifically, their combined relationship with perceptions of justice and trust is not understood. Hypotheses were tested using data collected from non-profit workers over two time periods. Results indicate that the relationships of psychological ownership and perceived insider status with trust are mediated by perceptions of procedural and interpersonal justice. However, organizational identification, distributive and informational justice have limited impact.

INTRODUCTION

Employees’ relationships with their organizations are of interest to researchers and managers because stronger ties to the organization are thought to engender positive attitudes, intentions and behaviors (Coyle-Shapiro & Shore, 2007). Self-referential relational concepts such as psychological ownership (PO), perceived insider status (PIS) and organizational identification (OID) are of particular importance because they represent employees’ personal connectedness. PO, I own, represents an employee-organization relationship based on feelings of possession (Mayhew, Ashkanasy, Bramble & Gardner, 2007; Pierce, Kostova, & Dirks, 2001). PIS, I belong, represents an employee-organization relationship based on inclusion; employees’ perceive they are preferred members of the organization (Stamper & Masterson, 2002). The third employee-organization relationship, OID or I am, suggests that employees define themselves in terms of the organization and share in its successes and failures (Ashforth & Mael, 1989; Ashforth, Harrison & Corley, 2008).

Despite calls for further exploration into outcomes associated with these relational ties (Masterson & Stamper, 2003), the impact of PO, PIS, and OID are often evaluated in sets of one or two, rather than holistically (e.g., OID and PO, Mayhew et al., 2007; PIS and OID, Stamper & Masterson 2002). Little progress has been made to assess their collective impact or to determine
their unique contributions to outcome variables. In particular, it remains unclear how PO, PIS, and OID relate to perceptions of justice and trust.

Taking a step towards closing these gaps, we draw on the group-value model of justice (Lind & Tyler, 1988; Tyler, 1989; Tyler, 1994) and fairness heuristic theory (Lind, 2001; van den Bos, 2001) to develop and test a theoretical model linking PO, PIS, and OID to perceptions of justice and trust (see Figure 1). Data were collected from non-profit employees over two time periods and hypotheses were tested using structural equation modeling.
FIGURE 1

Final Model with Results
Standardized path coefficients shown. ** p < .01 * p < .05
Residuals of Justice Measures Allowed to Covary
THEORY AND HYPOTHESES DEVELOPMENT

The central premise of our research is that relational ties such as PO, PIS, and OID likely have a positive relationship with trust in the organization and that this relationship is mediated by perceptions of justice. We start by defining PO, PIS, and OID with the intention of highlighting the theoretical similarities and distinctions. Then, after a brief review of justice-related research, we draw on the dynamics described in the group-value model of justice (Lind & Tyler, 1988; Tyler, 1989) to explain why these relational ties likely predict perceptions of justice. We further argue that PO, PIS, and OID are likely to have an impact on perceptions of trust. Finally, drawing on fairness heuristic theory (Lind, 2001; van den Bos, 2001), we hypothesize that the relational tie and trust relationship is mediated by justice perceptions.

The Relational Concepts

Psychological Ownership PO (I own.) is a feeling of possession by an individual towards a target, regardless of any legal or formal claims (Mayhew et al., 2007). Those who develop this sense of attachment cognitively assert that the organization is “MY organization” (Vandewalle, Van Dyne & Kostova, 1995). These possessive feelings can develop over a variety of material (e.g., office, office chair) or immaterial (e.g., ideas and feelings) objects, including the organization itself (Van Dyne & Pierce, 2004).

A sense of organizational ownership can help satisfy employees’ needs for efficacy, self-identity and sense of place (Pierce et al., 2001) as well as strengthen the psychological connection with the organization’s culture and goals (Mayhew et al., 2007). Those with a strong sense of ownership may hold higher expectations of their rights and responsibilities, including the right to voice their opinion, the right to insider information as well as the responsibility to positively contribute to the organization’s functioning (Pierce et al., 2001).

Perceived Insider Status PIS (I belong.) represents the extent to which individuals perceive themselves to be organizational insiders (Stamper & Masterson, 2002). This perception may be felt by anyone working within or for the organization (Lapalme, Stamper, Simard, & Tremblay, 2009; Stamper & Masterson, 2002). PIS develops when individuals receive inclusive treatment from the organization or its members such as: formal and informal socialization, training and development initiatives, as well as work assignments and performance review practices (Armstrong-Stassen & Schlosser, 2011; Masterson & Stamper, 2003).

Insider status fulfills a need for affiliation, creating a protective boundary inside the organization (Lapalme et al., 2009). This boundary provides a sense of community, allowing employees to feel comfortable in revealing needs and feelings with others (Armstrong-Stassen & Schlosser, 2011).
Organizational Identification OID (I am.), stems from a perception of oneness with the organization. Employees who possess a high identification with their organization believe themselves to be psychologically connected to the organization’s successes and failures (Ashforth & Mael, 1989; Mael & Ashforth, 1992). The development of identification is encouraged by distinctive organizational values and practices (Oakes & Turner, 1986), exclusivity of in-group membership (Allen, Wilder, & Atkinson, 1983), and shared goals and values (Ashforth & Mael, 1989).

OID satisfies needs for self-worth and self-definition. That is, when employees perceive OID, they believe the organization validates individual values and goals (Abrams & Hogg, 1988) and represents an extension of who they are (Tajfel & Turner, 1985; Hogg, 2001).

We now link these relational ties to perceptions of justice and trust.

**Dimensions of Organizational Justice**

Organizational justice is a widely researched construct in organizational behavior (Colquitt, Conlon, Wesson, Porter & Ng, 2001) consisting of four dimensions: distributive justice, procedural justice, interpersonal justice, and informational justice.

Distributive justice concerns the “fairness of outcomes in a given transaction,” (Byrne & Cropanzano, 2001, p.4). It has three widely accepted rules for assessing fairness: equality, whereby outcomes are evenly distributed; equity, under which outcomes are distributed based on effort (Deutsch, 1975; Leventhal, 1980); and need, whereby outcomes are distributed based on individuals’ relative needs (Greenberg & Cohen, 1982; Leventhal, 1976). When distributive justice is perceived, employees are more likely to bond with the organization, increasing affective commitment (Masterson, 2001). Moreover, when organizational relationships are strong, certain behavior, e.g. withholding citizenship behavior, which is prompted by perceptions of distributive injustice, may be suppressed (Moorman, 1991).

Procedural justice is associated with the manner in which organizational processes and procedures are fairly applied across the organization (Leventhal, 1980). It is assessed according to the amount of voice an individual has during the decision making process and according to how closely the organization adheres to practices such as accuracy, bias suppression, and consistency (Leventhal, 1980; Leventhal, Karuza & Fry, 1980). The positive benefits of procedural justice are well documented including job satisfaction, organizational commitment, trust in the organization, increased citizenship behavior and enhanced job performance (Colquitt et al., 2001).
Interpersonal justice encompasses the way in which an individual has been treated by the organization and its representatives (Bies & Moag, 1986). It can be directly tied with the employee-organization relationship: When managers feel positively towards employees, they are more likely to treat them with respect and courtesy. When treated with dignity and respect, employees are more likely to perceive greater degrees of interpersonal justice (Armstrong-Stassen & Schlosser, 2011; Scott, Colquitt & Zapata-Phelen, 2007).

Informational justice concerns the sincerity and truthfulness of the information conveyed during the decision making procedure (Bies & Moag, 1986). Providing honest and sincere information about an organization’s activities (e.g. layoffs) increases an individual’s positive assessment of their relationship with the organization (c.f., Brockner, 1992; Skarlicki, Barclay & Pugh, 2008).

**Predicting Justice: Relational Ties and the Group-Value Model**
The group-value model of justice (Lind & Tyler, 1988; Tyler, 1989), also known as the relational model (Colquitt & Rodell, 2011; Tyler, 1994), proposes that individuals who perceive themselves as having high status within trustworthy groups are more likely to perceive fair treatment for self (Colquitt & Rodell, 2011). The benefits are two-fold: (1) group status allows individuals to assume they can claim the rights afforded to group members while (2) the perception of justice allows individuals to assume that those rights will be respected.

Masterson and Stamper (2003) suggest that PO, PIS, and OID collectively represent a sense of belonging that can lead employees’ to claim greater organizational rights and to accept greater organizational responsibilities. As such, organizational status, a perception associated with the group value model, is reflected within the relational ties: Status based on the feelings of control and efficacy associated with ownership is manifest in PO. Status associated with perceiving a safe space and a sense of community is manifest in PIS. Status assumed through a psychological connectedness to the organization’s successes and failures is evident in OID. Therefore, we argue that individuals possessing higher levels of PO, PIS, and OID are more likely to perceive themselves as having organizational rights and are more likely to believe that their organizations’ and their organizations’ representatives will respect those rights.

Thus, we argue that as strong relational ties reflect employees’ perceived high status and because high status perceptions can lead individuals to believe they are being treated fairly, the relational ties (PO, PIS, OID) will have a positive relationship with perceptions of justice at a later date:

\[ H1: \text{Psychological ownership at time 1 will have a positive relationship with perceptions of justice (distributive, procedural, interpersonal, and informational) at time 2.} \]
H2: Perceived insider status at time 1 will have a positive relationship with perceptions of justice (distributive, procedural, interpersonal, and informational) at time 2.

H3: Organizational identification at time 1 will have a positive relationship with perceptions of justice (distributive, procedural, interpersonal, and informational) at time 2.

Beyond reflecting employees’ perceived status, PO, PIS, and OID also likely encourage employees to make assumptions about the trustworthiness of their organizations. People tend to prefer and rely on information consistent with already established views, and they tend to discount or ignore information that is not (Fiske & Taylor, 1984; Korman, 1976). This preference is amplified when individuals’ self-concepts are involved because people are motivated to maintain a positive and consistent self-image (Festinger, 1957). Given that PO, PIS, and OID evaluate the employee-organization relationship as an extension of self, we suggest that employees with positive evaluations of these ties are likely to perceive greater degrees of justice as well as possess a greater degree of trust in their organization.

Predicting Trust: Relational Ties and Fairness Heuristic Theory

Mayer, Davis, and Schoorman (1995) define trust as the willingness of one party (e.g., an employee) to be vulnerable to the actions of another party (e.g. employer, or organization). The willingness to be vulnerable is based on an expectation that the actions of the trustee will be performed similarly to how the trustor would perform them (Rousseau, Sitkin, Burt, & Camerer, 1998). In an organization, trust is a much desired outcome of the employee-organization relationship as researchers suggest that its presence is a “foundational principle” for business success (Block, 1993; Erturk, 2010).

The influence of justice perceptions on trust is also well-documented. For example, Dirks and Ferrin (2001) suggest that a key antecedent to increasing trust in leadership is to ensure employees of fairness in the organization’s procedures (e.g., procedural justice), outcomes (distributive justice), and interactional processes (interpersonal and informational justice). In empirical testing, procedural justice was positively related to the perception of trust in the organization, job satisfaction and increased citizenship behaviors (Colquitt et al., 2001; Korsgaard, Schweiger & Sapienza, 1995). Additionally, a perception of differential levels of informational justice provided during a layoff situation enhanced assessments of the integrity of the organization’s representative (Skarlicki et al., 2008). Integrity is a key component of trust (Dirks & Ferrin, 2001).
What has not been established is the role that relational ties play in the justice-trust relationship. Fairness heuristic theory (Lind, 2001; van den Bos, 2001) suggests that the connection between relational ties and trust is likely mediated by justice perceptions. According to this theory, justice perceptions are translated into heuristics that individuals rely on when deciding whether or not to trust another party (Roberson & Colquitt, 2005). Specifically, perceptions of justice, formed during early encounters with organizational members, weigh heavily in fairness heuristic formation (Jones & Martens, 2009). These heuristics allow employees to automatically assume a certain degree of trust in other individuals, and alleviate the need to continually and consciously calculate trust levels (Lind, 2001; van den Bos, 2001). That is, once employees have formed a perception of justice in a relationship, they are also likely to assume a certain degree of trust (see Colquitt & Rodell, 2011). As heuristics are outside of conscious awareness (Bargh & Chartrand, 1999), the link between justice and trust is very direct, automatic, and influences outcomes quickly. Thus, we expect that enhanced justice perceptions, developed because of relational ties with the organization, to be the most proximal predictor of trust. However, based on the fairness heuristic theory, we expect the effect of relational ties on trust operates through justice perceptions.

\[ H4: \text{Perceptions of justice (distributive, procedural, interpersonal, and informational) will mediate the effects of psychological ownership at time 1 on trust in the organization at time 2.} \]

\[ H5: \text{Perceptions of justice (distributive, procedural, interpersonal, and informational) will mediate the effects of perceived insider status at time 1 on trust in the organization at time 2.} \]

\[ H6: \text{Perceptions of justice (distributive, procedural, interpersonal, and informational) will mediate the effects of organizational identification at time 1 on trust in the organization at time 2.} \]

**METHOD**

**Participants and Procedure**

Participants were recruited and data were collected online, via a two-step process. First, Cint (www.cint.com) was used to recruit respondents. Cint provides access to over 5 million individuals belonging to a variety of research-quality survey panels. Panel members are rewarded with modest incentives for completing surveys (e.g., “points” redeemed for sweepstakes entry). Second, our online survey was hosted on Zoomerang.
Separating respondent recruiting and web-hosting functions allowed us to keep respondents completely anonymous; only Cint had access to respondents’ contact information and only the authors had access to individual responses.

Research panel members were prescreened by Cint to be full-time non-profit employees. These panelists received invitations to participate in an academic study examining work attitudes. The invitation contained a link to a web page explaining the study’s purpose and issues related to informed consent. By clicking a “SUBMIT” button on the web page, potential respondents acknowledged understanding this disclosure and agreed to participate in our study. Only individuals who clicked the “SUBMIT” button were granted access to the Time 1 survey.

The non-profit employee sample offers a unique opportunity to study relational ties for several reasons. First, research in the non-profit sector suggests these organizations are typically less hierarchical (Barnabé & Burns, 1994), thus holding perceived insider status may be particularly salient. Second, it has been found that individuals who work for non-profits are typically focused on serving the public and less focused on large extrinsic rewards (e.g., salary or bonuses) (Wittmer, 1991). Therefore, identification with the organization may be stronger due to a fit with the ethos of the organization. Finally, it is suggested that nonprofit managers hold a stronger commitment to the philosophy of their organization as well as increased social behaviors such as forgiveness and helpfulness than for-profit counterparts (Handy & Katz, 1998). An enhanced commitment to organizational philosophy may strengthen perceptions of psychological ownership among non-profit employees.

A total of 504 non-profit workers opened and completed the time 1 survey. After a three month interval, respondents who had completed time 1 surveys were sent an invitation to participate in time 2. 196 individuals completed the time 2 survey for a completion rate of 38.88%. They were matched to their time 1 responses through a combination of respondent specific codes embedded in the invitation emails and idiosyncratic identification numbers provided by respondents. Average age of respondents was 42.70 years with a range from 19 to 67. Average organizational tenure was 9.00 years with a range from 1 to 43, and respondents were 71.93% female.

Measures

All measures were self-report and used a 7-point Likert-type scale.

Time 1 measures included Psychological ownership, Perceived insider status and organizational identification. Psychological ownership was measured using Van Dyne and Pierce’s (2004) scale. Respondents indicated their level of agreement with statements such as “I sense that this is
MY company.” and “Most of the people that work for this organization feel as though they own the company.” Cronbach’s alpha = .94

Perceived insider status was measured using Stamper and Masterson’s (2002) measure. Respondents indicated their level of agreement with statements such as “This work organization makes me believe that I am included in it” and “I feel I am an insider in this work organization.” Cronbach’s alpha = .94

Organizational identification was measured using Mael and Ashforth’s (1992) scale. Respondents indicated their level of agreement with statements such as “When someone criticizes my organization, it feels like a personal insult” and “When I talk about my organization, I usually say ‘we’ instead of ‘they’.” Cronbach’s alpha = .90

Time 2 measures included the four dimensions of organizational justice and trust. Distributive justice was measured using Colquitt’s (2001) 4-item measure. Respondents indicated the extent to which various outcomes were provided. Example items included “To what extent have your outcomes that are controlled by the organization reflected the effort you have put into your work” and “To what extent have your outcomes that are controlled by the organization been appropriate for the work you have completed?” Cronbach’s alpha = .96

Procedural justice was measured using Colquitt’s (2001) 6-item measure. Respondents indicated the extent to which various aspects of procedural justice were provided. Example items included “With respect to deciding important outcomes, to what extent have your organization’s procedures been applied consistently?” and “To what extent have you had influence over the outcomes arrived at by your organization’s procedures?” Cronbach’s alpha = .94

Interpersonal justice was measured using four items from Colquitt’s (2001) interactional justice scale. Respondents indicated the extent to which various aspects of interpersonal justice were provided. Example items included “With respect to carrying out procedures, to what extent has your organization treated you in a polite manner?” and “With respect to carrying out procedures, to what extent has your organization treated you with dignity?” Cronbach’s alpha = .95

Informational justice was measured using five items from Colquitt’s (2001) interactional justice scale. Respondents indicated the extent to which various aspects of informational justice were provided. Example items included “With respect to carrying out procedures, to what extent has your organization communicated details in a timely manner?” and “With respect to carrying out procedures, to what extent has your organization explained the procedures thoroughly?” Cronbach’s alpha = .95
Trust in the organization was measured using Robinson’s (1996) 5-item scale. Respondents indicated their level of agreement with statements on a 7-point Likert-type scale. Sample items included “I can expect this organization to treat me in a consistent and predictable fashion” and “In general, I believe this organization’s motives and intentions are good.” Cronbach’s alpha = .92
ANALYSES AND RESULTS

Means, standard deviations, and correlations of our measures are reported in Table 1. We used AMOS 19 computer program to analyze our data using structural equation modeling. To test our hypotheses, we followed Anderson and Gerbing’s (1988) two-step approach whereby the measurement model is first examined using confirmatory factor analysis after which path analysis is performed on the hypothesized model. We evaluated both our measurement and our path model using a combination of statistics, including: chi-square goodness of fit, root-mean-square error of approximation (RMSEA; Steiger, 1990) using a cut-off value < .08, comparative fit index (CFI; Bentler, 1990) using a cut-off value of > .90, and standardized root-mean-square residual (SRMSR, Hu & Bentler, 1999) using a cut-off value of < .10.

TABLE 1

Means, standard deviations, and intercorrelations

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
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<tr>
<td>1. Psychological Ownership</td>
<td>4.19</td>
<td>1.61</td>
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<td>2. Perceived Insider Status</td>
<td>5.25</td>
<td>1.44</td>
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<tr>
<td>3. Organizational Identification</td>
<td>5.11</td>
<td>1.31</td>
<td>.68**</td>
<td>.65**</td>
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<tr>
<td>4. Distributive Justice</td>
<td>4.53</td>
<td>1.54</td>
<td>.55**</td>
<td>.51**</td>
<td>.43**</td>
<td></td>
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<td>Std Dev</td>
<td>F1</td>
<td>F2</td>
<td>F3</td>
<td>F4</td>
<td>Reliability</td>
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<td>5. Procedural Justice</td>
<td>4.43</td>
<td>1.57</td>
<td>.64**</td>
<td>.65**</td>
<td>.53**</td>
<td>.75**</td>
<td>(.94)</td>
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<td>6. Interpersonal Justice</td>
<td>5.31</td>
<td>1.57</td>
<td>.50**</td>
<td>.59**</td>
<td>.40**</td>
<td>.58**</td>
<td>.75** (.95)</td>
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<td>7. Informational Justice</td>
<td>4.71</td>
<td>1.64</td>
<td>.64**</td>
<td>.64**</td>
<td>.49**</td>
<td>.67**</td>
<td>.85** (.95)</td>
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<tr>
<td>8. Trust</td>
<td>5.10</td>
<td>1.53</td>
<td>.62**</td>
<td>.62**</td>
<td>.48**</td>
<td>.55**</td>
<td>.77** (.74**)</td>
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Notes. N = 196. Reliabilities for individual measures are reported on the diagonal. All measures use seven point Likert-type scales: 1 = strongly disagree to 7 = strongly agree. * p < .05.;** p < .01
In the measurement model analysis, error terms for within-measure reverse coded items were allowed to covary a priori, and confirmatory factor analysis was performed on time 1 and time 2 variables separately. For time 1, all items loaded on the intended factor, however the model did not quite meet our criteria for good fit, $\chi^2 (146, N = 196) = 508.776, p < .001$, RMSEA = .113, CFI = .902, and SRMR = .049. In our results, four items containing possessive pronouns (e.g., items including the words “OUR” or “MY”) appeared to have correlated error terms. We reran the CFA allowing the error terms of these four items to covary. This adjusted model fit the data well, $\chi^2 (140, N = 196) = 236.264, p < .001$, RMSEA = .059, CFI = .974, and SRMR = .046, and a chi-square difference test confirmed better fit, $\Delta \chi^2 (6, N = 196) = 272.512, p < .001$.

For the time 2 CFA, all items loaded on the intended factor. However, this model also did not meet our criteria for good fit, $\chi^2 (265, N = 196) = 794.880, p < .001$, RMSEA = .101, CFI = .915, and SRMR = .049. In our results, the three items in the procedural justice scale relating outcomes to procedures appeared to have correlated error terms. We reran the CFA allowing these error terms to covary and the adjusted model fit the data well, $\chi^2 (262, N = 196) = 601.2, p < .001$, RMSEA = .081, CFI = .946, and SRMR = .051. Again, a chi-square difference test confirmed better fit, $\Delta \chi^2 (3, N = 196) = 193.68, p < .001$.

The second step of Anderson and Gerbing’s (1988) procedure involves testing the hypothesized path model using structural equation modeling and testing for indirect (e.g., mediated) effects using the bootstrapping procedures suggested by Preacher and Hayes for models with multiple mediators (2008). Age, organizational tenure, and gender were set as control variables, but as their presence did not change the pattern of results they were excluded from the analysis. Our hypothesized model fit the data well, $\chi^2 (868, N = 196) = 1730.074, p < .01$, RMSEA = .071, CFI = .916, and SRMR = .054. Paths leading from OID were insignificant, as well as paths from distributive justice and informational justice to trust. Bias-corrected bootstrap 95% confidence intervals demonstrated significant indirect effects for PO (upper boundary = .504, lower boundary = .136, $p < .01$) and PIS (upper boundary = .580, lower boundary = .183, $p < .01$) on trust indicating mediation. Consistent with the lack of statistically significant direct relationships, indirect effects of OID on trust (upper boundary = .142, lower boundary = -.280, $p < .583$) were insignificant. Standardized path coefficients are shown in Figure 1.

An alternate model, one more reflective of the traditional way of perceiving the relationship between relational ties and trust, added paths leading directly from PO, PIS and OID to trust. This model also fit the data well, $\chi^2 (866, N = 196) = 1725.924, p < .01$, RMSEA = .071, CFI = .916, and SRMR = .052, but the direct paths from PO, PIS and OID to trust were non-significant. However, the path leading from distributive justice to trust, non-significant in the hypothetical
model, became significant ($p = .04$) in this model. A chi-square difference test failed to indicate that this alternative model was a better fit, $\Delta \chi^2 (2, N=196) = 4.14, p = .13$. Thus, we find our original model to be more parsimonious and more in line with our theoretical reasoning.

Therefore, using our hypothesized path model, we establish that the significant relationships represented there fully support hypotheses 1 and 2. Hypotheses 4 and 5 were partially supported in that bias-corrected bootstrapping intervals demonstrated significant indirect effects of PO and PIS on trust. However, as the paths leading from distributive and informational justice to trust were non-significant, it appears that the mediating effect operates primarily through procedural and interpersonal justice. We found no significant relationships between OID and perceptions of justice, therefore hypotheses 3 and 6 were not supported.

**DISCUSSION**

The purpose of our study was to examine how psychological ownership (I own) perceived insider status (I belong) and organizational identification (I am) relate to perceptions of justice and trust. We examined this issue using a sample of non-profit employees and structural equation modeling procedures. Our results represent important contributions to research. First, although PO, PIS, and OID are distinct concepts, they are also highly similar in that they each represent employees’ relational ties to their organizations. Given these similarities, it is important to understand the extent to which these concepts demonstrate discriminate and predictive validity. We established discriminate validity through confirmatory analysis, but more importantly we were able to assess the degree to which each variable contributes a unique explanation of variance in outcome variables using path analysis.

Second, we identified a pattern of relationships not revealed in previous research. Our results suggest that employees of non-profit organizations who hold perceptions of ownership (PO) and insider status in the organization (PIS) are more likely to trust their organizations and that the effects of PO and PIS on trust are mediated by procedural and interpersonal justice. Conversely, it appears that OID, informational justice and distributive justice have limited impact on trust within this employee group. We discuss additional implications and limitations of these contributions in the following paragraphs.

**Organizational Identification (OID) Did Not Predict Justice and Trust**

The most conspicuous (non)finding of our research was that organizational identification had no impact on the dimensions of justice or trust. As substantial research documents the benefits of
identification (Ashforth et al., 2008; Riketta, 2005; Riketta & Van Dick, 2005) and that OID signifies a highly personal and important relational tie, this warrants explanation.

One plausible explanation is the nature of the relationship with the organization. Organizational identification can sometimes exist outside of direct interactions with a target entity (e.g., an organization) and/or outside of a cohesive group (Cardador & Pratt, 2006). That is, oneness with an organization or group is not dependent on organizational status. Individuals sometimes link their self-concept to an organization because it has symbolic value (Cardador & Pratt, 2006, Cialdini, Borden, Thorne, Walker, & Sloan, 1976). It is possible that for our respondents, identification is based on the symbolic value of the non-profits’ mission rather than on personal interactions and relationships with the organization. Mission-based identification may exist outside of relational ties and justice perceptions. Thus, these individuals may not be as committed, cognitively, to be consistent in their judgments of the organization and its decisions.

Another potential explanation is that PO and PIS explain the majority of variance in justice perceptions and resulting trust. These ties reflect pragmatic interests, implying a certain degree of control over and access to resources. Individuals may be more familiar with their organizational rights and more assertive in ensuring that these are met. In effect, because employees perceive they are owners and insiders they may be more proactive in managing fair treatment, rendering identification redundant. Future researchers should explore these possibilities.

**Distributive and Informational Justice Did Not Predict Trust**

Another interesting (non)finding of this research is that a positive perception of informational justice and distributive justice were not significant predictors of trust. This is surprising as these relationships have been found in prior research (informational, Colquitt & Rodell, 2011; distributive, Aryee, Budhwar, & Chen, 2002). Additional research is needed to sort among the potential explanations for this non-finding. Perhaps the expectation of open access to truthful and honest communication associated with ownership (Lapalme, et al., 2009) combined with the sense of efficacy of place also associated with ownership (Pierce et al., 2001) renders mediation by informational and distributive justice redundant. Alternately, this finding may be specific to non-profit employees as they are found to be more concerned with serving the public than with receiving fair communication and rewards (Schepers, De Gieter, Pepermans, Du Bois, Caers, & Jegers, 2005).

**Future Study of Non-Profit Contexts**
We have speculated that the nature of our sample is a potential explanation for the lack of expected relationships in our data. Non-profit employees were an interesting population due to the limited hierarchical levels in these organizations, the strong desire of employees to eschew extrinsic rewards, and the idea that non-profit employees usually resonate with cause first, organization second (Schepers, et al., 2005). Thus, well-known management concepts such as OID and the dimensions of justice may manifest themselves in novel ways (Hull & Lio, 2006) among these employees, problematizing many assumptions of traditional management theory. For example, non-profit employees may be attracted to the mission of the organization (e.g. helping fight hunger) rather than its ability to provide personal benefits. Further, rather than focusing on shareholder value, non-profit enterprises carve their own approach to mission, added value, and helping the public.

Perhaps the most important question raised by our research is the extent to which these findings and current theory are generalizable across for-profit and non-profit employees. Our research focused on non-profit employees, yet many for-profit organizations - particularly entrepreneurial entities - share similarities with non-profits in terms of flatter hierarchical structures, an enhanced devotion to the mission of the organization and the importance of professional efficacy. Thus, these findings may be generalizable to certain for-profit employees and should be explored further across both sectors.

Practical Implications

The results of our examination emphasize the importance of the relational ties of PO and PIS among employees of non-profit organizations. These two variables had a direct impact on all four justice dimensions and an indirect impact on trust. Socialization tactics, policies and procedures, as well as treatment by organization’s representatives may influence the development of PO and PIS, therefore we emphasize structuring these in such a way that all employees feel valued early and often in their careers (Armstrong-Stassen & Schlosser, 2011; Lapalme et al., 2009). We also recommend that managers initiate actions which emphasize inclusion, helping employees see they are an integral part of organizational functioning (e.g., increasing responsibilities, access to information or resource control).

Our results also emphasize the importance of procedural and interpersonal justice when it comes to engendering trust among employees of non-profit organizations. As higher levels of trust encourage cooperation, we recommend that managers make sure that they do not neglect the kinds of fairness which may enhance trust. For example, managers should ensure that policies and procedures are fair and that employees understand their underlying rationale.
Limitations

Our research represents a first step towards understanding the mediating impact of justice dimensions on the relationship between PO, PIS and trust. Despite the value of our findings, our research methodology does have limitations. One potential limitation is the use of online data collection; because of this, only non-profit employees with internet access could participate. However, online data collection offers benefits which should ameliorate these concerns (e.g., equivalent results to mail surveys, Deutskins, Ruyter, & Wetzels, 2006; can lessen social desirability bias impact, Kreuter, Presser & Tourangeau, 2008).

Another limitation of our methodology is the use of employee self-reports. Self-reported data was necessary as we were interested in the relationships among the personal perceptions and attitudes of non-profit employees. Collecting a second data source would not have gathered these self-assessments adequately. Through the temporal separation of independent (time 1), mediating, and dependent variables (time 2), we hoped to alleviate the possibility of common method variance in the data set (Podsakoff & Organ, 1986).

CONCLUSION

Our work adds to the body of literature on PIS and PO as it highlights the importance of these two relational ties for influencing perceptions of justice and subsequent levels of trust. Results demonstrated that OID has no apparent impact on justice perceptions or trust, and that both distributive justice and interpersonal justice have no apparent impact on trust at least among non-profit employees. These findings are unique and warrant further exploration. In particular, the impact of PO and PIS on fairness perceptions and trust deserves future inquiry in for-profit settings so we may fully understand the influence these self-referential assessments.
REFERENCES


THE IMPACT OF PSYCHOLOGICAL DISTANCE ON MORAL BEHAVIOR
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ABSTRACT

Immoral or unethical behavior is often at the center of scandal. It makes headline news and is the basis for considerable academic research and case analysis. Yet, moral behavior as a separate construct from moral intent, has not received the same attention. The purpose of this paper is to consider the importance of psychological distance on moral behavior. Within the context of moral behavior, psychological distance refers to felt or perceived differences between victim, offender, and moral agent. A brief review of related theory is offered as are four propositions tying the constructs of psychological distance, emotional intensity, and values violation to moral behavior. Contribution to theory and suggestions for future research are discussed.

INTRODUCTION

Immoral or unethical behavior is often at the center of scandal. It makes headline news and is the basis for considerable academic research and case analysis. While immoral behavior is often analyzed in hindsight, moral behavior has not received the same attention. Instead, when studying ethical or moral behavior, it is common for researchers to use intention to behave as a proxy for actual behavior. This proxy is often used as it is quite difficult to observe moral behavior in action and it rarely receives the same media attention as immoral behavior. However, intention for moral behavior is only weakly related to actual moral behavior (Hannah, Avolio, & May, 2011). Instead, research suggests that individuals are more likely to report an intention for moral behavior than to actually express moral behavior (Weber & Gillespie, 1998). Given that the proxy of intention for moral behavior may be a relatively poor representative for moral behavior, current research and theory may be inadequate in explaining the differences between moral intent and moral behavior. The purpose of this paper is to consider the importance of psychological distance between victim, offender, and moral agent as an influence on moral behavior.

LITERATURE REVIEW AND THEORETICAL DEVELOPMENT

In this section, we review the literature related to moral behavior, psychological distance, and values violation. Further, we propose that psychological distance (e.g., spatial distance and social
distance) is a significant antecedent of moral behavior, while values violation tends to moderate this relationship.

**Moral Behavior**

The moral agent is one who is faced with moral or ethical choice. An action with moral content involves consequences for others (Jones, 1991). The theoretical model of moral or ethical decision making proposed by Rest (1986) begins with recognition of the moral issue. The next steps are for the individual to make a moral judgment, then establish intent, with the final step engaging in moral behavior. This model has been further developed over the years by many researchers who have added details to help explain individual differences in outcomes of the process (see Jones, 1991). Research and theory support the relation between many individual and situational characteristics on the steps in the moral decision making model. Individual characteristics include (but are not limited to) education, sex, experience, religiosity, personality traits, and moral development. Situational characteristics include the context (i.e. organizational and national culture), the aspects of the moral issue itself (intensity), and influence of others on the process. In addition, moral decision making theory suggests the constructs which may turn moral intent into moral action (Hannah & Avolio, 2010; Sekerka & Bagozzi, 2007). While theory for the ethical decision making process ends with moral behavior, research testing this theory commonly ends with moral intent as a proxy for moral behavior. Yet neither the desire for moral action nor the decision for moral action is sufficient for actual moral action (Hannah & Avolio, 2010; Sekerka & Bagozzi, 2007). The impetus for moving from desire, to decision, to action is still understudied. Given that moral action takes place in an interpersonal context (moral action has consequences for others), we propose that differences in moral action may be related to the interpersonal relations between the moral agent, victim, and offender. One such interpersonal construct is psychological distance.

**Psychological Distance**

Trope and Liberman (2010) define psychological distance as “a subjective experience that something is close or far away from the self, here, and now” (p. 440). As an umbrella construct, psychological distance consists of four distance dimensions: time, space, social distance, and hypotheticality. Among these dimensions, space and social distance are of particular interest of this paper. In the settings of this study, in which people respond (e.g., intervention or avoidance) to unethical behaviors, spatial distance refers to the physical distance between self and the location of the event, whereas social distance is the perceived similarity between the identities of self and the individuals involved in the scene (i.e., the victim versus the offender).
Williams and Bargh (2008) suggest that spatial distance is a significant environmental cue that guides people’s feelings. They argue that, unlike the other three dimensions of psychological distance (i.e., temporal, social, and hypotheticality distances), spatial distance is a stronger stimuli to the cognitive process and is the antecedent of the other three dimensions. Spatial distance influences the people’s perception in such a fundamental way that it alters their affect and judgment.

In general, the construal level theory maintains that psychological distance (including spatial distance) determines the mental construal level at which cognitive processes occur so that increase in psychological distance results in high-level construals, which are characterized with abstract, structured, de-contextualized representations. In contrast, reduced psychological distance triggers low-level construals that are concrete, unstructured, and contextualized (Trope & Liberman, 2010; Trope, Liberman, & Wakslak, 2007).

Close spatial distance to the scene where the victim is harmed by the unethical behavior catches the attention to the case and raises the pressure to respond to the event. According to the construal level theory, when spatial distance is reduced, people become more involved with the contextual and specific details (Liberman & Forster, 2009). Henderson, Fujita, Trope, and Liberman (2006) noted that participants tended to predict typical events to occur when they were spatially distant from the scene. Such prediction was challenged when people were spatially close to the scene, as they paid more attention to idiosyncratic factors within the context. Similarly, when spatially distant from a scene where two parties (i.e., the victim and the offender) are having exchanges, people assume that interpersonal behaviors in the public are peaceful and following the norm. They will be less firm on such an assumption once they get closer to the scene, when details of the circumstances indicate that the behavior deviates from local behavioral norms.

Alerted by the observed atypical behavior, people make a judgment on how it is related to themselves. Once people realize that the expectation is not met, unresponsiveness to the scene creates cognitive dissonance. According to the theory of cognitive dissonance (Festinger, 1957), people seek for harmony among their attitudes and beliefs and try to avoid dissonance among these cognitive outcomes. When cognitive dissonance is established, people are driven to act upon the malleable elements (e.g., cognition, attitude, behavior) in order to achieve consistency. One of the likely consequences would be moral behavior that intervenes with the unethical behavior because moral behavior justifies people’s attitude toward the atypical behavior and allows people to resume consistency in their social environment.
**Proposition 1a:** When observing unethical behavior, low spatial distance with the victim promotes moral behavior of intervention.

Wong and Bagozzi (2005) maintain that reduced social distance promotes self-extension, which means that people tend to include the closely related target as an extension of self or being an in-group member. In addition, people are likely to assume their own emotion and behavior to be representative for those who are socially close. Thus, identifying with the victim encourages people to adopt the victim’s stand point and recognize the interest of the victim. This leads to sympathy to the victim’s situation, sensitivity to the harm done to the victim, and perceived entitlement to act on behalf of the victim. Consequently, an observer is likely to take action to help the victim when the perceived social distance is low. This argument is supported by a bystander intervention study by Levine and Crowther (2008). They found that when bystander and victim shared the same social category membership (i.e. social distance is low), helping behavior increased.

Meanwhile, identifying with the victim enhances the social distance from the offender. The construal level theory indicates that psychological distance promotes the salience of unethical behavior (Rogers & Bazerman, 2008), strengthens the trait-based attribution (Henderson et al., 2006), and provokes stronger prosocial intentions (Agerstrom & Bjorklund, 2009). Rogers and Bazerman (2008) found that participants tended to be more aware of the moral standard and willing to behave according to the “should” self (the self-identity that that links to their core value), rather than the “want” self (the self-identity that derived from their immediate needs), when they were psychologically remote from the focal person or event. As a dimension of psychological distance, increased social distance from the offender should work the same way to increase the salience of the deviation from the behavioral norm. Moreover, being socially distant from the offender motivates the observer to justify their core value with their “should” behavior.

On the other hand, if people perceive close social distance to the offender, they are likely to be confused by the peripheral factors of the events, claim situational-based attribution of and find excuse for the unethical behavior, and even mimic such behavior themselves (Gino & Galinsky, 2012; Henderson et al., 2006; Trope et al., 2007). This is because people perceive the behavior of the socially close other as norm, attempt to fit in the environment by following the “normal behavior”, and find excuses for the morally questionable behavior.
Thus, we argue that social proximity with the victim and social distance with the offender make people alert to the behavior, develop their intention to act for the interest of the victim, and motivate them to intervene with the unethical behavior.

*Proposition 1b: When observing unethical behavior, low social distance with the victim promotes moral behavior of intervention.*

Williams and Bargh (2008) argue that physical proximity results in stronger emotional attachment to the subjects. They primed spatial distance cues by asking the participants to find two points on a grid. In a series of experiments, they found that the participants who identify two close points on the grid experienced stronger emotions toward an episode of event than those who located two far apart points. Likewise, Wong and Bagozzi (2005) asked participants to read scenarios describing unethical behavior and imagine that the victim was a stranger, their friend, their family member, or themselves. The results suggest that as the social distance to the victim decreased, the participants experienced higher emotional intensity such as anger, sadness, resentment and contempt. In general, it is suggested that reducing spatial and social distances evokes increasingly intensive emotion.

Moral emotion refers to emotions with concerns to the welfare of other people or society (Haidt, 2003; Kim & Johnson, 2013). Strong moral emotion is a powerful predictor of moral behavioral intention as emotional arousal creates motivation to behave (Fredrickson, 2001). For example, Kim and Johnson (2013) surveyed consumers and found that participants were more willing to indicate an intention to buy a more expensive t-shirt when there was a label indicating that part of the profit would be contributed to a charity, when the advertisement promoted moral emotions such as pride and guilt.

We suggest that the impact of psychological distance on moral behavior is likely to be mediated by moral emotion in that close social and spatial distance stimulate intense moral emotion toward unethical behavior, which strongly promotes moral behavior of intervention.

*Proposition 2: When observing unethical behavior, low psychological distance with the victim enhances emotional intensity, which in turn, promotes moral behavior of intervention.*

**Values Violation**
Values have been classified into two major groups, each consisting of two categories. The major groups include terminal values and instrumental values. Terminal values are beliefs about end-states of existence and includes values with both a self-centered and a society-centered focus. Self-centered terminal values include items such as happiness, a comfortable life, and self-respect. In each self-centered terminal value, the focus is on intrapersonal end-states, qualities of life the person desires for him/herself. Society-centered terminal values include items such as world peace, national security, and equality. In each society-centered terminal value, the focus is on interpersonal end-states, qualities of life the person desires for the environment in which he/she lives (Rokeach, 1973).

Instrumental values are beliefs about codes of conduct and includes competence values and moral values. Competence values are self-centered and include items such as ambition, capability, and cheerfulness. In a self-centered instrumental value, the focus is on personal improvement and may be related to striving towards self-actualization. Failure to uphold a self-centered competence instrumental value viewed as important may lead to feelings of shame based on inadequacy. Moral values are interpersonal and include items such as honesty, responsibility, and helpfulness. Failure to uphold an interpersonal moral instrumental value viewed as important may lead to feelings of guilt for wrongdoing (Rokeach, 1973).

According to Rikeach (1973), values are determinants of attitudes and behavior. While attitudes include many beliefs about a particular situation or object, a value is a single belief generalizable towards many situations and objects. Values are standards that hold a central position in a person’s thinking and motivate people to behave in particular ways. Thus, everything we think, feel, and/or do has been influenced by our values. “A value system is a learned organization of principles and rules to help one choose between alternatives, resolve conflicts, and make decisions” (Rokeach, 1973, p. 14). A value is both a belief about what a person ought to do and a desire to do it.

Kidder (2005) argues that moral action often comes down to a choice between two right actions. For example, is it better to be completely honest or to protect an individual’s sensitive feelings? Which right action takes precedence over another is dependent upon the strength of conviction of the moral value associated with that action. Decision making between two right actions may be easy, when the strength of one moral value far outweighs another, or difficult when competing moral values are similar in strength. Action displays the strength of our moral convictions, without moral action, moral values are of no real importance.
Given that moral action involves consequences for others, we propose that the interpersonal aspect of psychological distance may be a salient factor in part values violations play in moral behavior. We suggest that the impact of psychological distance on moral behavior is likely to be moderated by values violation in that the strength of the values violation will enhance the relation between psychological distance and emotional intensity.

**Proposition 3:** Values violation moderates the relation between psychological distance and moral behavior such that increases in values violation enhances the relation between psychological distance and emotional intensity.

**CONCLUSION**

**Contribution**

This paper makes three major contributions to the literature. First, it explores the impact of psychological distance on moral behavior and suggests that reducing the spatial and social distance pressures the moral agent to act upon the moral offense in that the moral agent cannot ignore the negativity of the unethical behavior and is driven to intervene and correct the result. We argue that people strive to maintain cognitive and attitudinal consistency, whereas reduced psychological distance highlights the inconsistency, disturbs internal peace, deprives the leisure of observing an irrelevant scene, and motivates people to get involved in the events. Our research contributes to the literature and enhances the insight on the antecedents of moral behavior.

In addition, the paper highlights the underling mechanism that supports the main effect of psychological distance. Specifically, it is suggested that emotional intensity mediates the relationship between psychological distance and moral behavior. The role of emotion as a predictor of behavior has been well-recognized in that emotional arousal is likely when individuals witness behavior outside of social norms (Worline, Wrzesniewski, & Rafaeli, 2002). In addition, Baumeister, Vohs, DeWall, and Zhang (2007) maintain that the behavior following emotion is a product of the learning process through past experiences so that certain psychological and external results can be expected. The mediating effect of emotional intensity further explains the power of psychological distance in motivating moral behavior. Above and beyond the cognitive process triggered by reduced psychological distance, the moral agent is no longer a cool thinker who proceeds with calculated evaluation of the situation. Rather, he/she can be aroused by the intense emotion and may act forcefully without lengthy analytical thinking. Emphasis on this underling mechanism makes psychological distance a more convincing
predictor of moral behavior, demonstrates falsifiability and utility of the theory, and promotes constructive discussion in the literature (Barcharach, 1989).

Last but not least, the intrapersonal dimension of values violation may also help to explain the differences between moral behavioral intent versus moral behavior. We theorize that values violation will strengthen the relation between psychological distance and emotional intensity. When a moral agent recognizes a victim suffering an offense against a strongly held value, the moral agent more closely aligns with the victim against the offender and the strength of emotional arousal is increased. It is through this enhanced relation that we theorize that increases in moral behavior are realized. In this way, the intrapersonal dimension of values violation augments the interpersonal relation of psychological distance. We argue this point because, by definition (Jones, 1991), an action with moral content involves consequences for others. For example, ideally the moral agent may like to stand for truth, but without a suffering victim to turn principles into practice, the moral agent may never move beyond moral intention to actual moral behavior.

Suggestions for Future Research

The propositions presented in this manuscript direct future research in a number of ways. For example, although research and theory have uncovered a number of antecedents in the moral decision making process, we suggest that the interpersonal dimension of psychological distance may also be an important antecedent to moral behavior. It is not that we suggest that the individual, situational, or contextual dimensions previously reported are unimportant, but rather that these dimensions may fail to fully account for the interpersonal nature of moral action. We suggest that the psychological distance dimensions of spatial and social distance draws increased attention to the interpersonal nature of moral action and may help explain variability in outcomes often described in the literature. For example, research findings often tie gender to moral intention, but this personal characteristic explains only a small part of the variance in moral intent. Instead, a close alignment between victim and moral agent may be able to explain what this personal characteristic has not. As such, research is needed to measure and test the functions of spatial and social distance in increasing emotional intensity and ultimately moral action.

Second, it has been recognized in the literature that intention to behave does not always translate to real behavior (Hannah et al., 2011), nor will an emotional impulse to behave in a certain way not guarantee such behavior (Fredrickson, 2001). In addition, research on psychological distance recognizes how the cognitive process varies due to the change of spatial and social distance, which suggests that people are likely to act differently than what they intend to do as they move
psychologically closer to the event. Given that many studies with moral content are conducted in an experimental environment with hypothetical scenarios, intention to behave is often measured as a proxy of real behaviors. These hypothetical scenarios require the moral agent to imagine and then report how he/she would behave if faced with particular situations. As such, it would be interesting to investigate cases where the moral agent really takes moral action without the added construct of moral agent imagination.

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THE STRATEGIC IMPACT OF IT ON MARKET ORIENTATION
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ABSTRACT

With ever-rising competition due to globalization, the search for superior performance and sustained competitive advantage is a common focus across research disciplines. Unfortunately, all too often, insights are not shared across disciplines. The authors review literature from Information Technology (IT) and market orientation and argue that IT competence performs as a fourth antecedent to market orientation. It is shown that IT competence increases firms’ internal and external connectedness and allows for more agility in responding to market changes, thereby increasing their level of market orientation and their competitive advantage. Furthermore, the authors use Contingency Theory to show that when a firm’s IT resources are based on its environment, the environmental effects on the market orientation – performance relationship can be mitigated. We are trying to be able to show that IT is the resource that has been missing from the market orientation literature which can demonstrate why some firms are not as affected by the environment.

INTRODUCTION

As competition continues to increase due to globalization, the search for superior performance and sustained competitive advantage is a common focus across research disciplines. Unfortunately, all too often, insights are not shared across disciplines. In the management and strategy of organizations, market orientation is at the forefront of trying to resolve issues that arise (Day, 1992). As defined by Narver & Slater (1995), the purpose of market orientation is two-fold. The first purpose is the generation of market data regarding customers and competitors. The second is creating greater value for customers using the data generated. The creation of market orientation is only the beginning. Markets are continually changing (Narver & Slater, 1995; Dickson, 1992) and market orientation will thrive only if the information generated, disseminated and the subsequent outcomes are efficient (Kohli & Jawarski, 1990) and responsive to those changes. We argue that this might be afforded through the efficient use of information technology (IT). The ability of firms to adapt quickly and generate greater value in turbulent and changing markets is important to outpace competitors, which is the main factor for creating a sustained advantage (DeGeus, 1988; Day, 1992). The purpose of this paper is to review the literature in information technology (IT) and market orientation (MO) in order to develop a model that provides an integrated understanding of how IT interacts with other firm
resources to create a competitive advantage. We argue that as an antecedent to market orientation, a company’s IT competence directly impacts a firm’s ability to generate, disseminate and respond to market information, and thus its level of market orientation. Moreover, using Contingency Theory (Woodward, 1958), the authors show that the agility derived from a company’s chosen IT competence has the potential to nullify the negative effects of the environment on performance.

Market orientation has been studied extensively in the marketing and strategic management literature as a way to develop a competitive advantage by understanding and meeting customer needs. We use the definition developed by Kohli and Jaworski, (1990, p. 6):

“Market orientation is the organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to it.”

Since the development of these market orientation models, much research has been conducted on the effect of environmental factors, such as market turbulence, competitive intensity, and technological turbulence on the relationship between market orientation and performance. While some studies have found supportive results (Houston, 1986; Greenley 1995; Jaworski and Kohli 1993; Slater and Narver 1994a; Han, Kim, & Srivastava, 1998; Kirca et al, 2005; Song & Parry, 2009), many empirical studies have failed to prove the environmental effects hypothesized (Jaworski and Kohli, 1993; Becherer and Mauer, 1997; Rose & Gopalakrishna, 2001; Tay and Morgan, 2002; Kwon, & Hu, 2000; Perry & Shao, 2002; Bhuian, 1998; Harris, 1998). These mixed findings, regarding the effect of environmental factors on the market orientation-performance relationship, have resulted in a large and important question remaining in this most important subject. Why have there been so many mixed and non-significant results regarding the role of environmental factors on the market orientation-performance relationship?

We believe that IT competence is this missing factor. Drawing on IT literature, we show how IT competence, through digital options, leads to an increase in agility that reduces the role of the environment in the effects of market orientation on performance. Furthermore, we argue that a company’s IT competence should be chosen based on their environment in order to achieve the greatest benefit.

The strategic role of IT is of growing interest to researchers and practitioners alike. Several studies have been conducted that prove that IT investments benefit performance (Bharadwaj et al. 1999; Hitt and Brynjolfsson, 1996). Sambamurthy, Bharadwag and Grover (2003) take a closer look at the reasons behind the positive relationship between IT and firm performance, finding that it is through digital options and agility, resulting from IT competence that performance and productivity are enhanced. While it is understood that IT does not create value on its own, but rather by complementing other firm resources, the process and relationship
between IT and other firm resources is not well understood (Wade and Hulland, 2004, Ravichandran and Lertwongsatien 2002).

We have three primary goals in this paper. First, we hope to unify IT and market orientation to develop a new comprehensive market orientation framework. This framework will help us better understand the relationship between IT and other firm resources and propose that IT competence is an antecedent to market orientation. Second, we examine the effects of IT competence in the form of digital options and agility on market orientation and how they might counteract the effects of environment turbulence on a firm. Third, we discuss how IT strategies, based on environmental factors, can contribute to a firm’s competitive advantage. We begin by reviewing the marketing and information technology literature, which serves as our foundation. We then construct our model and develop propositions based on the findings. Finally, implications and future research are discussed.

BACKGROUND

We draw from marketing and information technology (IT) literature to frame our concept. From the marketing literature, we gain insights into the firm behaviors that drive competitive advantage, including intelligence generation, intelligence dissemination and responsiveness, all of which are components of market orientation. The IT literature provides a view into the complementary relationship that is essential for IT to provide strategic value to the firm and the environmental effect on IT strategy. A brief look into these topics is provided below.
Market Orientation

Most of the literature on market orientation is based on the framework proposed by Kholi and Jaworski (1990). Because market orientation is a relatively new construct, most of research has focused on its definition (Jaworski and Kohli, 1993; Narver and Slater, 1990), influencing factors (Jaworski and Kohli, 1993; Narver and Slater, 1990), its effects on organizational performance and employees (Siguaw, Brown, and Widing, 1994) and its measurement (Deshpande and Farley, 1988; Kohli, Jaworski and Kumar, 1993). We continue this trend by incorporating a factor that has until now been essentially left out of the market orientation discussion – IT competence. We believe that IT competence directly affects the ability of a firm to generate, disseminate and respond to market information (Payne & Frow, 2005). In Kholi and Jaworski (1990), three sets of antecedents determine the level of market orientation. These are top management factors, inter-departmental factors and organizational systems. These are briefly discussed below.

Top Management

From early in the marketing literature, the influence that top management has on organizational orientation is clear (Felton, 1959; Levitt, 1969). Executives are expected to set the tone and character of a company (Webster, 1988). Top management factors include emphasis and risk aversion (Jaworski and Kohli, 1993). In order to build an organization that is market oriented, top managers must emphasize the importance of responding to customers’ needs and changes in the market (Levitt, 1969; Webster, 1988). Responding to market information by introducing new products, services or expanding to new markets requires taking risks. Top managers that are risk averse will have a hard time responding to the market information they receive and will thus limit the level of market orientation achieved (Jaworski and Kohli, 1993).

Interdepartmental Dynamics

This antecedent includes two components - interdepartmental connectedness and interdepartmental conflict. Interdepartmental connectedness is the degree of contact within an organization that individuals have with each other (Kennedy, Goolsby, and Arnould, 2003). Deshpande and Zaltman (1982) propose that connectedness promotes usage of the disseminated information. Jaworski and Kohli (1993) found a positive relationship between interconnectedness and dissemination of, and responsiveness to, information. Interdepartmental conflict, on the other hand, has been shown to erode team unity and cohesiveness within an organization, reducing a firm’s responsiveness to the market (Gaski, 1984).
conflict has also been tied to lower communication between departments, hindering the dissemination of information (Ruekert and Walker 1987).

Organizational systems

The final antecedent of market orientation in Kohli and Jaworski’s (1990) model, organizational systems, is composed of three structural factors – formalization, centralization, and departmentalization - (Jaworski and Kohli, 1993). Formalization is the importance of rules in an organization. Highly formalized organizations produce systems that are highly structured (Hall, Haas, and Johnson 1967). Such organization have a harder time responding to changes in the market because often the structure is too rigid and does not foster freedom of information utilization (Jaworski and Kohli, 1993). Centralization refers to the decision-making authority in an organization. Highly centralized organizations depend on their top management for decision-making, whereas less centralized organizations delegate decision-making authority throughout the organization to members at various levels. Centralization has been found to have an inverse effect on market orientation because it mitigates dissemination of and responsiveness to information (Matsuno, Mentzer, and Oszomer 2002).

Departmentalization refers to the number of departments that organizational activities are broken into (Jaworski and Kohli, 1993). Departmentalization also has a negative effect on market orientation, due to the increased barrier to information dissemination that arises with increased departments (Jaworski and Kohli, 1993). In the following section we investigate how IT competence, through digital options and agility, can lead to improved market orientation. In addition, we discuss how firms that base their IT competence on environmental factors can mitigate the negative effects of the environment on performance.

MODEL DEVELOPMENT AND PROPOSITIONS

From the time the first market orientation model was developed in the early 1990s (Jaworski and Kohli, 1990), technology has evolved rapidly, shifting the way organizations function. In most organizations, technology is intertwined with every aspect of operations. Through the use of various technologies, including the internet, firms are more integrated internally and externally than ever before. Information technology is no longer a luxury for organizations but a means of surviving as it allows organizations to be quicker, more intelligent and to reach a wider customer base.

Market orientation, as developed by Kohli and Jaworski (1990) includes a set of three organizational behaviors these include the generation of market information, its dissemination and responsiveness to the information (Kohli and Jaworski, 1990). Nowadays, everything
depends on technology. Technology can influence the way organizations devise their market orientation and how effective they are at reaching their market orientation goals.

*Intelligence generation* is the first step in market orientation (Kohli and Jaworski, 1990). It entails gathering market information that might impact customers’ needs and wants. While the goal of intelligence generation is to better understand the customer, the act of intelligence generation not only includes collecting information on customers, but also on competitors’ actions, regulatory changes, technology innovations and any other information that provides insight into what customers will want and need in the future (Kohli and Jaworski, 1990). This information can be generated from an array of methods, including customer surveys, market share information and through partners (Kohli and Jaworski, 1990). *Information dissemination* refers to the sharing of information across departments (Kohli and Jaworski, 1990). In order for organizations to act on the information gathered, dissemination is essential. It allows a concentrated effort from different actors throughout the organization in response to market information. *Responsiveness* is the final piece of the market orientation puzzle. It refers to a firm’s ability to take action based on the market intelligence gathered (Kohli and Jaworski, 1990). Without it, all the information generated and disseminated throughout the organization is useless.

Much of the information technology (IT) literature revolves around the value of IT. Information technology is strategically valuable when it complements the other resources of the firm and integrates with business strategies (Barua and Mukhopadhyay, 2000; Kettinger et al, 1994; Sambamurthy et al, 2003). Through lower coordination costs, IT allows firms to streamline work processes, build relationships with external partners, and collect and share information. Per Sambamurthy et al (2003), IT competence is made up of two components. The first, *IT investment*, measures the firm’s expenditures in IT resources, including hardware, software and human resources. The second aspect of IT competence is *IT capabilities*. IT capabilities measure the quality of a firm’s IT resources. Such factors as global connectivity, reliability, technical and business skill of human capital, as well as the use of IT in business relationships (Feeny and Wilcocks 1998; Henderson 1990; Ross et al. 1996; Weill and Broadbent 1998) are important indicators of a firm’s IT capabilities (Sambamurthy et al, 2003). Both IT investment (Barua and Mukhopadhyay, 2000) and IT capabilities (Bharadwaj 2000) have independently been shown to have a significant positive relationship on firm performance. In Sambamurthy et al, 2003, IT competence is proposed as an antecedent to competitive actions, mediated by agility, digital options and entrepreneurial alertness. Sambamurthy et al (2003) use competitive actions as a proxy to performance.

We argue that IT competence, in the form of IT investments and capabilities, is extremely influential in determining the level of market orientation a firm can achieve. IT Investments increase the infrastructure, software and IT professionals in a firm to create distinct competencies
(Feeny and Wilcocks 1998). While IT investments alone are not capable of changing how a firm operates, in conjunction with IT capabilities, companies can function more effectively and generate more and better information through improved analysis and interpretation. This will, in turn, create more immediate responses to any type of threat either internal or external. IT competence also allows for greater managerial foresight by providing decision-makers with better information. This foresight is an important factor in responding to changes in the market. We propose the following:

P1: The greater the IT competence, the larger the (1) market intelligence generation, (2) intelligence dissemination and (3) responsiveness of the organization.

Sambamurthy et al (2003) define digital options as the IT-enabled capabilities derived from the combination of organizational processes and knowledge systems. Amram and Kulatilaka (1999) argued that when a firm uses previous experiences, ventures, and learned problems to consolidate into opportunities their assets become that much more valuable. Several studies agree that IT can enhance a firm’s processes and knowledge systems (Alavi and Leidner, 2001; Davenport, 1993). Process and knowledge systems are the two main components that make up digital options. Each of these components can be described by its level of reach and richness.

Process reach and richness. Digitized processes are the amount that an organization utilizes the network components of its processing system. These systems can include a firm’s supply chain and customer relationship management. Greater levels of digitized process reach signify that the firm has high control over information and is able to distinguish between the information needs of each department, as well as outside stakeholders (Sambamurthy et al. 2003). Digitized process richness is defined by Sambamurthy et al (2003) as the quality of the generated information. In order to achieve adequate richness, digitized processes must be transparent and transformational. Transparency includes openness with regard to how information is generated and linked to different processes Transformational describes the degree to which the data is used in order to improve processes. A firm with a greater level of process richness uses technology to enhance interactive activities, customization, and relevance in processes (Evans and Wurster 2000).

Digitized process reach and richness are very important for the formulation and alteration of market orientation. While IT investments directly allow for information generation, it can also lead to digitized process reach and richness, which also enhances information generation. The greater the digitized process reach and richness, the greater the idea generation, analysis of data, and information available for firms to use in determining strategy (Sambamurthy et al. 2003). In addition digitized reach and richness also enables greater dissemination of information.
across departments and to external partner networks. This will enable the dissemination of information as well as the firm’s ability to generate market information.

P2: The greater a firm’s IT competence leads to greater (1) market intelligence generation, and (2) intelligence dissemination through the mediating effect of digital options, measured by the level of process reach and richness.

Knowledge reach and richness. Sambamurthy et al. (2003) further elaborate on the digitized knowledge systems, also characterized by their level of reach and richness. Knowledge reach has to do with the breadth and composition of a company’s informational assets, how widely available the information is and also the underlying networks that permit the information to be easily transferred (Sambamurthy et al, 2003). On the other hand, knowledge richness has to do with how members of an organization use the IT system to further their knowledge base. Higher levels of this construct are achieved through the complete comprehension of stakeholders (Grover & Davenport, 2001).

Both digitized knowledge reach and richness have the capability to enhance market orientation. Digitized knowledge reach increases the generation and diffusion of information (Sambamurthy et al 2003) by making a firm’s codified knowledge readily available to those who need it. While information can be disseminated by word of mouth in small organizations, IT is critical in disseminating information in medium and large firms. With the widespread use of emails, chats, video conferences, newsletters, online social boards, databases, intranets and cloud services, among others, communication throughout and between organizations is easier and quicker than ever before. Through the expansion of networks and communication, ties will develop among stakeholders. The ties formed between employees, managers and outside partners increase the exchange of ideas, as well as enhancing the experience of those involved (Granovetter, 1973). Digitized knowledge richness has to do with the degree that users of a firm’s digitized knowledge understand the information they have access to. Thus knowledge richness enhances dissemination of and response to market information. This common understanding of relevant market information allows for employees, managers and partners to share deeper levels of understanding and trust (Huber, 1990) and to make critical decisions on how to respond to market information. Even when geographically dispersed, rich channels such as audio and video conferencing enhance communication by enabling the dissemination of tacit knowledge (Dewett & Jones, 2001) as well as increasing ties throughout the organization and between organizations.
P3: A firm’s IT competence leads to greater (1) market intelligence generation, and (2) intelligence dissemination through the mediating effect of digital options, measured by the level of knowledge reach and richness.

Agility has been defined as the ability of an organization to recognize and employ distinct “assets, knowledge and relationships” (D’Aveni, 1994) in order to take advantage of market opportunities. Agility is encompassed by two components - the exploitation of existing capabilities and the exploration of new opportunities (Sambamurthy et al. 2003). Exploitation is the use of current capabilities and knowledge to further the goals of the organization (March, 1991). Exploration is when organizations look outside the firm for new knowledge and opportunities that have the potential to be transformed into future competencies (March, 1991). Agility includes three subcomponents referred to as customer agility, partnering agility and operational agility (Sambamurthy et al, 2003; Cronin, 2000; Treacy & Wiersema, 1993).

Customer agility is deemed as imperative to the development of new and future opportunities. By integrating customers into organizational innovation through virtual connections, firms can receive direct input from customers (Nambisan, 2002; Sambamurthy et al., 2003). IT competence through digital options, such as virtual networks, enhances an organization’s level of customer agility and allows firms to generate and respond to market information with greater ease.

Partnering agility is the incorporation of the organization’s intangible and tangible assets with external stakeholders, to create extended networks of alliances (Venkatraman and Henderson 1998; Choudhury and Xia, 1999). Partnering agility includes the enhancement and development of efficient and effective logistical systems with partners and customers, allowing the firm increased access to external networks (Dyer & Singh, 1998). IT competence through digital options, such as virtual supply chain networks, enhances an organization’s partnering agility in such a way that partners receive information like updated demand schedules immediately, thus improving a firm’s ability to respond to market information.

Operational agility refers to the degree to which a firm uses its capabilities toward the effective exploitation of current strengths and the exploration of new market opportunities (Sambamurthy et al., 2003). Operational agility allows a firm to quickly adjust to changing environments. In addition, suppliers and buyers who are involved in operations can also be kept informed of operational changes immediately and incorporate this knowledge into their processes. IT competence through digital options improves the operational agility of a firm, thereby increasing its ability to disseminate and respond to market information.

IT competence, through digital options, has the potential to increase a firm’s customer agility, partnering agility and operational agility, allowing a firm to remain responsive to market information. Communication between product planning, R&D, engineering, suppliers,
manufacturing and logistics assist with the design, development, testing, production and delivery of the new product.
P4: A firm’s IT competence leads to greater market orientation through the mediating effect of customer agility, partnering agility and operational agility.

Using Contingency Theory (Woodward, 1958), we argue that IT’s impact on market orientation is affected by five environmental factors found in the market orientation and IT literature to create external unpredictability. These include market turbulence, competitive intensity and technological turbulence found in the market orientation literature and, from the IT literature, environmental munificence and environmental complexity. Contingency Theory states that there is no right way to run or structure a company, but rather that a strategy should be based on internal and external factors affecting the company. We argue that firms that invest in IT capabilities that are consistent with their particular needs, based on their environment, will be better equipped with the digital options necessary to become agile in responding to environmental unpredictability.

Day (1994) sorted IT capabilities into three categories: inside-out, outside-in, and spanning. Inside-out capabilities tend to be internally focused, such as technology development, information sharing and cost reduction. Inside-out capabilities have not been found to be a source for sustained competitive advantage (Mata et al, 1995; Powell and Dent-Micallef, 1997; Ray et al, 2001). Outside-in capabilities are externally focused, like gathering and disseminating market information, anticipating customer needs, collecting competitor information, and building relationships with customers and business partners. Finally, Spanning capabilities are used to integrate the firms inside-out and outside-in capabilities. This includes aligning IT functions with other functional areas in order to increase collaboration and improve management and planning (Wade and Hulland, 2004).

Market Turbulence occurs when there are frequent shifts in customer base and/or customer demand (Kholi and Jaworski, 1990). This type of turbulence was found to have a significant influence in the relationships of market orientation and sales (Slater and Narver, 1994), profitability (Harris, 2001) and overall firm performance (Kumar, Subramanian, and Yauger, 1998). Negative effects were found by Greenley (1995) and Slater and Narver (1994). Companies in turbulent environments need different strategies and capabilities than those in more stable environments (Eisenhardt and Martin, 2000; Teece et al, 1997; Volberda, 1996). Unlike stable environments, turbulent environments tend to erode competitive advantages quicker (Foss, 1998). Agility for firms in turbulent environments should be aimed toward exploration since new opportunities arise frequently. Firms in stable environments will be more concerned with improving internal efficiencies and therefore invest more on inside-out resources,
for example improving technology to reduce cost. Thus, organizations in turbulent environments have a greater need for market orientation than those in stable environments and must increase IT competence in outside-in capabilities which help increase their generation and dissemination of information, as well as their agility in responding to market changes.

P5: In environments with high market turbulence, companies that increase their IT competence to achieve greater outside-in capabilities will increase their MO through agility, thereby reducing the negative effect of the environment on their performance.

Competitive intensity refers to how readily competitors alter their marketing decisions to gain competitive advantage (Song & Parry, 2009). In a competitively intense environment, consumers adjust their purchasing decisions based on options provided by firms, thereby increasing a firm’s risk of losing customers. Most of the literature has found a positive result on the effect of competitive intensity on the market orientation—sales (Harris, 2001), and performance (Kumar, Subramanian, and Yauger, 1998). Competitive intensity requires high market orientation, while competitively stable environments do not (Houston, 1986; Noble et al, 2002). Organizations facing intense competition must develop outside-in and spanning capabilities to allow for intelligence generation, dissemination and the ability to integrate activities between functional areas of the firm, thereby increasing their agility and market orientation.

P6: In environments with high competitive intensity, companies that increase their IT competence to achieve greater outside-in capabilities will increase their MO through agility, thereby reducing the negative effect of the environment on their performance.

Technological intensity refers to changes in the entire process of an organization’s transformation of inputs to outputs, as well as final delivery to the customer (Kohli and Jaworski, 1990). Of the three environmental factors shown to moderate the market orientation—performance relationship, technological turbulence has only seen a handful of significant results in launch of new products (Slater and Narver, 1994), performance (Han, Kim and Srivastava, 1998) and defined market orientation (Rose and Shoham, 2002). Organizations in either type of environment will benefit from outside-in and spanning capabilities to enable intelligence generation and dissemination to their partners. In terms of agility, organizations in low technologically intense environments have a greater need for agility since they must respond to market intelligence quickly in order to stay competitive.
P7: In environments characterized by high technological turbulence, companies that increase their IT competence to achieve greater outside-in capabilities will increase their MO through agility, thereby reducing the negative effect of the environment on their performance.

The following two environmental factors have not been evaluated in terms of market orientation. However, they have been examined in the IT literature (Wade and Hulland, 2004). **Environmental munificence** is a measure of whether a business environment is growing or shrinking. Environments with high munificence are characterized by rapid growth, whereas those with low munificence are mature or shrinking (Wade & Hullard, 2004). Environments high in munificence are characterized by sustained growth. Similar to environmentally turbulent environments, organizations in these environments benefit from high market orientation. IT competence in areas of outside in and spanning are critical to help these organizations monitor changes in the environment and coordinate activities between departments when responding to intelligence (Wade & Hulland, 2004). On the other hand, organizations in mature environments (low munificence) compete on internal efficiencies. This reduces the need for market orientation. In this type of environment, IT competence must focus on inside-out resources in order to maximize internal efficiencies, while decreasing IT investment in outside-in and spanning resources, which would be a waste of resources (Wade and Hulland, 2004). Organizations in munificent environments must drive IT competence with the goal of achieving agility and improving their ability to respond to their growing environment.

P8: In environments with high munificence, companies that increase their IT competence to achieve greater outside-in capabilities will increase their MO through agility, thereby reducing the negative effect of the environment on their performance.

**Environmental complexity** measures the range of activities that make up an industry or an organization within the industry. For instance, an environmentally complex organization or industry requires many inputs and outputs and interacts with many and varied suppliers, consumers and competitors. In a highly complex environment, organizations have the burden of having many inputs, outputs and partners to track. Understanding what is needed in order to create a competitive advantage is difficult when so many factors are present. Therefore, these organizations benefit from high market orientation. Organizations in highly complex environments must build IT competence that includes all three types of IT resources. Outside-in and spanning resources help in understanding and responding to the market, while inside-out capabilities allow for efficient operations management. Firms in highly complex environments must focus on having a network of connected partners and being as agile as possible throughout their supply chain. On the other hand, organizations in environments with low complexity have
simple operations and do not require the same level of investment in IT spanning capabilities, since there are fewer activities to coordinate. IT investments in inside-out and outside-in capabilities can also be lowered, since low complexity means fewer inputs and outputs and fewer interactions with suppliers, competitors, and consumers. Agility for organizations in this type of environment is often inherent just based on the simplistic environment and low need for connectedness among partners.

P9: In environments with high complexity, companies that increase their IT competence to achieve greater outside-in capabilities will increase their MO through agility, thereby reducing the negative effect of the environment on their performance.

**SUMMARY AND CONCLUSION**

It is our argument that when firms target their IT investments and capabilities to their particular environment, they place themselves in a better position to pursue the level of market orientation needed and simultaneously decrease their vulnerability to the environment. In highly unpredictable environments, this will help firms increase their agility in responding to environmental shifts. In stable environments, this practice will ensure that firms are not wasting important resources unnecessarily.

For a company to remain successful, it must create a sustainable competitive advantage (Porter, 1985). This competitive advantage comes through continuously creating value for its customers (Narver & Slater, 1990). Market orientation is the implementation of the marketing philosophy (Kohli & Jaworski, 1990) and states that companies must generate disseminate and respond to market intelligence in order to remain responsive to customers’ current and future needs, thereby creating a sustained competitive advantage. Our intent for this study was to merge IT and marketing literature in order to create an extended model of market orientation which includes IT competence. As a new antecedent to market orientation, we propose that IT competence has a main effect on market orientation through its ability to enable the generation, dissemination, and responsiveness to market intelligence. In addition, we propose that the digital options and increased agility that result from IT competence have the potential to increase market orientation and thus performance. Using Woodward’s (1958) Contingency Theory, we propose that firms that take into account their particular environment when determining their IT investments and capabilities improve their ability to react to environmental changes and make the most out of their investments in IT. In this way, IT competence has the ability to be used to achieve a competitive advantage.
By combining Kohli and Jaworski’s (1990) market orientation model with Sambamurthy et al.’s (2003) IT model, this paper is the first to create an integrated model that examines the role that IT plays in market orientation. This integrated model not only provides insights into the process by which IT interacts with other firm resources in order to create value for the firm, but it also addresses why attempts to understand the environmental impact on the market orientation-performance relationship have been conflicted. We propose that IT competence is the missing puzzle piece to this unresolved issue. We argue that agility, achieved through IT competence and digital options, has the potential to mitigate the environmental effects on the relationship between market orientation and performance. We also show that the level of IT competence a firm requires is contingent on a company’s particular environment.

Many times, managers feel that the more IT, the better. However, we try to show that increasing IT competence beyond what is necessary to compete in a particular environment can be a waste of valuable resources. When the IT strategy of a company is based on that company’s environment, it has the greatest chance of mitigating environmental effects. Therefore, managers must analyze their environment in order to determine which IT investments and capabilities will provide the most benefit. We provide a guideline for managers in doing this. We hope that this study helps managers understand the important role of IT competence in market orientation and in creating a sustainable advantage for their firms. Adding IT competence as an antecedent to market orientation shows the synergistic force that these two previously separate constructs have to create a company that is aware and responsive to market information and robust to environmental changes.

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THE IMPACT OF HUMAN CAPITAL ON ORGANIZATIONAL LEGITIMACY VIA STRATEGIC CONFORMITY AND PERSISTENCE
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ABSTRACT

The concept of organizational legitimacy refers to the criteria that provide acceptance to the firm by its environment. In order to better understand how organizations become legitimate, the concept of human capital needs to be critically examined. Industry-specific human capital is transferable to other firms within the same industry whereas firm-specific human capital is not transferable outside of the firm. I, first, argue that having strong industry-specific human capital would help firm better establish strategic conformity whereas having strong firm-specific human capital would help firm better establish strategic persistence. Second, I argue that both conformity and persistence would have positive impact on organizational legitimacy.

Keywords: Organizational legitimacy, human capital, strategic conformity, strategic persistence.

INTRODUCTION

Organizational survival can be considered one of the most critical criteria for organization’s long-term success. According to Arnold et al. (1996: 232), this concept refers to “the degree of which the organization elicits participation among members of a particular constituency.” If an organization wants to survive longer, it will have to meet the requirements that exist within a particular environment so that it would be able to satisfy the needs of that environment in order to become its legitimate member. They also mention that there is a close linkage between organizational survival and legitimacy by arguing that legitimacy of the organizations would be a determining factor for organizational survival. Since the concept of legitimacy is very important for organizational life, how it can be effectively established within organizations needs to be considered a critical research question in the field of management.

Suchman (1995: 574) defines legitimacy as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed systems of norms, values, beliefs, and definitions.” When we look at this concept from an organizational perspective, it can be defined as “the acceptance of an organization by its environment (Kostova and Zaheer, 1999: 64).” From both of these definitions, it is possible to conclude that legitimacy requires some type of an acceptance by a particular environment. In other words, a well-established congruence between firm and institutional norms will be needed.
in order to talk about the existence of legitimacy (Arnold et al., 1996). Therefore, the underlying idea within this concept is to be accepted by the other members of a particular environment by placing appropriate organizational norms that would make an organization execute its operations effectively and efficiently. Since legitimacy is such a critical concept in organizational life, there are two very important questions to ask: How can organizations gain legitimacy and do executives and their managerial skills matter during the process of gaining legitimacy?

Since top executives are the “key” individuals who would take primary responsibility in order to make their organization legitimate in a particular environment, it is crucial to consider what kind of skill sets these executives would need to possess while taking steps necessary during this process, which refers to the concept of human capital. In the literature, this concept is defined as “a set of abilities, expertise, and knowledge that managers acquire in part from previous experience (Bailey and Helfat, 2003: 348).” Human capital, which is also seen as “a special form of strategic asset (Coff, 1997: 375)”, has been categorized under three main parts: generic, industry-specific, and firm-specific human capital (Bailey and Helfat, 2003). In this paper, the main focus will be on the industry- and firm-specific human capital. According to Bailey and Helfat (2003), industry-specific human capital includes the managerial skills that are transferable within the same industry whereas firm-specific human capital includes the managerial skills that do not hold a big value outside of the firm. In order to make sure that organizations establish legitimacy within its own unique environment, top management teams will need to have executives who possess both of these skill sets so that it would be much more convenient for them to place environmentally-acceptable norms within the firm. Therefore, the most critical question that needs to be answered is that in what ways top executives would need to utilize their unique skills during the process of establishing organizational legitimacy.

There are two other important concepts that are highly critical while understanding theoretical connections between human capital and legitimacy: strategic conformity and persistence. The former concept, which is strategic conformity, can be defined as “the extent to which an organization’s strategies resembled the conventional, normal strategies in an industry (Deephouse, 1996: 1029).” The latter concept, which is strategic persistence, can be defined as “a tendency for firms to stick with strategies that have worked in the past (Audia et al., 2000: 837).” Since the definition of strategic conformity primarily refers to the resemblance with industry-level strategies, it can be argued that executives would mainly have to utilize their industry-specific skills in order to better establish conformity within their firms. On the other side, the definition of strategic persistence mainly refers to sticking with previous, successful firm-level strategies. Therefore, it can be argued that executives would primarily have to utilize their firm-specific skills in order to successfully establish persistence within their organizations.
The establishment of legitimacy is such a complicated and challenging process and it requires both industry- and firm-level expertise in order to make this process go smoothly. Because of this complexity, it is very important to examine the antecedents of organizational legitimacy by looking at several factors at the different levels. In this paper, I try to explain how industry-specific human capital would help firm improve strategic conformity and firm-specific human capital would help improve strategic persistence. As a result, I argue that both strategic conformity and persistence would have important positive impacts on the level of organizational legitimacy. The conceptual framework is shown in Figure 1.

**THEORY DEVELOPMENT**

**Organizational Legitimacy**

One of the primary goals of an organization is to survive both economic and institutional environments successfully. Economic environment refers to an environment “where a product or service is exchanged (Arnold et al., 1996: 230)” whereas institutional environment refers to an environment that “contains the norms, rules, and requirements to which individual organizations must conform (Arnold et al., 1996: 231).” If an organization wants to be considered legitimate in its strategic actions and processes, it will have to obey “the rules” of its institutional environment and therefore, it will become a member of a particular environment and be able to receive institutional support from that community.

**FIGURE 1 (*)**

Figures 1 The relationships between human capital and organizational legitimacy via strategic conformity and persistence. (*) All the relationships in Figure 1 are positive.
The concept of organizational legitimacy has been defined by many scholars. One of these definitions argues that legitimacy is “the social acceptance resulting from adherence to regulative, normative, or cognitive norms and expectations (Deephouse and Carter, 2005: 332).” According to another definition, legitimacy is “a condition reflecting cultural alignment, normative support, or consonance with relevant rules or laws (Scott, 1995: 45).” Both of these conceptual definitions evidently show that legitimacy will be established by adapting to the environmental norms, rules, laws, and expectations and placing those “environmentally-caused” factors appropriately within the organizations. In other words, establishing legitimacy is the process of getting used to an institutional environment and doing whatever is institutionally required by that specific community in order to become an acceptable part of it.

As Certo and Hodge (2007: 465) clearly state, if an organization wants to gain legitimacy, it will have to obey the rules of institutional environment, which mainly includes “the form of political and legal typologies, rules guiding market behavior, and general belief systems.” All of these factors should be considered very critical since they either will or will not let the organization survive. From a more general perspective, it is possible to argue that the key factor in gaining legitimacy is to meet the expectations of a social system (Deephouse and Carter, 2005). Although most research in legitimacy literature has primarily focused on the conceptual definitions and identifications of normative rules and regulative processes and how social actors within the institutional environments try to meet these institutional requirements (Deephouse and Carter, 2005), there is still an important need for exploring how these processes actually take place within organizations, which is the main purpose of this conceptual study.

An organization will be considered legitimate as soon as it starts receiving support from “a segment of society large enough to ensure its effectiveness and survival (Elsbach and Sutton, 1992: 700).” How this result can be achieved has been considered a critical research topic in the field of management. According to some institutional theorists, one of the best ways to maintain legitimacy would be through “adopting designs that mask or distract attention from controversial core activities that may be unacceptable to some key constituencies (Elsbach and Sutton, 1992: 700).” Some others have also argued that this process should be considered “a boundedly rational process in which an ongoing interaction with the environment is required (Kostova and Zaheer, 1999: 67).” By being related to both of these viewpoints, it is possible to argue that this complex process requires critical evaluations and interpretations of a social system surrounding the organizations. As a result of these evaluations, organizations would be able to create a “generalized perception that they are behaving appropriately according to some culturally shared definitions (Scott and Lane, 2000: 49)” within their social systems and this is going to be called organizational legitimacy.
Some scholars have focused on internal and external aspects of legitimacy. According to Singh et al. (1986: 176), while talking about external legitimacy, the focus is on “an organization having its actions endorsed by powerful external collective actors and developing strong relationships with external constituencies.” On the other side, internal legitimacy refers to “the acceptance and approval of an organizational unit by the other units within the firm and, primarily, by the parent company (Kostova and Zaheer, 1999: 72).” Both of these sub-dimensions of legitimacy should be also considered important in order to better understand the underlying mechanisms of this concept since internal legitimacy provides some important firm-level cues for the survival of the firm whereas external legitimacy reveals some influential outsider-factors on organizational survival. In addition, Suddaby and Greenwood (2005: 37) see legitimacy as “a crucial element in the creation and survival of new organizational forms.” According to them, it is very important to understand the process of legitimacy by focusing on the ways how it is acquired, maintained, and lost (Suddaby and Greenwood, 2005). By following their explanation, I argue that one of the most critical factors in the process of gaining legitimacy would be related to human capital within firms. In other words, individual executives and their skills would hold a great deal of importance in the establishment of organizational legitimacy.

**Human Capital**

The concept of human capital can be defined as the knowledge and skills that a manager possesses in an organization (Buchholz et al., 2003). When the amount of strategic decisions that top managers need to make is taken into consideration, it will be much easier to realize why managerial skills that executives possess should be considered crucial while studying organizational survival-related subjects. In other words, the sets of their unique skills will be the primary key in making the most critical decisions, which may lead an organization to either success or failure. According to Becker (1975), human capital can be classified in two categories: general human capital, and firm- and industry-specific human capital. In the definitions by DeTienne and Chandler (2007: 367), general (generic) human capital refers to “the knowledge and skills that are useful in more than one job or firm” whereas firm- or industry-specific human capital refers to “the knowledge and skills that are useful primarily in a single firm or industry.” In this paper, my main focus will be on the second category, which is firm- and industry-specific human capital, as the two antecedents of organizational legitimacy.

According to Hall and Hall (1988), as organizations try to expand and hold a better position within their sector, the connections between the structure of organizational processes and knowledge and skills of the executives will become more important because of the fact that firm-
and industry-specific human capital are going to be primarily and heavily used during the processes of organizational change and growth. Harris and Helfat (1997: 896) define firm- and industry-specific human capital as follows: firm-specific human capital includes the set of skills that “an executive cannot transfer outside of the firm” and industry-specific human capital includes the set of skills that “an executive can transfer only to firms that operate in the same industry.” By looking at these two definitions, it is possible to argue that the main distinction between both of these dimensions of human capital is whether these skills would be useful at the either firm-level or industry-level while executing some strategic actions in order to improve organizational effectiveness and efficiency. This should be considered a pretty important and critical distinction since the top management team of a firm needs to include some qualified executives possessing firm- and industry-specific skills in order to successfully implement strategies and make their organization legitimate in the institutional community.

Bailey and Helfat (2003) mention that human capital, in general, refers to the concept of managerial skills. They also (Bailey and Helfat, 2003:351) state that firm-specific human capital involves “an in-depth understanding of a company’s history, personnel, culture, and internal strengths and weaknesses” whereas industry-specific human capital involves an in-depth understanding of “customers, products, and capabilities” that create high value for the firm within the same industry. Basically, the former helps to have a better understanding of firm-related factors whereas the latter helps to better comprehend industry-related factors. In order to compete with other firms in a particular industry, it is very important to have an appropriate exploitation of these human skills so that the firm would survive longer by gaining legitimacy. During the process of gaining legitimacy in an institutional environment, there are also two other important firm-level factors that will have to be taken into consideration: strategic conformity and persistence. These factors are expected to have some positive impact on gaining organizational legitimacy depending on the type of human capital being possessed by the top executives within the firm.

The Linkage between Industry-Specific Human Capital and Strategic Conformity

The concept of strategic conformity can be defined as the extent “to which a firm’s strategy matches the average strategic profile of its competitors in the same industry (Finkelstein and Hambrick, 1990: 492).” In other words, this concept refers to the condition of a firm in “which its strategy conforms to the central tendency of the entire industry (Finkelstein and Hambrick, 1990: 487).” By relying on these definitions, it is possible to argue that conforming to an industry’s general conditions is the primary tenet of strategic conformity. Hiller and Hambrick (2005:311) refer to this concept as the total efforts of a firm to become “the typical firm in its
industry.” Therefore, strategic conformity includes appropriate organizational attitudes that would help firm become a strategic member of a specific industry.

Conformity, in general, means “doing what the majority are doing (Miller et al., 2012: 3).” In an industry context, conformity refers to the “adherence to industry norms such as proximity to industry medians (Miller et al., 2012: 3).” In order to achieve in getting closer to these proximities, industry-specific human capital in organizations would hold a great deal of importance. If there are executives with valuable industry-specific skills in a firm, this condition will help them define what the requirements of being a strong member of that industry are and how to accomplish those requirements successfully and in a timely manner. In other words, knowing more about industry norms, the characteristics of other competitors within that industry, and the other factors that would help firm have a “matching strategy” to the average competitor’s profile in that industry would be the main determinants of establishing strategic conformity. As Zhang and Rajagopalan (2003) state, if firms adhere to central tendencies in the industry, more value will be given to the industry-specific skills while trying to gain conformity. Their statement can be considered a clear explanation for the strong linkage between industry-specific skills and conformity. Therefore, I argue that having executives who possess strong industry-specific human capital would help to increase the level of strategic conformity within the firm.

**Proposition-1:** There is a positive relationship between industry-specific human capital and strategic conformity.

### The Linkage between Firm-Specific Human Capital and Strategic Persistence

The concept of strategic persistence can be defined as “the extent to which a firm’s strategy remains fixed over time (Datta et al., 2003: 108).” According to Audia et al. (2000), firms tend to stick with former strategies that have been proven successful and this is called being strategically persistent for the firm. Basically, the general stability in firm’s actions and strategies are the main “ingredients” of strategic persistence as long as the results of this stability have resulted in successful outcomes in the past. This condition is also defined as “commitment to the status-quo” by Grossman and Cannella (2006: 258). Therefore, if a firm wants to follow this path, its focus will be on sticking with past successful strategies instead of coming up with novel ones.

Strategic persistence has also been considered pretty advantageous for the firms especially under the conditions of environmental stability (Audia et al., 2000). An important advantage of being strategically persistent is the development of firm-level capabilities that have worked well in the past and this is expected to create value in the future by increasing both efficiency and quality of
operations (Audia et al., 2000). According to Grossman and Cannella (2006: 260), top managers of the firms usually prefer to choose being strategically persistent as long as there is “consistency in resource allocation decisions over time” that produces satisfactory performance. If we think about the definition of firm-specific human capital, we can argue that as long as there are executives who possess valuable, internal information about the firm and are able to use it for effective and efficient future operations within their firms, they will be able to successfully establish a strategically persistent structure in their organizations. In other words, being familiar with organization’s norms and practices as clear and close as possible would enable top managers to pursue strategically persistent actions better. Therefore, I argue that having top managers who possess strong firm-specific human capital would help to increase the level of strategic persistence within the firm.

Proposition-2: There is a positive relationship between firm-specific human capital and strategic persistence.

The Linkages among Strategic Conformity, Strategic Persistence, and Organizational Legitimacy

As explained in the previous two sections, there are some important connections between different types of human capital and strategic conformity and persistence. These critical linkages are also important since they are expected to have critical impacts on the establishment of organizational legitimacy. In other words, strategic conformity and persistence can be considered the two “pre-conditions” in the process of gaining legitimacy. The very general definition of legitimacy refers to obeying and adapting to the institutional environment’s norms, rules, and requirements. I argue that this critical process can be more easily taken care of by the executives as long as strategic conformity and persistence exist within the organizations because of the reasons and conditions explained below.

As Deephouse (1999) clearly states, strategic conformity is expected to increase legitimacy. In order to gain conformity, organizations try to match their strategies as close as possible to those of their competitors in the same industry (Finkelstein and Hambrick, 1990). While doing that, some organizations prefer just “imitating the successful strategies of other organizations (Delgato-Garcia and Fuente-Sabate, 2010: 564)” and some of them adapt their strategies and policies to the social and cultural format of their institutional environment (Geletkanycz and Hambrick, 1997). Firms, after gaining conformity, can be expected to establish legitimacy much easier and quicker since they will have already known what the requirements of institutional environment are and how to apply those requirements in their organizational life in order to
become a focal firm within their industry. Miller et al. (2012:1) see conformity “as a means of securing legitimacy.” According to them, sources of conformity come from “the impact of institutional logics on the values, goals, and strategies of an organization (Miller et al., 2012:1).” This institutional impact will have the organizations establish and secure their legitimacy appropriately by providing an easy access to external resources such as capital, talent, and clients (Miller et al., 2012). Therefore, I argue that strategic conformity would have a positive effect on gaining organizational legitimacy.

Proposition-3: There is a positive relationship between strategic conformity and organizational legitimacy.

When firms prefer being persistent with utilizing their past, successful strategies, they can easily improve their abilities as well as competencies that have provided positive outcomes in their previous operations (Audia et al., 2000). The critical point here is that sticking with strategies that have not been proven successful should not be considered a condition for being strategically persistent. As long as firms persist with exploiting prior, successful strategies in their strategic actions, an increase in organizational outcomes may be seen in two different ways: efficiency of new operations and quality of new product and services. When these two improvements occur, firms can be expected to better build legitimacy with their external environment (Audia et al., 2000) since the other members of the community would witness some tangible improvements in firm’s performance. Besides, persistence is expected to reduce both economic and social risks (Audia et al., 2000), which can be considered another highly important factor during the process of gaining legitimacy. Although some scholars (Grossman and Cannella, 2006) have argued that strategic persistence may result in organizational inertia, when we look at the possible positive consequences of persistence, it is quite easy to see how sticking with past, successful strategies would help organizations become an “accepted member” within an institutional community. Basically, an increase in overall efficiency of operations and an improvement in quality of products and services are expected to help the firm become legitimate. Therefore, I argue that strategic persistence would have a positive impact on gaining organizational legitimacy as long as those prior strategies and actions of the firm have been proven successful.

Proposition-4: There is a positive relationship between strategic persistence and organizational legitimacy.
DISCUSSION

Organizational legitimacy is an important concept in the field of management since it provides important cues on how firms survive in the long run. The main idea of being legitimate stems from creating congruence between organizational attributes and institutional norms. In other words, there needs to be a coherent relationship between what the organization is “thinking of doing” and how the institutional environment is “doing.” The process of gaining legitimacy may be pretty challenging since organizations will have to find some appropriate ways to arrange their actions according to the norms constructed by the social system in which they are in. The concept of human capital will be very important to explore and exploit in order to better establish organizational legitimacy.

Human capital, in general, refers to the abilities, skills, and knowledge that managers have gained though their previous work experience. Depending on the transferability of these skills, human capital can be classified in two different categories: firm- and industry-specific human capital. Firm-specific human capital is usually more valuable within the firm and not easily transferable across firms. Industry-specific human capital is usually more valuable within the same industry and not easily transferable across industries. In order to gain legitimacy in a socially constructed system, it is important to have top managers who possess strong both firm- and industry-specific skills.

Firm-specific human capital refers to the skill-set that is related to in-depth understanding of the firm, which may include culture, history, procedures, and strategies of the firm. Using firm-specific human capital can be helpful if an organization want to build strategic persistence, which refers to sticking with prior, successful strategies. As long as there are managers who overall understand firm well, it won’t be quite difficult to establish a strategically persistent organization. On the other side, industry-specific human capital refers to the skill-set that offers in-depth understanding of the actors within the industry, which may include customer profiles, industry products, and main capabilities of other competitors. Using industry-specific human capital can be helpful in an organization to establish strategic conformity, which refers to being close to the central tendencies of the industry. If there are managers who have clear knowledge about the industry conditions, it will be quite easy to establish strategic conformity. Therefore, sticking with past, successful strategies and being close to industrial tendencies by an effective utilization of firm- and industry-specific human capital will be expected to result in gaining organizational legitimacy much better and quicker.
CONCLUSION

Human capital should be considered a very important concept in gaining organizational legitimacy. Having both firm- and industry-specific human capital will enable firms reach their goals in establishing a legitimate structure in their own institutional environment. During this process, strategic conformity and persistence would play a mediating role between human capital and legitimacy. More specifically, industry-specific human capital would lead to legitimacy via strategic conformity and firm-specific human capital would lead to legitimacy via strategic persistence. Thus, as a result of the combination of all of these four factors, the legitimate firm can be securely established in an institutional community.

I believe that the conceptual study contributes to the field by examining both individual and firm level factors that play an important role in the establishment of organizational legitimacy. This study also reaffirms the importance of human factor in organizational life and how individuals can help to improve the “placement” of an organization within an institutional environment. For the practitioners, this conceptual framework can be an important guide in terms of seeing what type of managerial skill sets would be needed in building organizational legitimacy.

REFERENCES


SPECIALISTS, ADVOCATES, AND STEWARDS:
PROCESS ROLE IDENTITIES IN TOP MANAGEMENT TEAMS
AND THEIR INFLUENCE ON TEAM PERFORMANCE
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ABSTRACT

Extending research considering deep-level cognitive TMT and team diversity factors such as faultlines and factions, this paper examines the effects of differences among decision-process role identities. Team role theory and TMT structural studies support the development of three primary role types: functional specialist, divisional advocate, and organizational steward. Such role identities and their related behaviors are posited as additional explanatory factors in TMT decision functioning. Specifically, an integration of social identity theory and identity theory supports propositions that compositional imbalances among these role types affects TMT outcomes of relational conflict, decision process satisfaction, and perceived decision quality. Formality of debate and discussion processes and CEO empowering leadership are posited as moderators of TMT composition and process outcomes.

INTRODUCTION

Upper echelon theory (UE) (Hambrick & Mason, 1984) has been one of the most vibrant areas of research in the strategic management field (Carpenter, Geletkanycz, & Sanders, 2004; Certo, Lester, Dalton, & Dalton, 2006; Hambrick, 2007; Menz, 2012). No individual or group has as much potential to influence the form, direction, and performance of an organization as does the top management team (TMT) (Hambrick & Finkelstein, 1987). Research related to UE diversity and the wider domain of TMT decision-making factors have provided evidence of positive relationships between a variety of TMT demographic variables and firm-level performance (Certo et al., 2006). Furthermore, UE research has been the foundation for showing that top executives and their decision processes matter (Dean & Sharfman, 1996; Finkelstein, Hambrick, & Cannella, 2009).

Yet, the results of research on TMTs have failed to converge or reconcile inconsistent findings and diametrically opposed effects (Beckman & Burton, 2010; Carpenter et al., 2004). Inherent limitations of the demographic proxy approach used in the majority of UE research are well-documented (Priem, Lyon, & Dess, 1999). Further, some argue that UE research over-emphasizes an aggregated team perspective to the exclusion of critical individual and inter-team relational factors (Beckman & Burton, 2010). While prior works have largely identified and
explained the main effects of demographic proxy variables on firm outcomes (Boal & Hooijberg, 2001; Carpenter et al., 2004; Lawrence, 1997), there is substantial opportunity to extend our understanding of TMT decision making by examining deeper-level individual factors and their interactions (Carpenter et al., 2004).

Due to the recognition of the limits of demography, much research has shifted attention to the processes underlying TMT decisions and the factors that affect those processes (Certo et al., 2006). Different debate processes have been studied (Schweiger, Sandberg, Ragan, 1986) and the effects of debate on positive and negative forms of conflict have been identified (Amason, 1996; Simons & Peterson, 2000). Scholars have examined the effects of TMT structure (Beckman & Burton, 2010; Menz, 2012), behavioral integration (Hambrick, 1994), the influence of asymmetries of information and involvement (Edmondson, Roberto, & Watkins, 2003; Hambrick, 2007), and the role of variation in cognitive functioning and TMT behavior (Narayanan, Zane, & Kemmerer, 2011).

Research on TMT functioning however, has yet to consider that self-assumed process role identities may have effects on TMT interactions and team decision-making. Researchers continue to expand our understanding of the complexity of multi-business, complex firms (Bardolet, Fox, & Lovallo, 2011; Joseph & Ocasio, 2012; Martin & Eisenhardt, 2010). The presence of multiple process role identities within the upper echelons of these complex organizations may be particularly relevant to understanding complex interpersonal TMT processes. Departing from surface-level demographic analyses, recent literature has begun to examine how intra-team cognitive subgroups characterized as factional groups (Li & Hambrick, 2005) or by faultlines (Lau & Murnigham, 2005; Thatcher & Patel, 2012) show that diversity implications can stem from cognitive differences and team perceptual and behavioral divisions (Harrison, Price, Gavin, & Florey, 2002). Because TMTs are a critical decision-making body for an organization, the nature of the decision making process is a critical component of TMT functioning (Papadakis, Lioukas, & Chambers, 1998). Processes, whether formalized or emergent, are likely to involve a number of roles (Belbin, 1993). Role identities, therefore, may be an additional variable that can help understand the actions and interactions of TMT members as individuals and in role-similarity subgroups.

Social identity theory (SIT) (Ashforth & Mael, 1989; Tajfel, 1972) and self-categorization theory (SCT) (Hogg & Terry, 2000; Turner, 1985) help explain how individuals define themselves by their associations to specific groups (Ashforth, Harrison, & Corley, 2008). Identity theory explains how individuals’ behavior relates to the varying roles they assume (Hogg, Terry, & White, 1995; Stryker & Burke, 2000). Identity theory adds value when integrated with SIT because the role components of identity are frequently related to prototypical conceptions of category or group members that emerge through SCT and SIT (Stets & Burke, 2000). These
theories on individual identities suggest that executives may perceive and assume informal roles that are distinct from and unobservable through their official organizational positions. TMT member role identities and perceptions of others’ behavioral appropriateness are likely to affect the behavior of TMT members with respect to their involvement in discussion of certain issues and in their interactions with other members. Specifically, role identities and role identity diversity may interact with decision process styles and team leadership to affect conflict and group decision-making. Because role identities cannot be captured by demography proxies such as title or functional background, the effects of such drivers of behavior have yet to be addressed in the TMT literature.

The primary purpose of this manuscript is to develop the argument that informal role identities within TMTs have an influence on conflict, process quality, and process satisfaction. To develop specific propositions on how such role identities may be important to theory three main identities are proposed: (1) functional specialist; (2) divisional advocate; and (3) organizational steward. Further, consideration is given to factors that may moderate the effects of role identity compositions in TMTs. Specifically, propositions are developed regarding the influence of the decision process style employed and the style of leadership used by the CEO.

In developing theory on how informal role identities among multi-business firm TMT members interact and affect important TMT outcomes such as perceived relational conflict, process quality, and decision process satisfaction, scholars may gain valuable new insights to explain new TMT functioning. CEOs and TMT leaders may also benefit by understanding how team structures, informal team role identities, debate processes, and process leadership interact to aid or inhibit decision quality and process acceptance.

THEORETICAL BACKGROUND AND PROPOSITIONS

The complex system involved in linking TMT diversity characteristics with organizational performance involves many antecedents, intervening moderator and mediator factors, internal and external contextual factors, and intermediate TMT outcomes (Carpenter et al., 2004; Papadakis et al., 1998; Simons, Pelled, & Smith, 1999). Of specific interest in this analysis are the types of decision processes used by TMTs, the effectiveness of leadership of those processes, and the types of conflict that occur in those processes. These three literature streams shape the UE model context into which identity theory will be integrated. Stewardship theory and literature on functional-versus-divisional TMT position differences will also be used to develop and propose relationships between different compositions of TMT role identities and relational conflict and process outcomes.
TMT Decision Processes

The process view of TMT functioning theorizes that communication frequency, communication informality, and overall social interaction among TMT members are positively associated with high team performance (Smith, Smith, Olian, Sims, O’Bannon, & Scully, 1994). The process of bringing out and integrating the diverse knowledge, expertise, and experience of team members is the mechanism through which diversity is understood to aid team decision-making (Carpenter et al., 2004; Harrison et al., 2002; Knight et al., 1999). Process is also an important factor in gaining decision acceptance, commitment and implementation (Mason & Mitroff, 1981). Information sharing positively relates to team cohesion and decision process satisfaction, and it is necessary for the integration of knowledge in order to make higher quality team decisions (Mesmer-Magnus & DeChurch, 2009). Research that has examined the process through which TMTs organize their decision-making typically characterize processes based on the formality and structure of debate. The literature has largely addressed three specific approaches to TMT decision-making: consensus (i.e. agreement seeking); dialectical inquiry; and devil’s advocacy.

While a consensus-oriented process is generally a more loosely-structured and open discussion that seeks an eventual agreement among all members, dialectical inquiry (DI) and devil’s advocacy (DA) approaches require greater formality in debate structure (Schweiger et al., 1986). DI sets two competing recommendations or sets of assumptions in competition against each other. The winner is the alternative best able to defend against critiques from its opposition and to create acceptance of its greater value toward the particular decision objective. DA focuses the attention of critique and scrutiny on only one alternative at a time. In both of these structured debate processes, effectiveness is dependent on the involvement of all participants and the quality of their argumentation for or against the proposal(s) under discussion. These structured styles strive to constructively heighten the level of task conflict between members of the TMT.

Decision comprehensiveness, thoroughness in considering and evaluating alternative perspectives and possible solutions (Fredrickson, 1984; Miller, 2008), is a common measure of TMT decision quality. There is much debate about which decision process type is most effective toward decision quality (Priem, 1990; Schweiger et al., 1986). In many situations, formalized debate processes lead to higher quality decisions (Cosier & Schwenk, 1990; Schweiger et al., 1986; Simons et al., 1999; Amason, 1996). The conclusion of many is that when managed effectively, structured debate processes and their constructive task conflict allow better access to the benefits of a diverse TMT (Amason, 1996; Simons et al., 1999). Without a formal process to bring additive and possibly contrarian opinions or conclusion into the discussion, group-level discussions risk being influenced by preference-reinforcing biases toward information already known and shared (Brodbeck, Kerschreiter, Mojzisch, & Schulz-Hardt, 2007).
An alternative argument is that a consensus-oriented approach leads to a more favorable perception of team cohesion and to higher process satisfaction. These perceptions are often associated with greater decision commitment, acceptance, and implementation follow-through (Amason, 1996; Schweiger et al., 1986; Knight et al., 1999). Positive socialization among team members has a positive effect on the speed, quality, and creativity involved in decision-making (Hutzschenreuter & Kleindeinst, 2006). The level of mutual and collective information sharing, support, collaboration, and shared decision responsibility among members of teams with high behavioral integration correlates positively with organizational performance (Carmeli & Schaubroek, 2006; Hambrick, 2007).

In summary, discussion structure and TMT member interaction processes are important factors in behaviors that lead to more effective decision-making and organizational performance (Mesmer-Magnus & DeChurch, 2009). The nature of the group process (i.e. how well the group members interact and develop shared mental frames, consistent interpretations, and shared cognition) is the mechanism that either accesses or suppresses the effects of cognitive diversity (Knight et al., 1999). Consensus-oriented processes positively influence commitment and implementation (Knight et al, 1999). Although a level of conflict can stimulate productive decision analysis, the risks of the negative influence of conflict are pervasive (De Dreu & Weingardt, 2003). Research in this area has yet to specify how interactions of members within the TMT affect outcomes or how different configurations of member perceptions and discussion styles influence the group dynamic (Carpenter & Reilly, 2006).

Conflict in TMT Decision Making
Conflict is an inherent force driving comprehensive scrutiny and analysis in more structured decision-making processes. Task conflict is so vital to full and honest debate and decision comprehensiveness that these processes may sometimes require contrived dissent (Schulz-Hardt, Jochims, & Frey, 2002) if insufficient true dissent is not present to force a level of valuable scrutiny. The principle argument against the structured debate processes is that they require conflict, and even if managed and focused toward positive ends, productive task-related conflict can quickly erode into damaging relational conflict that undermines the TMT interpersonal relations (Amason, 1996; Simons & Peterson, 2000).

Amason (1996) described that the coexistence of functional and dysfunctional conflict embedded in TMT decision-making processes is a subtle paradox. Researchers have identified two primary types of conflict and each has varied effects on TMT outcomes. Task conflict arises from differences in perspective and is viewed as constructive and useful in eliciting decision-enhancing discussions (Amason & Sapienza, 1997). Task conflict is therefore associated
positively with effective team decision-making (Cosier & Schwenk, 1990; Schweiger et al., 1986; Simons & Peterson, 2000). Relational conflict refers to individual-targeted differences (Amason & Sapienza, 1997) and is associated with negative effects on group satisfaction and commitment (Simons & Peterson, 2000). Despite many prescriptions favoring the encouragement of task conflict while simultaneously inhibiting relational conflict, Amason (1996) argued that it is questionable if both objectives can be achieved at the same time. Compounding the challenge of managing conflict in TMT discussions is that almost all studies have found task and relational conflict to be positively correlated (De Dreu & Weingardt, 2003; Simons & Peterson, 2000). Negative effects can also arise when perceptions of conflict are asymmetrical among the TMT members (Jehn, Rispens, & Thatcher, 2010).

As the volume of published research on team conflict has expanded, several meta-analyses have assessed the level of convergence of findings on the effects and sources of conflict. De Dreu and Weingart (2003) concluded from their analysis of over thirty studies that both task and relationship conflict have negative effects on team satisfaction. Both relational and task conflict, the authors concluded, are undesirable. However, more recent meta-analyses that including more than eighty additional empirical studies to the prior analyses indicate that task conflict is not strongly and negatively correlated with group performance (deWit, Greer, & Jehn, 2012). Furthermore, the more recent analyses support that when specifically measured for effects on decision-making quality (as would be relevant for TMT performance) task conflict is positively related to performance. This supports previous theory that task conflict is a positive influence on decision comprehensiveness.

TMT Role Identities

It is likely that even the most complex organizations have a relatively stable set of titles and positions that have seats at the TMT table. Each TMT member is typically the singular representative of a function, division, or area of responsibility in the organization. Though the TMT members’ collective identification with the TMT is known to influence important factors such as team learning and overall performance (Van der Vegt & Bunderson, 2005), attention to individual role identities and their effects on team decision processes is the specific interest of this research.

Three different conceptualizations of an individual’s identity within the context of an organization can be examined (Ashforth et al., 2008). The first view is based on social identity theory (SIT) and self-categorization theory (SCT) (Tajfel, 1972). This perceptive describes how personal identities form by placing oneself within a defined group. In this view, one’s identity
inheres in memberships. SIT leads to in-group and out-group definitions and prototypical embodiments of each (Hogg & Terry, 2000). It follows that an executive may assume and enact a TMT role based on their perceptions of prototypical behaviors for a TMT member in their position. Further, they may use their own prototypes of similar or dissimilar TMT roles to judge how well other TMT members appear to be enacting within their expected roles.

A second view, based on identity theory (IT) (Turner, 1985), explains how individuals develop personal meaning from the roles that they assume and enact. Though SIT and SCT are salient, self-assumed role identities may likely subsume SIT factors due to the strength of role identities and potential ambiguity of TMT role categorizations. As managers ascend through an organization on their way to the TMT, they will develop role models, stereotypes, and prototypes of TMT membership and these perceptions will affect their adopted role once in the TMT. Through behavioral observation and interaction, TMT members may form perceptions of the informal roles of other TMT members but these perceptions likely relate to their own core role identity. Therefore, role identities may be influenced by social identity prototypes.

A third conceptualization of identity is organizational identity, that is the identification of being a part of a ‘we’ beyond the ‘me’. Because the focus of this study is on individual roles within the TMT, identity theory is most salient.

**Identity Theory.** Identity theory covers the domain of contextually specific definitions of the self and is a central concept in understanding why people act as they do (Ashforth et al., 2008). These self-defined roles give meaning to the multiple facets of individuals’ lives. Role identities are self-conceptions built and altered based on how others respond to the behaviors resulting from role enactment (Hogg et al., 1995). Levine and Moreland (1990) noted that individuals may not agree with the roles that others assume and enact or they may judge the enacted behaviors of others as inappropriate to the role they cognitively assign to others. Such inconsistencies in role perceptions and behaviors can create conflict. Individuals within social structures such as a TMT act in ways to place one another into roles and these role placements lead to expectations of behavior in the self and in others (Stets & Burke, 2000). If individuals cannot effectively negotiate with others in their team to establish and verify their perceived role, they may tend to withdraw from the group (Riley & Burke, 1995).

**Team Role theory.** Belbin (1993) proposed a team role theory that emphasized that a portfolio of roles is necessary for effective team functioning. Belbin (1993) argued that both functional and team-oriented roles had value and that the degree of recognition and mutual adjustment of role enactment were vital for team performance. The premises of team role theory have been
generally supported (Prichard & Stanton, 1999; Senior, 1997). Belbin (1993) additionally argued the need to differentiate between a team member’s formal, functional role in a team and their informal team role that relates to how they behave, contribute, and interrelate with other team members. A team member’s title or formal position may have little bearing on their role in the actual team functioning. Thus, similar functional roles may have different team roles or those with different functional roles may take on similar team roles.

Demography approaches to the study of TMT processes have succeeded to degrees in measuring the cognitive diversity of TMTs using proxy measures. However, consideration of the informal and dynamic nature of identity advances research to a deeper level of analysis. Role identities are co-constructed through the social interactions within teams (DeRue & Ashford, 2010; p. 628). That is, TMT member identities are shaped through a process of claiming roles and having those roles reciprocally granted back (i.e. legitimated and accepted) by the other members (DeRue & Ashford, 2010). Claiming and granted may not, however, always occur smoothly. The role identity composition of the TMT may skew toward certain behavioral and conflict tendencies. True or incorrectly perceived identities and role-appropriate behaviors may affect decision-making processes. Thus, role identities emerge as important factors in TMT decision process functioning.

*TMT Role Identities.* A problem with much research on TMTs, even research attending to demographic heterogeneity, is that TMT members are substantially disconnected from one another (Menz, 2012). A number of differing role categorizations could be developed when considering informal process roles in TMT decision-making. Research considering such informal role categories helps brings greater awareness to the deficiencies of examining the TMT as a group of similar executives (Menz, 2012). For the purposes of this research, a three-part typology of member identities is developed. These identity types are: (1) *functional specialist* (the role of expert representative for a specific function of the organizations such as marketing, finance, or information technology); (2) *divisional advocate* (the role of the top executive representing a specific semi-autonomous sub-unit of the organization); and (3) *organizational steward* (the role of advocate for the entire organization’s success and well-being). While these role types represent only one set of potential role identities that may be meaningful in TMTs, these are believed to represent a core set that can offer an example of role identity salience in TMTs. The three role types proposed are not explicitly mutually exclusive. However, it is argued that if mixed role identities exist within an individual, a hierarchy is present and one core identity will dominate. Furthermore, following research on role socialization (Allen & Meyer, 1990; Jones, 1983), TMT role identities for all members other than newcomers should be rather stable.
The three role categories specified here are based on the extant research related to TMT structure and leadership. Larger, more complex organizations are likely to have TMTs with a mix of corporate center, functional department, and divisional leadership executives. Yet process roles are not necessarily observable through proxies such as background or title. A functional specialist, while likely to have a deep functional background that would be clearly identified through traditional TMT demography research, could assume an organizational stewardship role when they are working on TMT tasks. Divisional advocates, who would most likely be considered ‘generalists’ from traditional UE research perspectives, could likewise have deep functional expertise that is not apparent from their title. For example, the leader of a business unit growing via acquisitions may have ascended to their leadership position solely based on their financial markets skills. Such an executive may have a title indicating a divisional role but they may revert to a more functional specialist (e.g. financial specialist) orientation when involved in TMT decision processes. Alternatively, a highly conscientious divisional advocate with high organizational commitment may move beyond their singular business unit agenda and act as an organizational steward when attended to TMT duties. Lastly, although it is probably assumed that a CEO is in the generalist or organizational steward role, a strong functional or divisional background could sway their behavior and attention toward a functional specialist or divisional advocate role. In sum, these three basic role types are not readily apparent in or accurately captured by surface-level demography measures. Yet, based on the literature on how role identities affect behaviors, these TMT process roles may have considerable effects on TMT functioning.

How Role Identities Affect TMTs. Examinations of TMT behavioral dynamics have begun to consider the structural aspects of the team. Traditional views of the TMT look at functional backgrounds and functional roles (Hambrick & Mason, 1984; Harrison et al., 2002). Extensions of this view have incorporated differences between TMT roles related to functional leadership (e.g. CFO, Vice President of Marketing) and roles related to divisional leadership (e.g. Vice President for Commercial Products, President of European Operations) (Beckman & Burton, 2010; Menz, 2012). The responsibilities and priorities of functional TMT members can vary a great deal from those members with divisional leadership roles (Beckman & Burton, 2010). The differing perspectives and agendas among functional and divisional TMT roles is likely an important element explaining how TMTs with both members function. Thus, these two important role distinctions are conceptualized for this study.

Conflicts between member role behaviors and other members’ perceptions of appropriate role behaviors may be important determinants for member interactions. However, the examination of the effects of perceptions of others’ roles and behavioral fit is beyond the scope of this paper.
The focus here is how asymmetries of roles across the TMT matter. TMT members enacting different identity roles are likely to differ in their level of involvement in debate and discussion dependent on the topics. Different compositions of TMT role identities, therefore, are likely to be associated with different levels of process success, conflict, and perceptions of process quality. Such subgroups and faultlines (Lau & Murningham, 2005) may be key elements of TMT diversity beyond individual level composition measures.

Specific research attention to members of TMTs that are responsible for one or more functional areas of their organizations has been increasing (Menz, 2012). Functional TMT members bring diverse agendas, perspectives, and cognitions that may be negatively related to strategic consensus (Knight et al., 1999). However, as the independent functional areas of a firm are interrelated toward the same common organizational purpose and are often dependent on each other for even functional-level success, conflict due to competition or relational issues may be controlled through process structure. Behavioral integration can be positively influenced by powerful overarching visions and shared goals (Hambrick, 1996; Lubatkin, Simsek, Ling, & Veiga, 2006). Functional identity diversity is at the core of how UE connects TMT diversity to enhanced performance.

Cross-business-unit collaboration and value creation in multi-business firms can be an important driver of success. However, to foster such collaborative thinking among business unit leaders with divergent agendas require a process led by teams of those divisional leaders as opposed to a centralized, CEO-led process (Martin & Eisenhardt, 2010). Yet most TMTs remain structured as corporate center and CEO centric bodies. Therefore, divisional advocates are likely to have more independent agendas due to their leadership of semi or fully autonomous business units. Divisional advocates are more likely to focus on their own division’s goals and needs and to deemphasize the needs of other areas or even the firm as a whole. Thus, they will tend to compete more vigorously for allocations of corporate resources (Bardolet et al., 2011). The mental models and priorities of divisional advocates may therefore differentially affect their interpretations and involvement in different TMT decision domains (Knight et al., 1999). A member taking on a purely divisional role identity is more likely to attend primarily to those decision topics that more directly affect their specific division. The decisions and challenges facing another division or a corporate functional department may be far less salient. Conversely, corporate discussions of actions that may potentially limit resources or otherwise be potentially harmful to the member’s ‘own’ division may be perceived as threats to be attacked or defended against.
TMT members enacting functional specialist identities are likely have a higher focus on their interdependence with other functional roles. Thus, as compared with teams dominated by divisional advocates, teams with a higher proportion of members acting on functional specialist identities are likely to experience higher levels of interdependent and interactive information sharing and positive discussion. With more positive and synergistic team relations, therefore, teams dominated by functional specialist identities should experience lower relational conflict, have higher perceived decision quality, and result in higher levels of decision process satisfaction than do teams dominated by divisional advocate roles. Research on faultlines and factional groups has shown that subgroup size is associated with the effect of group divisions (Lau & Murnigham, 2005; Li & Hambrick, 2005). Therefore, it is expected that a ratio of TMT membership that identifies with one role type will create greater role diversity effects than teams with a balanced role mix.

**P1:** TMTs with a higher ratio of functional specialist identities to divisional advocate identities have more positive perceptions of team decision quality.

**P2:** TMTs with a higher ratio of functional specialist identities to divisional advocate identities have lower perceived relational conflict.

**P3:** TMTs with a higher ratio of functional specialist identities to divisional advocate identities have higher levels of decision process satisfaction.

The notion of an organizational steward identity is grounded in stewardship theory (Davis, Schoorman, & Donaldson, 1997). Agency theory (Jensen & Meckling, 1976) emphasizes how self-interest shapes managerial behaviors and how various mechanisms can be used to align managers’ self-interest with the goals of owners (i.e. to the greater, overall goals of the organization). Stewardship theory, in contrast, is a view in which actors see greater long-term benefit in “other-focused pro-social behavior than in self-serving, short-term opportunistic behavior” (Hernandez, 2012; p. 172). The essence of a stewardship role identity is a de-emphasis of the individual agenda and priorities to focus on the greater organizational needs. The role of CEO is logically not a functional specialist nor is it a divisional advocate. Thus, by default, CEOs are expected to assume organizational steward role identities. However, as discussed previously, title alone cannot predict what process role identity a member of the TMT may enact.

Research on TMTs in which individuals are the unit of measure has focused primarily on the CEO, CEO leadership effects, and dyadic CEO-member relations (Zhang, Li, Ulrich, & van Dick, 2013). Studies have found that CEO role dominance can impede quality TMT decision-
making in turbulent environments (Haleblian & Finkelstein, 1993), that dominant CEOs can restrict important flows of information (Eisenhardt & Bourgeois, 1988), and that CEO process leadership styles can affect process satisfaction and decision quality (Edmondson et al., 2003). Stewardship theory (Davis et al., 1997) offers a conception of top leaders as rising above their own self-interests for the greater good of the organizations they serve. In this path, researchers have noted that CEO transformational and empowering leadership styles often contribute to effective TMT functioning (Carmeli, Schauerbroeck, & Tishler, 2011). Thus, the stewardship role is conceived as an identity that effective CEOs and other conscientious TMT members may embrace. TMT members who are officially categorized as functional leaders or heads of business units may, when in the TMT process, take on organizational stewardship identities distinctive from their ‘titled’ roles from which they otherwise operate. That is, functional and divisional TMT members may put aside their formal roles (e.g. the role of vice president of marketing or the role of president of the commercial products division) for broader, organizational-level roles when at the TMT table. Thus, even for executives with a clear functional or divisional responsibility, their TMT-specific role behaviors may operate from a wider perspective of priorities and decision factors.

As noted, divisional advocates are more likely to compete for resources due to their largely independent agendas. Functional specialists are more likely to move in and out of participating in decision processes as topics do or do not concern their specific functional areas of expertise and interest. If a divisional or functional member perceives they cannot add value to a discussion due to a lack of knowledge, they may defer to other functional role specialists they see as more knowledgeable. In contrast, organizational stewards should tend to be diligently and more consistently involved through the entire decision process and across all decision topics facing the TMT. This high level of involvement and de-emphasis of individual priorities should enhance positive interrelations among TMT members.

Research has found that behaviors stemming from a stewardship role perspective can enhance team participation and reduce the negative effects of conflict in team decision-making (Eddleston & Kellermans, 2007). Teams that are more vigilant in their decision-making are more likely to be effective (Peterson, Smith, Martorana, & Owens, 2003). Due to their wider levels of involvement in all decision-making processes, stewards are likely to have more general knowledge about firm issues. Teams with more generalists and greater levels of intrapersonal background diversity are better at problem solving than are teams dominated by more narrowly focused experts (Bunderson & Sutcliffe, 2002).
P4: TMTs with a greater proportion of organizational steward identities have more positive perceptions of decision quality.

P5: TMTs with a greater proportion of organizational steward identities have less reported relational conflict.

The Influence of Process and Leadership Style

Research is beginning to shed light on the effects of CEO personality and leadership style on the functioning of TMTs. For example, Peterson and colleagues (2003) found links between CEO personality traits and TMT behavioral tendencies. Researchers have similarly found that CEO leadership style is associated with TMT effectiveness (Zhang et al., 2013). TMT leaders (i.e. CEOs) have choices in how to structure and guide decision-making processes. Edmondson and colleagues (2003) delineated three primary decisions that CEOs can control in order to influence the nature of the process: (1) the structure of debate; (2) the type of process facilitation; and (3) the method of reaching closure. The appropriate mix of these factors, Edmondson and her coauthors argue, is contingent on the level of information and interest asymmetries in the team. Such asymmetries are fundamental to the previously developed hypotheses relating how different compositions of role identities in the TMT may lead to conflict, process limitations, or differing levels of process satisfaction. CEO centrality, power, and process influence within the process, regardless if the objective is consensus or debate, thus becomes an additional and highly influential variable in the study of the effects of TMT role identities.

Generally, researchers studying the effects of TMT diversity assume the level of team member involvement in the decision process is constant and symmetric. Alternatively, the level of involvement is simply left unspecified (Bunderson, 2003). However, in order for functional expertise and diverse knowledge perspectives to inform team decision making, members holding unique information must first be fully engaged in the discussion process. Interactive involvement of TMT members cannot simply be assumed to operate in a democratic or thorough process. Full and open involvement is likely only as an outcome of a process in which formal and informal structures influence who, how, and when TMT members participate (Bunderson, 2003). This is a central point in considering the structural influence of the composition of self-assumed functional, divisional, and stewardship identities. Non-personal and energized debating of alternative viewpoints and solutions (i.e. task conflict) is an important contributor to quality decision making in TMTs (deWit et al., 2012; Schweiger et al., 1986; Simons et al., 1999). Because functional experts and divisional advocates may tend to defer from debating topics they do not perceive as relevant to their knowledge or needs, formal processes that encourage and
induce their involvement are likely to improve decision quality through more inclusive, diverse involvement.

P6: Process structure formality moderates the relationship between team identity composition and TMT perceived decision quality.

Further, research has shown that an empowering leadership style by a CEO leads to higher TMT behavioral integration and thus to enhanced team effectiveness (Carmeli et al., 2011). In contrast to an open process in which the leader guides and effectively manages to elicit high involvement, teams can be negatively affected by high CEO power centralization (Edmonson et al., 2003). An overbearing process leader tends to inhibit valuable information exchange and open debate. Therefore, with respect to the beneficial effects of higher functional identity role presence and higher levels of organizational stewardship roles in the TMT, the nature of the process (i.e. its formality) and the empowering leadership by the CEO are intervening moderating factors.

P7: CEO empowering leadership style moderates the relationship between team identity composition and TMT relational conflict, decision quality, and process satisfaction.

The overall model of the relationships between TMT role configurations, TMT outcomes, and moderating factors is presented in Figure 1. Relational conflict consistently shows a negative impact on team process satisfaction and team decision quality (DeDrue & Weingart, 2003; deWit et al., 2012), therefore, no propositions are specified in these relationships.

DISCUSSION

“There are few more important subjects to strategy scholars, or for that matter practitioners, than the link between the people at the strategic apex of the organization and that organization’s performance” (Pitcher & Smith, 2001; p. 1). Yet explanations of the link between TMT members’ cognition and behavior and the positive TMT decision process outcomes are inconsistent, often overly complex, and frequently paradoxical. It seems advancing clarity of understanding in this domain will require the examination of more antecedent and intervening factors. However, with the multitude of mediators and moderators identified as intervening factors in the UE model linking TMT heterogeneity and decision performance, it might be more accurate to think TMT composition as an
How might these important role identities develop? When they first join the group, TMT members do not get new job descriptions. They are unlikely to be assigned new definitive roles in the TMT beyond member. Their official identity remains their corporate title. Their membership in the TMT implicitly indicates that they are the top decision making team for the entire organization. Yet, identity theory informs that assumed roles and identities are not entirely bound to official positions. Underlying traits, experiences, dispositions, and how these individual factors relate to the social context of the TMT open the possibility of TMT members taking on any one (or more) of multiple identities that can influence the way they interact within the TMT processes. It seems evident, and this research has supported, that TMT members across any measure of demographic diversity have differing choices as to what role they chose to take. Ultimately, it is likely these identity choices begin with their base assumptions about what the ideal TMT prototype member to be (Hogg & Terry, 2002). Different self-concepts and identification motives are also likely to influence role identification and enactment (Cooper & Thatcher, 2010). Individuals create differing prototypes, so this should lead to different assumption of identities, not based on demography, but based on prototypes. Demographic variables may help explain the formation of these prototypes, but in ways not captured in extant UE research. Therefore, it is possible that these prototypes and their resulting identity
assumptions could be confounding effects in the associations of demographic variables and TMT outcomes.

Interaction among TMT members, especially with the CEO, may play a key role in how members select, build on, or alter their role identities. Identities are dynamically tested and refined based on feedback from the social environment. So too are prototypes. This dynamic flux of role identities may be a critical factor for furthering the precision of measuring the influence of TMT composition on TMT outcomes. More importantly, finding that CEO behavior can moderate the effect of process formality on how different identity compositions result in differential outcomes would support that CEO choice of process and leadership style can be substantially influential in countering undesirable outcomes. This adds incremental value to the theorizing regarding CEO choices in processes and process leadership (Edmondson et al., 2003).

This study makes several contributions to the study of TMT functioning and TMT leadership. First, for scholars examining the factors that influence the quality of TMT functioning, the conceptualization and theorized influence of informal role identities may contribute significant additional explanation of the variability in TMT effectiveness. Prior research has predominantly examined the effects of factors inherent in TMT members (e.g. backgrounds, personality traits, experiential schema). The present analysis is believed to be the first to develop unique process role identities within TMTs. Positing that role identities are correlated with widely studied intermediate TMT outcomes such as decision process quality and process satisfaction promotes a new stream of TMT and team decision-making research. Not only do the conclusions of this examination contribute to the study of how individuals behave within team decision processes, they provide an additional variable of compositional diversity that may further explain outcomes. In this way, this research helps extend prior theory of team diversity research related to faultlines (Lau & Murnigham, 2005) and factions (Li & Hambrick, 2005).

Second, by building theoretical support that self-selected informal roles within TMTs can influence intermediate group outcomes such as behavioral integration, this research argues that TMTs dominated by one identity type may harm or hinder such indirect outcomes as information sharing, social and behavioral integration, and transactive memory (Austin, 2003; Wegner, 1987). These intermediate outcomes have been widely shown to relate to organizational performance outcomes such as growth and profitability (Carpenter et al., 2004). Therefore, understanding how these individual identities play out in TMT processes is a valuable contribution to organizational studies.
A third contribution results from the argument that unobservable individual cognitive choices may influence TMT functioning above and beyond traditional diversity factors. By studying observable differentiation measures, prior research has struggled with the paradox of diversity in TMTs (Pitcher & Smith, 2001). Diversity, typically examined in functional background, age, tenure, education, or gender, is good on one hand. Diversity can lead to greater creativity and information exchange (Wiersema & Bantel, 1992). On the other hand, diversity can lead to conflict and reduce consensus (Smith et al., 1994). Introducing role identity adds a valuable new internal context factor that can help clarify a portion of the complexity found in the extant models of TMT decision making.

A fourth contribution specifically addresses practitioners. CEOs can benefit by understanding how their process choices and leadership of processes interact with team composition variables (Edmonsdon et al, 2004). Further, because identities and roles are assumed by members individually, there is likely opportunity to shape, amplify, or change these roles as necessary to manage TMT composition. That is, the same conscientiousness that may motivate a functional to excel in their specialist role may fuel their ability to respond to a request from the CEO for them to take on a needed additional organizational stewardship role within the TMT. Such adaptations may be particularly achievable with TMT members having aspirations for advancement. This potential malleability of process role identities may afford managerial choice and action beyond most of the variables previously studied as antecedents to TMT decisions. That is, CEOs can rarely if ever effectively choose TMT members to form a desirable composition of diversity of experience, age, schema, experience, etc. TMT membership is usually derived by official position in the organization. However, it could be argued, and should be tested, that rather than simply allow members to find and enact their role identities independently, CEOs and TMTs can jointly assess, manipulate, and form a composition of team roles suited for greater effectiveness.

**An Agenda for Future Research**

Theories on identities clearly point toward at least some TMT members taking on informal process role identities. However, their true existence is a key empirical question. Furthermore, while the literature leads to the development of the three role identities proposed herein, the existence and salience of other roles may need to be developed to accurately depict the full nomological network of interrelating identities. It is recommended that qualitative research first explore the role identities assumed by TMT members and work to clarify and categorize these roles. Empirical testing of their effects and generalizability across different teams should follow. This study also assumed roles to have a stable nature and to be, if hierarchical, consistently dominated by only one role identity. It is possible that TMT members bring a role portfolio to
their involvement in the TMT and that they adjust their role identity behavior depending on factors such as the topic of discussion or what other parties are involved in the debate. Research on such role multiplicity, adaptability, and conditional application is necessary. For more precision in the evaluation of these cause and effect relationships, experimental designs will be useful, especially quasi-experimental designs involving ethical interventions and observations with actual functioning TMTs.

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ANTECEDENTS OF TURNOVER IN THE COMPENSATION COMMITTEE
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ABSTRACT
This study provides a first investigation of several determinants of turnover in the compensation committee in a sample of 447 manufacturing firms. Using equity theory and a managerial power perspective, I hypothesize that underpaid CEOs will try to indirectly influence their compensation by changing the composition of the compensation committee. The limited findings were contrary to predictions. Various explanations for these contradictory findings are discussed.

INTRODUCTION
Executive compensation has captured the attention of researchers from various disciplines (economists, accounting and finance researchers, organizational researchers). Despite decades of research, examination of the factors affecting managerial compensation contracts continues to be an important and popular area of academic study (Finkelstein, Hambrick and Cannella, 2009). Chief executive officer (CEO) pay practices also remain at the forefront of the popular business press and are increasingly scrutinized and criticized by shareholders and the general public. The Oversight and Government Reform Committee recently (2007) started an investigation into the role of compensation consultants. In the opening statement of the hearing, Chairman Henry Waxman said that CEOs earn 600 times more than the average company employee (in 1980 they earned 40 times more), and at a typical company, 10% of corporate profits go into the pockets of top executives (Bebchuk & Fried, 2004) which Mr. Waxman called a “staggering sum”. He then asked: “Are soaring CEO pay packages earned or are they the result of a rigged process?”[http://oversight.house.gov/story.asp?ID=1646, retrieved May 2008]. The recent growth in CEO compensation has led many to question whether CEOs have too much influence over their own compensation. In light of the recent turmoil in the financial sector, I expect that the compensation setting process in public companies will receive even more scrutiny.

In this study I investigate one aspect of the compensation setting process using a managerial power perspective. Specifically, I analyze determinants of turnover in the compensation committee. To my knowledge, this is the first study to addresses this issue.

This study is motivated by the desire to gain understanding of an additional factor by which CEOs may use their power to influence their own compensation. CEO compensation is determined in many companies following a similar process (Elhagraysey, Harrison & Buchholz,
Shareholders elect the board of directors whose job it is to monitor, advise, hire, fire and compensate the top managers. The compensation committee as a subcommittee of the board of directors plays an important role because it sets and structures pay packages for the top executives, including the CEO. The process usually starts out with the Human Resource Department making a proposal to the compensation committee. The compensation committee then consults with outside compensation consultants and submits a recommendation to the whole board. These recommendations are usually accepted by the whole board.

The compensation committee is the organizational structure that is the core decision-making body responsible for setting and monitoring executive pay (Lorsch & McIver, 1989, Bebchuk & Fried, 2004). In my view, the compensation committee can be considered as an instrument that CEOs may use to impact their own compensation. This argument is supported by previous research. Murphy (1998: 24) states: “There is no doubt, however, that CEOs and other top managers exert at least some influence on both the level and structure of their pay”. I explore whether CEOs use their power to influence their own pay by influencing the composition of the compensation committee.

This study makes two important contributions. First, it expands on the limited research that addresses issues regarding board committees. Researchers have recently supported the need for more research concerning the functioning of board committees. Finkelstein, Hambrick and Cannella (2009, 231) state: “… it seems clear that board committees will be a much more prominent arena of study as events evolve” (referring to recent regulatory changes concerning committees). Second, this study looks at an additional process by which CEOs can indirectly influence their own compensation, namely, through changes in the compensation committee.

LITERATURE REVIEW

There has been extensive research on the determinants of executive pay packages over the last decades. This literature has focused on explanations from economic, social-psychological and managerial power perspectives and has been extensively reviewed by Devers, Cannella, Reilly & Yoder (2007), Finkelstein & Hambrick (1996), Finkelstein, Hambrick & Cannella (2009), Gomez-Mejia & Wiseman (1999), Hambrick & D’Aveni (1992) and Murphy (1999). However, research on director turnover has been rare, and focused mostly on turnover in the whole board (Beatty and Zajac, 1994; Boecker & Goldstein, 1991; Crutchley, Garner & Marshall, 2002; Yermack, 2004; Zajac and Westphal, 1994). Research on board committees, and specifically committee turnover, has been even less prevalent. The limited research that examines composition and function of board committees has focused mostly on audit committees and nominating committees. Arthaud-Day et al. (2006) looked at the impact financial
restatements have on turnover in the audit committee. Vafeas (1999) and Shivdasani & Yermack (1999) focused their studies on issues on the nominating committee. To my knowledge, there is no study that specifically addresses turnover in the CC.

Past research on compensation committees is mostly focused on investigating a relationship between the structure of compensation committees and CEO pay (Anderson & Bizjak, 2003; Daily, Johnson, Ellstrand & Dalton, 1998; Newman & Mozes, 1999; Vafeas, 2003). The focus of these studies was to look at consequences of various structural features of compensation committees. These studies did not look at factors that determine the make-up of compensation committees. Anderson and Bizjak (2003) found that pay mix, pay levels, and pay sensitivity to performance are largely unrelated to committee independence. In a study of 194 large manufacturing firms, Daily et al. (1998) also looked at the impact of compensation committee composition on CEO compensation. They found that compensation committee members with business and professional relationships with the focal firm, compensation committee members who have been appointed to the board during the tenure of the CEO, and compensation committee members who are CEOs do not influence the compensation received by the CEO. Newman & Mozes (1999) also found that CEO pay is not related to insider participation on the compensation committee. They do show however that the relationship between CEO compensation and firm performance is more favorable toward the CEO in firms that have insiders on the compensation committee. Vafeas (2003), found a continuous decline in the number of committees with insider participation during his study period from 1991 to 1997. In addition, they found no relationship between affiliated directors on the CC and CEO compensation.

The results of the following studies support the main argument of this paper by suggesting a motivation for CEOs to actively influence the composition of the compensation committee. O’Reilly, Main and Crystal (1988) report a positive relationship between average salary of compensation committee members and CEO salary and bonus. They attribute this result to a social comparison process that leads compensation committee members to use their own compensation as a reference in determining the compensation for the CEO. Main, O’Reilly and Wade (1995) found support for a social influence perspective even after controlling for a social comparison perspective. They showed that both having a CEO appointed before the CC chairman and having a CEO on the nominating committee has a positive relationship with CEO compensation measured as salary and bonus. This argument was extended in the study by Belliveau, O’Reilly and Wade (1996).
CEO Influence

There is ample empirical evidence that CEOs influence various aspects of their own pay. Focusing on the role of compensation committees, O’Reilly, Main, and Crystal (1988), Main, O’Reilly, and Wade (1995), and Newman and Mozes (1997) suggested the existence of the influence as did Finkelstein and Hambrick (1989) and Bebchuk and Fried (2004). Furthermore, researchers have found additional influence strategies used by CEOs for the purpose of increasing pay. O’Reilly et al. (1991) and Wade, Porac and Pollock (1997) argue that CEOs can influence their compensation by hiring outside compensation consultants and making them suggest a large pay increase. Pollock, Fischer and Wade (2002) found a positive relationship between CEO power and the likelihood that executive options are re-priced, which increases the potential pay-out for the CEO. A recent study by Lie (2005) found that CEOs have become effective at timing stock option awards to their advantage. Zhang, Bartol, Smith, Pfarrer and Khanin (2008) found that CEO incentives are positively related to earnings manipulations. Westphal (1998) showed that CEOs used social influence tactics such as persuasion and ingratiation to counteract the effects of increased structural board independence on corporate policy and strategy. They state “It is clear that CEOs use their influence for their own purposes, even in situations that do not necessarily appear to afford them power (i.e. having a strong board)”.

In sum, there is a lot of evidence that supports the main argument in this paper, that CEOs will find ways to increase their compensation. As I suggest, influencing the composition of the compensation committee is one strategy that has not been subjected to empirical study.

This study differs from previous research on executive compensation in a number of important ways. First, limited previous research on the role compensation committees play in the compensation setting process has focused on the effect of various characteristics of the compensation committee on components of executive compensation (Anderson & Bizjak, 2003; Newman & Mozes, 1999; Vafeas, 2003). These studies have mainly looked at the effect insiders on the compensation committee have on CEO compensation. They concluded that overall insider participation on the compensation committee is unrelated to CEO pay. In this study, I analyze one aspect in the compensation setting process, i.e. whether underpayment motivates CEOs to change the composition of the compensation committee. Second, the limited prior research involving compensation committees uses samples of large firms from various industries (Anderson and Bizjak 2003; Daily et al. 1998; O’Reilly et al. 1988). This study includes a sample of small and large firms from the manufacturing sector.
THEORY AND HYPOTHESES

The main theoretical basis for the argument in this paper is the managerial power perspective (Herman, 1981; Finkelstein, 1992). This theory states that powerful CEOs are able to promote the practices and policies that are beneficial to themselves. This is, among others, facilitated by persisting norms on boards to support the CEO (Herman, 1981; Alderfer, 1986; Westphal & Stern, 2006). As I have shown in previous discussions, this perspective is relevant to the identification of factors that influence compensation committee turnover. Previous research has convincingly shown that CEOs influence various aspects of compensation and other outcomes that are favorable to themselves.

Applying a managerial power perspective, I expect that given the opportunity, CEOs will try to influence their own compensation (Elhagracey, Harrison & Buchholz, 1999). One important mechanism through which this can be accomplished is through changes in the composition of the compensation committee. Previous research supports the argument that CEOs have an interest in influencing decisions about membership on the compensation committee, considering the importance this committee plays in determining compensation (Bebchuk & Fried, 2004). There is empirical evidence that characteristics of directors and board structure have a positive effect on the compensation awarded to the CEO. I expect that CEOs will use their influence and change membership on the compensation committee with the underlying assumption that the new compensation committee members will be selected by the CEO based on their potential to favorably reward the CEO. CEOs are generally in control of the director-nominating process (Bebchuk & Fried, 2004; Mace, 1971). CEOs are motivated to select directors who will be sympathetic to themselves. Research on boards has shown that the proportion of directors on the board appointed by a CEO can increase the support for the CEO’s preferences (Main, O’Reilly, & Wade, 1995; Westphal & Zajac, 1994). As previously discussed, O’Reilly et al. (1988) showed that the salaries of CEOs on the compensation committees were positively related to the pay of the CEO of the focal firm.

Main, O’Reilly & Wade (1995) investigated the impact of social influence on CEOs’ compensation. They found that having a CEO who is a member of the nominating committee, or who was appointed to the board before their compensation committee chair, is significantly related to compensation. This result was found even after controlling for social comparison processes.
In addition, one of the tools that CEOs can take advantage of to influence their compensation is the norm of reciprocity (Cialdini, 1993; Gouldner, 1960). Most people feel a sense of obligation after they have received a favor from someone or after someone has treated them kindly. The norm of reciprocity states that people feel strongly obligated to repay favors, gifts, invitations, and the like. This norm is also played out in the relationship between the CEO and compensation committee members (Bebchuk & Fried, 2004). Compensation committee members who have been invited to serve on the board by the CEO feel obligated to repay the CEO for this favor, which I expect will result in a more favorable compensation contract. Compensation committee members who are CEOs themselves will identify with management and will design a pay package for the CEO that resembles the pay package they receive at their own firm (Westphal and Zajac, 1997). Westphal and Stern (2006) find widespread norms for directors to support the CEO.

CEO Underpayment

Based on the managerial power perspective discussed above, I expect that CEOs will be motivated to change compensation committee membership if they perceive to be underpaid. A change in compensation committee membership has the potential to increase CEO compensation, because it is expected that the CEO selects new members of the compensation committee that are more loyal and responsive to the interests of the CEO (Westphal & Zajac, 1995). Predictions from equity theory come to the same conclusions. According to equity theory (Adams, 1963, 1965), individuals have a need to evaluate their own opinions, attributes, and abilities, and they compare themselves to others who are seen as similar in some way (Goodman, 1974). Specifically, equity theory (Adams, 1963, 1965) states that individuals assess their output/input ratio against the output/input ratio of a comparison other. If they then perceive their output/input ratio is unequal, then inequity exists. A perception of inequity will then lead to attempts to restore equity. Restoring equity can happen through various processes. Equity can be restored by cognitively distorting inputs or outcomes, by changing the reference group used for comparison, by actually changing the input or output, or by terminating the relationship (i.e. leaving the organization). I argue that by changing membership on the compensation committee the CEO can in effect influence his output/input ratio by increasing his outcome (compensation) and as a result restore equity. This argument leads to the following hypothesis.

Hypothesis 1: Firms in which CEOs are under-paid will have higher subsequent turnover in the compensation committee than firms in which CEOs are not under-paid.
Board commitments of CC members

The main argument studied has been whether directors with multiple directorships are less able to effectively monitor management because of time constraints to fully engage in each of their director positions. There is some disagreement about the consequences of these multiple directorships. Ferris, Jagannathan and Pritchard (2003) found no relationship between “busy” boards and subsequent securities fraud lawsuits and firm performance. On the other hand, Core, Holthausen and Larcker (1999) found evidence that CEO compensation is higher when outside directors are older and serve on more than three other boards. They argue that these boards might not be effective monitors. The Council of Institutional Investors (CII) and the National Association of Corporate Directors (NACD) propose limitations to deal with the problem. The CII recommends that directors with full-time jobs should not serve on more than two other boards, whereas the NACD suggests that directors serve on no more than three or four other boards. Bebchuk & Fried (2004) cite a study that found that in 2001 independent directors spent only about 100 hours a year for each board they served on. Independent directors (now the norm on compensation committees) usually have their own full-time positions and too many additional board appointments restrict the time and attention these directors can devote to monitor effectively. They will spend less time scrutinizing the compensation contracts, and therefore are more likely to go along with the proposal and the wishes of the CEO, considering the general norm of deference to the CEO (Westphal & Stern, 2006). It follows that CEOs will prefer compensation committee members who have more outside commitments and I therefore expect compensation committee members who have fewer outside commitments to exhibit higher turnover.

Hypothesis 2: The number of busy compensation committee members will be negatively related to turnover in the compensation committee.

CEO turnover

Based on the norm of reciprocity, I expect that a new CEO will attempt to change the membership of the compensation committee in order to have members that are more likely to support the CEO. CEOs are more likely to select directors for the compensation committee who can be expected to be loyal to the CEO and who will subsequently reward the CEO more favorably (Westphal and Zajac, 1995). They may be less likely to challenge the CEO if they feel indebted to the CEO for their appointment (Daily & Dalton, 1995; Wade, O’Reilly & Chandratat, 1990). Yermack (2004) looked at director turnover and found that the likelihood of director turnover increased if the CEO who appointed the director was no longer in office. I therefore formulate the following hypothesis.

Hypothesis 3a: CEO turnover is positively related to subsequent turnover in the compensation committee.
Turnover of the compensation committee chair

Even in circumstances in which the CEO may not affect significant changes in the compensation committee, I would expect that a change will occur in what is generally considered to be the most important position on the compensation committee, the chair position.

**Hypothesis 3b**: CEO turnover is positively related to subsequent turnover in the compensation committee chair position.

Firm performance

In cases of high firm performance, compensation committee members have no trouble to justify high compensation for the CEO. However, in low performing firms the CEO will have increased interest in handpicking members of the compensation committee to ensure adequate compensation, mainly because it takes more effort on the part of the compensation committee to justify high compensation. Directors who are selected by the CEO to be on the board and on the compensation committee are more likely to put forth this effort, invoking the norm of reciprocity (Gouldner, 1960; Cialdini, 1993). In addition, directors and compensation committee members have a higher incentive to leave their board position if firm performance is low. Poor firm performance, especially performance relative to industry, puts pressure on the whole board to take action. Replacing directors is a highly visible action. Turnover in the general board subsequently may affect turnover in the compensation committee. Crutchley, Garner, and Marshall (2002) found that directors are more likely to leave if firm performance is poor. This result was supported by Yermack (2004). In an investigation on the incentives and disincentives received by outside directors he found that the personal financial benefits, including increased compensation, equity ownership, and additional directorships, increased as the market caps of the firms increased. However, when the firms performed poorly, the personal financial benefits suffered and the directors were more likely to leave.

In this study it is not possible to distinguish between the hypothesized influence of the CEO (CEO is more likely to want to have supportive board members on the compensation committee in a situation – like poor performance – where compensation committee members have to put out extra effort to justify high compensation), and the tendency of board members to leave a poor performing company (Crutchley, et al. 2002 and Yermack, 2004). However, since the compensation committee is made up of only a
fraction of all directors on the whole board, even if some directors leave I expect that the CEO can still use his influence to select directors for the compensation committee from the remaining board members.

**Hypothesis 4**: Firm performance is negatively related to CC turnover.

**CEO power**

As previously discussed, the extent of underpayment provides the motivation to change the compensation committee. However, the ability of the CEO to influence the composition of the compensation committee depends on the power attributed to the CEO. The main sources of CEO power that have been extensively used in previous research are CEO duality, CEO tenure, and CEO stock ownership (Finkelstein & Hambrick, 1989; Finkelstein, 1992; Elhagrasey, et al., 1988). Previous research has shown that managerial power also stems from the procedure for selecting directors (Pfeffer, 1981, Bebchuk & Fried, 2004). Pfeffer (1972, p. 220) argues “The selection procedure by which board members are chosen guarantees that, in most cases, board members are handpicked by management. In many practical respects, management is, therefore, in control of the board”. Not much seems to have changed, and Pfeffer’s statement has not been refuted (Bebchuk & Fried, 2004). Westphal and Zajac (1995) found that relatively powerful CEOs were better able to appoint demographically similar directors, who in turn are more likely to support the CEO. This introduces the following hypothesis.

**Hypothesis 5**: The proposed relationships in hypothesis 1 will be stronger for more powerful CEOs.

In summary, the hypotheses developed in the previous sections are based on a managerial power perspective and equity theory. I argue that CEOs, if given the opportunity, will find ways to “use” the compensation committee and its members to favorably influence compensation.

**RESEARCH DESIGN, DATA AND METHODS**

**Sample and Data Collection**

The main sample consists of 447 firms from the manufacturing sector (SIC categories 2000 through 3999). In order to be included in the study a firm needed to meet the following criteria. Data on CEO compensation and board of directors membership had to be available from S&P Execucomp and the Risk Metrics Directors database for 2003 through 2005. In addition, I
excluded companies that had a turnover in the CEO position between 2004 and 2005 (66 firms). However, I did include compensation in these firms in all the calculations related to over/underpayment and relative compensation.

All independent variables are measured for 2004, and compensation committee turnover is measured as turnover in the compensation committee that occurred between 2004 and 2005. I excluded all firms that experienced a turnover in the CEO position between 2004 and 2005 because my theoretical arguments assumes that the CEO was in office in order to be able to influence compensation committee turnover between 2004 and 2005. Also, since I measure CEO turnover between 2003 and 2004 I needed to restrict my sample to firms that have information available in S&P Execucomp for 2003.

Corporate proxy statements, the basis for data collection in both S&P Execucomp and Risk Metrics are usually filed with the SEC a few months after the end of the fiscal year. S&P Execucomp and Risk Metrics director data report yearly data differently. S&P Execucomp considers a year to include all firms whose fiscal year ends from June 1st, through May 31st the following year. For example: S&P assigns to year 2004 all data that is collected from proxy statements for firms whose fiscal year ends between June 1st 2004 and May 31st, 2005. However, Risk Metrics collects data for the year 2004 based on the meeting date of the annual shareholders meeting. I made the appropriate adjustments to align both data sets.

I also filled in missing data from the appropriate proxy statements that are available on-line in the EDGAR database from the SEC. Missing data was filled in for CEO age, dates of when the CEO became CEO, shares owned by the CEO and missing compensation committee chair identification. The following section explains all variables used in the analysis. For a summary please see Table 3.2.

**Dependent Variables**

I used several measures of compensation committee turnover. I measured compensation committee turnover as a dichotomous variable that takes on 1 if there is any change in the membership of the compensation committee between 2004 and 2005 (CC Change). In addition, I measure compensation committee turnover as the number of compensation committee members who joined the compensation committee between 2004 and 2005. I measured turnover in the
compensation committee chair position by assigning it a value of 1 if the compensation committee chair in 2004 is different from the compensation committee chair in 2005.

Independent Variables

I use several measures to try to capture the extent of CEO under-payment. Total CEO compensation includes all compensation earned and granted in 2004 (salary, bonus, other annual, restricted stock grants, all other, and Black-Scholes value of option grants). I am using a log transformation of total compensation.

CEO underpayment is derived from the residuals of an OLS regression, including various factors that influence compensation on the log of compensation. I included the following independent variables: firm size (log of assets), CEO tenure, CEO tenure squared, percentage of outsiders on the board, whether CEO also holds the chairman position, CEO ownership, return on equity, 1 year total return to shareholders, return on assets, and industry dummies for each 3-digit SIC category). The result of this regression is shown in the Appendix (adjusted R-squared is 0.5536). A positive residual means that the actual compensation received by the CEO was larger than was predicted based on the factors in the regression, and therefore means that the CEO was overpaid. The reverse is true for under-payment.

Using the residuals from this regression, I created a variable that reflects the extent of underpayment (Wade, O’Reilly & Pollock, 2006). Following Wade et. al (2006), I created the variable CEO under-payment by setting it equal to the residual if the residual was negative and setting it to zero otherwise. In addition, I reversed the sign of the CEO underpayment variable to make the interpretation clearer (Wade et. al. 2006). As a result, larger positive values mean that the extent of CEO under-payment is larger.

I measured CEO compensation relative to industry by creating a ratio of log compensation to the average log compensation in the industry (calculated by excluding the focal firm). Similarly, I measured CEO raise relative to industry by creating the ratio of the log of raise in total compensation between 2003 and 2004 and dividing it by the log transformation of the average raise in the industry, again, taking out the focal firm.

I used a fourth measure of compensation relative to the industry, compensation relative to size. This measure captures over- and underpayment by considering the size of the company. I calculated a ratio of log compensation divided by the log of total assets. I then created an industry average of this ratio, excluding the focal firm, and then created the measure of under-
and overpayment by dividing the ratio of compensation to size by the industry average of this ratio.

In all three previous measures of over- and underpayment I measured industry averages based on 2-digit SIC categories. For some categories I had only a few firms in my sample. In order to make industry averages for these more meaningful I combined these 2-digit SIC categories with other 2-digit SIC categories. For details, please refer to Table 1. As a result, I have at least 9 firms in each of the 2-digit SIC categories.

In equity theory, fairness and equity perceptions are dependent upon social comparisons with a referent. Identifying the appropriate referent has been a problem from the beginning (Bazerman, M.H., Schroth, H.A., Shah, P. P., Diekmann, K.A., Tenbrunsel, A.E. 1994; Summers & DeNisi, 1990). A guiding principle has been that people mainly select referents who are perceived as similar on some dimension (same-sex, similar attributes, same job) (Kulik and Ambrose, 1992). Although it would be desirable to include actual referents used, this is not possible in the context of this study. I therefore need to make an assumption about the likely referent group for CEOs. I consider the relevant comparison group for CEOs to be other CEOs in the same industry, since this is the primary labor market in which CEOs operate. Previous studies have also used industry comparisons (Balsam, Miharjo, 2007).

Table 3.1. Sample Description (N = 447)

<table>
<thead>
<tr>
<th>SIC</th>
<th>Description of SIC</th>
<th>Nr of firms</th>
<th>Combined with</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Food &amp; kindred products-mfrs</td>
<td>27</td>
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</tr>
<tr>
<td>21</td>
<td>Tobacco products-mfrs</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
<td>22</td>
<td>Textile mill products-mfrs</td>
<td>3</td>
<td>39</td>
</tr>
<tr>
<td>23</td>
<td>Apparel &amp; otr finished products-mfrs</td>
<td>7</td>
<td>39</td>
</tr>
<tr>
<td>24</td>
<td>Lumber &amp; otr finished products-mfrs</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>25</td>
<td>Furniture &amp; fixtures-mfrs</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Paper &amp; allied products-mfrs</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Printing publishing &amp; allied industries</td>
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<td></td>
</tr>
<tr>
<td>28</td>
<td>Chemicals &amp; allied products-mfrs</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Petroleum refining &amp; related inds-mfrs</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Rubber &amp; miscellaneous plastics-mfrs</td>
<td>7</td>
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</tr>
<tr>
<td>31</td>
<td>Leather &amp; leather products-mfrs</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>32</td>
<td>Stone clay glass &amp; concrete prods-mfrs</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>33</td>
<td>Primary metal industries-mfrs</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>
CEOs are measured as the number of years the CEO held the CEO position as of the end of fiscal year 2004, which is anywhere between June 1st, 2004 and May 31st, 2005.

The percentage of busy compensation committee members is calculated as the percentage of compensation committee members who serve on more than 2 additional corporate board. I consider directors to be busy if they serve on three or more boards of publicly traded firms. I do not include board seats in private firms, charitable foundations or non-profit organizations. Considering three board seats as the cut-off for being busy reflects the recommendation by the Council of Institutional Investors that directors should sit on no more than two boards. This is also consistent with prior research (Core et al. 1999, Ferris et al. 2003, and Fich & Shivdasani, 2006). Risk Metrics includes the number of additional corporate boards the directors are members. This information comes from corporate proxy statements, and individual firms differ in how much disclosure is provided with respect to biographical information for directors. As such, the measure for additional board commitments may not be consistent for all companies.

CEO turnover. This variable is measured as a dichotomous variable that is coded as 1 if the designated CEO for 2004 differs from the one in 2003. This information is extracted from Execucomp.

Firm Performance. I am using two measures of firm performance: profit margin as an accounting measure and total 1 year return to shareholders as a measure of market performance. Both are measured for 2004 and adjusted for industry averages.

CEO power is constructed as a composite index comprised of CEO duality, CEO ownership and CEO tenure. These indicators of CEO power have been widely used in previous research (Finkelstein, 1992). CEO duality is a dichotomous variable that is 1 if the CEO is also Chairman of the Board. CEO tenure is measured as the number of years the CEO held his position. CEO stock ownership is measured as the percentage of total shares outstanding. CEO stock ownership includes shares over which the CEO has sole or shared voting power. I create CEO power by following the procedure outlined in Cannella & Shen (2001) and Zajac & Westphal (1996b). I
standardized CEO tenure and CEO ownership, added these two measures together and then added CEO duality. As a final step, I standardized this measure. The resulting value is the CEO power index used in the analysis. In addition to this index, I also used all three indicators of power (CEO duality, CEO ownership, and CEO tenure) individually in the models testing hypothesis 5.

Control Variables

Because turnover in the compensation committee may be subject to the influence of other factors, several control variables were included that have been found to influence director turnover (Arthaud-Day et al. 2006; Yermack, 2004).

Age of directors. I expect that director age has a positive impact on turnover in the compensation committee (Yermack, 2004). This variable is calculated as the percentage of compensation committee members who are at least 62 years old and therefore captures a possible retirement effect.

Average tenure of compensation committee members on the board. This is the average number of years the compensation committee members served on the board. I was not able to calculate the tenure on the compensation committee since the necessary information is not included in the Risk Metrics Database that I used for all director information. I expect a positive relationship with compensation committee turnover.

Board Size. I expect a positive relationship between Board Size and compensation committee turnover. A larger board size provides more opportunities to change the composition of the compensation committee since more people are available to fill seats on the compensation committee.

Firm Size was measured as the log of total assets. To control for industry level effects on compensation committee turnover I included dummy variables for the 2-digit SIC categories in my sample.
### Table 3.2. Variable Description

<table>
<thead>
<tr>
<th><strong>Dependent Variables</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CC change</td>
<td>1 if there was any change in the composition of the compensation committee between 2004 and 2005, 0 if there was no change</td>
</tr>
<tr>
<td>CC chair change</td>
<td>1 if the compensation committee chair in 2005 is different from the compensation committee chair in 2004, 0 if there was no change</td>
</tr>
<tr>
<td>CC additions</td>
<td>The number of compensation committee members who are new in 2005</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Independent Variables</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Underpayment</td>
<td>Residual from a regression of several factors on total compensation</td>
</tr>
<tr>
<td>Relative compensation</td>
<td>Ratio of log of compensation to log of industry average compensation</td>
</tr>
<tr>
<td>Relative raise</td>
<td>Ratio of log of raise to log of industry average raise</td>
</tr>
<tr>
<td>Relative compensation to size</td>
<td>Ratio of log of compensation to log of size relative to industry average of this ratio</td>
</tr>
<tr>
<td>CEO turnover</td>
<td>1 if there was turnover between 2003 and 2004, 0 if there was no turnover</td>
</tr>
<tr>
<td>CEO tenure</td>
<td>Tenure of the CEO in years at end of fiscal year 2004</td>
</tr>
<tr>
<td>CEO duality</td>
<td>1 if the CEO also held the chair position on the board, 0 if he/she did not</td>
</tr>
<tr>
<td>CEO ownership</td>
<td>Percentage of total shares outstanding owned by the CEO</td>
</tr>
<tr>
<td>CC shorter tenure</td>
<td>Percentage of compensation committee members who have shorter tenure on the board than the CEO</td>
</tr>
<tr>
<td>CC busy percentage</td>
<td>Percentage of compensation committee members who have at least 2 other corporate board commitments</td>
</tr>
<tr>
<td>CEO power</td>
<td>Composite index of CEO tenure, CEO duality and CEO ownership</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Control Variables</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Board size</td>
<td>Total number of board members in 2004</td>
</tr>
<tr>
<td>CC 63 and up</td>
<td>Percentage of compensation committee members who are at least 63 years old in 2004</td>
</tr>
<tr>
<td>CC average tenure</td>
<td>Average tenure of compensation committee members on the board in 2004</td>
</tr>
<tr>
<td>Profit margin</td>
<td>Net income divided by total sales in 2004</td>
</tr>
<tr>
<td>Return to shareholders</td>
<td>1 year total return to shareholders in 2004</td>
</tr>
</tbody>
</table>
RESULTS

Since compensation committee turnover was measured first as a dichotomous dependent variable, it required analysis by logistics regression. I also use logistic regression analysis when investigating the probability of turnover in the compensation committee chair position (another dichotomous dependent variable). In addition, I measured compensation committee turnover as the number of directors that joint between 2004 and 2005. For this analysis I use negative binomial regression. This method is appropriate since the variance exceeded the mean for this dependent variable (McDonald, Khanna & Westphal, 2008; Von Nordenflycht, 2007). Results of this analysis are not shown. No measure of underpayment was significantly related to the number of new compensation committee members, and none of the other hypotheses was supported.

Table 3.3 provides descriptive statistics and correlations. Table 3.4 shows the results related to compensation committee turnover measured as a dichotomous variable indicating whether any change in the composition of the compensation committee occurred between 2004 and 2005. All the models include controls for 2-digit SIC categories, coefficients are not shown. Model 1 is the baseline model including all the control variables. Models 2 through 5 show results related to testing hypotheses 1, 2, 3a and 4. I found significance for two measures of relative compensation. Models 2 through 5 in table 3.3 show that relative compensation and relative compensation to size are significant, however, contrary to what I predicted. In hypothesis 1, I predicted that having an underpaid CEO (low relative compensation) will lead to subsequent changes in the compensation committee. The results show that higher relative compensation and higher relative compensation to size both increase the probability of a change occurring in the composition of the compensation committee during the following year. This means that CEOs whose compensation relative to industry averages is high and whose compensation relative to the size of their company is high, have a higher probability of a change occurring in the compensation committee in the subsequent year. It could be that higher compensation is an indicator of power, and CEOs use this power to affect changes in the compensation committee that potentially leads to even more favorable compensation.

Table 3.3. Descriptive Statistics and Correlations

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<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
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<th>3</th>
<th>4</th>
<th>5</th>
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<td>1.000</td>
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<td></td>
<td></td>
<td></td>
</tr>
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<td>2 CC 63 and up</td>
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<td>0.038</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 CC average tenure</td>
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<td>7.86</td>
<td>4.49</td>
<td>0.055</td>
<td>0.345</td>
<td>1.000</td>
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<td></td>
</tr>
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<td>---</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
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<td>18.42</td>
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<td>0.014</td>
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<td>0.098</td>
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<td>0.575</td>
<td>0.136</td>
<td>0.039</td>
<td>0.076</td>
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<td>-0.077</td>
<td>0.039</td>
<td>0.089</td>
<td>0.080</td>
<td>-0.070</td>
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<td>445</td>
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<td>-0.071</td>
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<td>-0.022</td>
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<td>0.016</td>
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<td>CEO turnover</td>
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<td>0.33</td>
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<td>-0.071</td>
<td>0.023</td>
<td>0.012</td>
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<td>-0.268</td>
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<td>0.076</td>
<td>-0.043</td>
<td>-0.095</td>
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<td>0.041</td>
<td>-0.035</td>
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<td></td>
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<tr>
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<td>0.201</td>
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<tr>
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<td>0.123</td>
<td>-0.041</td>
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232
### Table 3.4. Logistic Regression for Change in the Compensation Committee.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1.000</td>
<td>1.000</td>
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<tr>
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<tr>
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</tbody>
</table>

**Board size**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
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</table>

**CC 63 and up**

<table>
<thead>
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<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
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<td>-0.004</td>
<td>-0.004</td>
<td>-0.004</td>
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<tr>
<td>(0.004)</td>
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**CC average tenure**

<table>
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<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
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<tr>
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<td>(0.025)</td>
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**Profit margin**

<table>
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<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
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<td>(0.006)</td>
<td>(0.007)</td>
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**Return to shareholders**

<table>
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<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
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<tr>
<td>(0.003)</td>
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**Firm size**

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<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.029</td>
<td>-0.252</td>
<td>-0.252</td>
<td>0.135</td>
<td>0.124</td>
<td></td>
</tr>
<tr>
<td>(0.087)</td>
<td>(0.116)</td>
<td>(0.116)</td>
<td>(0.124)</td>
<td>(0.124)</td>
<td></td>
</tr>
</tbody>
</table>

**Relative compensation**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.994 *</td>
<td>2.892 *</td>
<td>(1.224)</td>
<td>(1.211)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Relative comp to size**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.752 *</td>
<td>2.670 *</td>
<td>(1.136)</td>
<td>(1.123)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CEO tenure**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.094 *</td>
<td>-0.093 *</td>
<td>(0.041)</td>
<td>(0.041)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CEO tenure squared**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.002</td>
<td>0.002</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Models 3 and 5 in table 3.4 show that the percentage of compensation committee members with shorter board tenure than the CEO (CC shorter tenure), is significantly related to the probability of a subsequent change in the compensation committee. This indicates that a higher percentage of compensation committee members with shorter tenure than the CEO reduces the probability of a change in the compensation committee. This result is in agreement with previous research that shows that CEOs select new board members that are more inclined to support the CEO (Westphal and Zajac, 1995). It is assumed that the CEO selected these compensation committee members and therefore already has their support and subsequently less incentive for further changes.

Models 3 and 4 in table 3.4 show that CEO tenure is significantly related to the probability of a change occurring in the compensation committee. CEO tenure shows a U-form relationship with the probability of a change in the compensation committee. Initially, the probability of a change in the compensation committee decreases, but after 24 years as CEO, the probability of a change in the compensation committee increases. Therefore, for most CEOs in the sample, tenure is negatively related to the probability of a change in the compensation committee.

As the correlation matrix shows in table 3.3, CEO tenure and CC shorter tenure are highly correlated (0.65). Both variables are only significant if included in the models individually, and not together. Both can be thought of as indicators of power. CEO tenure has been a standard measure of power (Finkelstein, 1992). If CEOs gain more power as their tenure increases, they...
will be more effective in influencing decisions about their compensation anyway and have less incentive and need to change the composition of the compensation committee to achieve the same goal (more favorable compensation). On the other hand, if the CEO has been in office longer, he had more chances to appoint new directors, and therefore, the percentage of compensation committee members with shorter tenure will also be higher. Both measures of CEO power (CEO tenure and CC shorter tenure) show results contrary to predictions. Longer tenure and a higher percentage of compensation committee that have been appointed during the tenure of the CEO reduce the probability of a change in the compensation committee.

I find no support for hypotheses 2, 3a and 4. The percentage of compensation committee members with more than two other board memberships, prior CEO turnover and firm performance has no effect on compensation committee turnover. It could very well be that potential effects of these variables don’t show up within a year (my timeframe), but instead take longer to materialize in changes in the compensation committee.

Hypothesis 5 that predicted that the relationship between underpayment and change in the compensation committee is stronger for more powerful CEOs was not supported in any of the models. Neither the composite power index, nor any of the individual indicators of power (CEO tenure, CEO duality, CEO ownership, CC shorter tenure) were significant in interactions with underpayment.

I used logistic regression analysis to test hypothesis 3b which stated that CEO turnover is positively related to subsequent turnover in the compensation committee chair position. The results are shown in Table 3.5. This analysis was conducted only for firms who had a compensation committee chair position identified (394 firms). Model 1 again is the baseline model and includes only the control variables. I find no support for hypothesis 3b that stated that prior CEO turnover is related to a subsequent change in the CC Chair position. Model 2 through Model 5 are shown to provide a comparison to the models with change in compensation committee as the dependent variable shown in table 3.4. Only one factor, the percentage of compensation committee members whose board tenure is shorter than the tenure of the CEO (CC shorter tenure), is significantly related to turnover in the compensation committee chair position. This shows that turnover in the compensation committee chair position is less likely if a larger percentage of compensation committee members received their board seat after the CEO became CEO. This result is in line with the general argument that CEOs appoint new directors that are likely to be supportive (Westphal and Zajac, 1995), and the more directors the CEO was able to appoint, the more likely there is already a compensation committee chair that is supportive of the CEO.
With respect to the control variables, only firm size had a significant effect in the models with change in compensation committee as the dependent variable (table 3.4). Firm size (measured as the logarithm of assets) is negatively related to the probability of a change occurring in the compensation committee. In other words, larger companies have a lower probability of a change occurring in the compensation committee between 2004 and 2005. There are several possible explanations for this finding. It could be that a position on the compensation committee of a large firm increases the reputation of the director and these directors are therefore less likely to leave or willing to move off the compensation committee. It could also be that being a member of the compensation committee of a larger corporation necessitates greater specific knowledge about compensation issues, since larger corporations are more likely to be the target of media attention regarding CEO compensation. Therefore, compensation committee members need to invest more time and effort to fulfill their role and as a consequence, exhibit lower turnover.

Table 3.5. Logistic Regression Results for Change in Compensation Committee Chair

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board size</td>
<td>0.088</td>
<td>0.087</td>
<td>0.071</td>
<td>0.089</td>
<td>0.073</td>
</tr>
<tr>
<td></td>
<td>(0.084)</td>
<td>(0.085)</td>
<td>(0.086)</td>
<td>(0.085)</td>
<td>(0.086)</td>
</tr>
<tr>
<td>CC 63 and up</td>
<td>0.0006</td>
<td>0.0003</td>
<td>-0.0005</td>
<td>0.0004</td>
<td>-0.0003</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>CC average tenure</td>
<td>-0.014</td>
<td>-0.014</td>
<td>-0.041</td>
<td>-0.014</td>
<td>-0.040</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.034)</td>
<td>(0.037)</td>
<td>(0.034)</td>
<td>(0.037)</td>
</tr>
<tr>
<td>Profit margin</td>
<td>0.016</td>
<td>0.017</td>
<td>0.021</td>
<td>0.016</td>
<td>0.021</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.015)</td>
<td>(0.016)</td>
<td>(0.014)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Return to shareholders</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Firm size</td>
<td>-0.154</td>
<td>-0.113</td>
<td>-0.143</td>
<td>-0.197</td>
<td>-0.235</td>
</tr>
<tr>
<td></td>
<td>(0.118)</td>
<td>(0.154)</td>
<td>(0.156)</td>
<td>(0.164)</td>
<td>(0.168)</td>
</tr>
<tr>
<td>Relative compensation</td>
<td>-0.874</td>
<td>-0.968</td>
<td></td>
<td>-0.403</td>
<td>-0.434</td>
</tr>
<tr>
<td></td>
<td>(1.620)</td>
<td>(1.650)</td>
<td></td>
<td>(1.473)</td>
<td>(1.495)</td>
</tr>
<tr>
<td>Relative comp to size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO turnover</td>
<td>0.274</td>
<td>-0.239</td>
<td>0.268</td>
<td>-0.244</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.386)</td>
<td>(0.445)</td>
<td>(0.386)</td>
<td>(0.443)</td>
<td></td>
</tr>
<tr>
<td>CC shorter tenure</td>
<td></td>
<td></td>
<td></td>
<td>-0.011 *</td>
<td>-0.011 *</td>
</tr>
</tbody>
</table>

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DISCUSSION AND CONCLUSIONS

This study is a first attempt to identify factors that influence compensation committee turnover using a managerial power perspective and equity theory. I hypothesized that CEOs who are relatively underpaid as compared to their industry peers will try to influence the composition of the compensation committee in order to receive more favorably compensation in the future, and as a consequence, this will lead to a higher probability of turnover in the compensation committee. Contrary to expectations, I find that higher compensation relative to industry peers leads to a higher probability of turnover in the compensation committee. Several things could explain this finding. It could be that CEOs don’t necessarily look at the compensation other CEOs receive, but instead try to get as much as they can get away with anyway, with the constraint of staying below “outrage” costs of their compensation (Bebchuck and Fried, 2004). If this is taken into account together with the argument that higher relative compensation to industry is although thought of as an indicator of power, I could expect highly compensated CEOs to use their influence to change the composition of the compensation committee, since it takes more effort to further increase compensation of an already well paid executive.

Like others, this study has several limitations. First, the motivation to influence compensation committee membership is inferred rather than measured directly. New insights and understanding of the influence processes between CEO and members of the compensation committee could be obtained by using interviews and surveys to gain a better understanding of the inner workings of the compensation committee.

Second, there are several methodological problems with measuring under and over payment. It is very difficult to accurately define what constitutes over- or underpayment (Finkelstein, Hambrick & Cannella, 2009). Measurement of this variable depends first on the choice of who to

### Table 1: Regression Results

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>z-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-1.912</td>
<td>1.169</td>
<td>-1.62</td>
<td>0.107</td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>-177.16</td>
<td>1.489</td>
<td>-119.38</td>
<td>0.000</td>
</tr>
<tr>
<td>Chi-square</td>
<td>12.75</td>
<td>13.56</td>
<td>12.03</td>
<td>0.000</td>
</tr>
<tr>
<td>D.f.</td>
<td>390</td>
<td>18</td>
<td>18.00</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>388</td>
<td>20</td>
<td>20.00</td>
<td>0.000</td>
</tr>
</tbody>
</table>

* * p≤.05; ** p≤.01; *** p≤.001
Standard errors are in parentheses.
use as a comparison. Several possibilities present itself: CEOs in the same industry (as was chosen in this study), CEOs in firms of similar size, CEOs from the same age-cohort or tenure-cohort, independent of industry, CEOs with the same educational back-ground. I made the assumption that most CEOs are likely to compare themselves to other CEOs in the same industry. Future work is needed to more accurately assess the appropriate referent used by CEOs. In addition, I was only able to include monetary rewards to assess underpayment. I was not able to account for “payments” in the form of prestige, perks like company planes that may reduce the motivation of a CEO to change compensation committee membership in order to receive more compensation in the future. However, it is well established that compensation for CEOs is most important because of its symbolic value (Lawler, 1966). I therefore feel confident, that focusing on monetary rewards captures at least a large percentage of the total reward received by CEOs.

This study raises more questions than it answers and thus identifies potential for future research. Overall, little is known about how membership on board committees is determined, and about the inner workings of board committees. Future work in this area would provide an opportunity to increase our understanding of the dynamics and workings of board committees. Future work could also look at the possibility that the proposed influence of the CEO on compensation committee composition is more applicable to compliant boards and not so much to active boards (Westphal & Zajac, 1998).

I looked at only one influence process that CEOs may use to positively influence their compensation. The limited findings were contrary to predictions. It would be interesting to be able to include other ways in which CEOs can influence their compensation since these various mechanisms could be substitutes for one another.

APPENDIX

Results of Regression for CEO Compensation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm size</td>
<td>0.405</td>
<td>***</td>
</tr>
<tr>
<td>CEO tenure</td>
<td>0.007</td>
<td></td>
</tr>
<tr>
<td>CEO tenure squared</td>
<td>-0.0001</td>
<td></td>
</tr>
</tbody>
</table>
Percentage of outsiders on board 0.779 **
(0.289)
CEO-duality -0.033
(0.079)
ROE -0.0002
(0.001)
Total return to shareholders 1 yr 0.0001
(0.001)
ROA 0.014 **
(0.007)
CEO ownership -0.039 ***
(0.008)
Constant 3.525
(0.701)
(1.169)
Adj R-squared 0.5536
D.f. 106
N 442

* p≤.05; **≤.01; ***≤.001
Standard errors are in parentheses.
Industry controls (dummies for 3-digit SIC categories) are not shown.

REFERENCES


OUTCOMES OF HEALTH INFORMATION TECHNOLOGY UTILIZATION IN NURSING HOMES

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Karabi Bezboruah, University of Texas at Arlington, bezborua@uta.edu

ABSTRACT

Using a mixed methods approach, we analyzed the impact of electronic medical records on service quality in nursing homes. Nursing home executives reported rather large increases in the quality of data they used, small increases in the speed at which staff were able to respond to residents’ and their families’ concerns, and small increases in the level of oversight that they had over their employees. Executives reported little staff resistance to electronic medical record implementation; however, our employee focus groups showed more resistance to change. Electronic medical records did not impact the more distal objective measures of the quality of care.

INTRODUCTION

Health Information technology (health IT) has been studied by many scholars in the fields of organization behavior, management, and healthcare. A meta-analysis of research on health IT found that it can improve and streamline healthcare, help patients obtain and renew medications, and help medical staff access and retrieve medical information (Shekelle, Morton, & Keeler, 2006). Other researchers found that health IT improved patient safety by reducing medical errors (Armstrong, 2000; Bates et al., 1998; Kaushal, Shojania, & Bates, 2003; Koppel et al., 2005; Bates & Gawande, 2003; Brown et al., 2005; Dixon & Zafar, 2009). One important type of health IT, electronic medical records (EMRs), lead to better clinical outcomes, improved medication adherence and refill rates, and improved patient satisfaction (Butin et al., 2011; Wang et al., 2003). While the impact of health IT on health outcomes may not always be positive, three recent literature reviews reported primarily positive and non-significant results (Butin et al., 2011; Jamal, McKenzie, and Clark, 2009; Chaudhry et al., 2006).

Research related to the impact of health IT on the quality of health care has not been studied much in nursing homes (Brandeis et al., 2007; Subramanian et al., 2007; Spinelli-Moraski & Richards, 2013). Long-term care has unique characteristics, payers and patients, and so it cannot be determined whether such positive results will transfer to this environment (Kramer et al., 2009). The results of the few studies (e.g., Yu et al., 2013; Pillemar et al., 2012;
Rantz, 2006, 2010; Judge et al., 2006) of the impact of health IT on the quality of care in nursing homes in the United States and internationally have shown mixed results. With the objective of contributing to this literature, we examine whether the implementation of electronic medical records (EMRs) has had an effect on quality outcomes in nursing homes.

What is not understood is whether administrators who have been avoiding the implementation of EMRs for rational reasons, or due to barriers to its implementation. If EMRs have not evolved to the point where they improve the quality of care and/or reduce administrative costs, it may be rational to avoid their implementation. On the other hand, if EMRs improve quality and result in cost savings, the adoption of EMRs should be encouraged. This study contributes to this important literature by considering the extent to which EMR implementation improves proximal and distal measures of the quality of care. The methodology of the study is unique; we used the results from several qualitative case studies, including six of our own, to frame survey questions that were piloted and then conducted in seven states. Finally, we studied the impact of EMRs on objective quality data obtained from regulators.

**LITERATURE REVIEW**

The few studies of health IT adoption in nursing homes have shown results that are mixed at best. Pillemer et al. (2012) interviewed residents in 10 nursing homes to understand the impact of health IT on their health and quality of life, finding no positive effects. Conversely, Klinger and White (2010), as part of an intervention process of implementing health IT in 20 New York nursing homes, viewed the implementation of health IT as successful for both residents and employees, but noted variability in outcomes among the sites. Munyisia, Yu and Hailey (2011) also reported mixed results in a staff survey—while the accuracy, legibility and completeness of resident records improved as a result of EMR implementation, the relevance and reliability of the information, staff communications, and decision making abilities were unchanged.

Some nursing home studies of health IT adoption found small effects. For example, Judge et al. (2006) found that the addition of a decision support system to an existing health IT suite slightly improved clinician action. Rantz et al. (2010) found that activities of daily living, range of motion, and high-risk pressure sores improved in groups with health IT but not in comparison groups. Rantz et al. (2006) found in interviews with staff members that they thought that they were more efficient and were able to document more accurately because of EMRs, but the quantitative outcomes at the nursing homes were mixed. However, in their staff interviews, Yu and colleagues (2013) found that EMR systems could have adverse effects on care quality. A reason for the mixed benefits experienced could be that the long-term care facilities had not
implemented the full suite of health IT, or in other words, they lacked comprehensive adoption (Brandeis et al., 2007).

The adoption of EMR has been hailed as a solution to both the quality and affordability crisis in health care (Lourde, 2009), and nursing home administrators feel pressure from regulatory bodies to adopt them (Bezboruah, Hamann, & Smith, in press). However, some administrators remain skeptical of the potential for EMR to enhance the quality of care, and intend to put off the implementation of such systems until payers or regulatory bodies require their use (Bezboruah et al., in press). Given the inconsistent impact of health IT on health outcomes, such concern may be well placed.

Several reasons have been given for the variability in the outcomes for health IT research. First, researchers have suggested that the implementation process is critical in determining whether health IT has any impact on outcomes. For example, Rantz et al. (2010) note that the key success factor in their case study was the involvement of expert nurses who had the knowledge and skills to use the health IT systems. Yu et al. (2013) and Bezboruah et al. (in press) found that staff were resistant to use technology, information management became unnecessarily complex, and there was increased documentation of records (including the duplication of records). They further reported reduced communication between staff and residents, problems with accessing the technologies when they were needed, and difficulties in delivering care. Bezboruah et al. (in press) concluded that health IT adoption in nursing homes they studied often lacked systematic planning preceding the implementation decision, lacked the involvement of the end users of the technologies, and the implementation process was fragmented and haphazard. It could be that the administrators in these cases could not obtain adequate information regarding how to select and implement health IT--Chaudhry et al. (2006) found in their review of the literature in acute and ambulatory settings that information about the costs and benefits of health IT was difficult for practitioners to obtain. These implementation problems could prevent the realization of quality improvements.

**METHOD**

Our study seeks to understand whether one type of health IT, Electronic Medical Records, contributes positively to proximal and distal quality outcomes in nursing homes. An Electronic Medical Record is defined as “longitudinal electronic record of patient health information generated by one or more encounters in any health care setting...including patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data, and radiology reports” (Healthcare Information and Management Systems Society, 2013). Our mixed-method research design, including case studies, a survey of administrators, and a database of objective quality data, offers a practical, logical, creative, and
complementary form of research and inquiry (Johnson & Onwuegbuzie, 2004), allowing for triangulation of multiple sources of data to reach informed conclusions.

We employ a qualitative approach to systematically determine the proximal outcomes of health IT that have been observed by top management and nursing staff in six nursing homes, using case study methodology as outlined in Maxwell (2005) and Yin (1994). The primary sources of qualitative data were semi-structured interviews with the administrators, executive directors and/or directors of nursing in six nursing homes. Two study instruments, one each for the administrators and the nursing staff, were designed in consultation with previous literature. They served as a guide; conversation in the interviews and focus groups were allowed to flow towards topics related to the research questions but not anticipated by the researchers in advance. We complemented our interviews and focus groups with careful observations recorded during our visits. Topics covered with the administrators included their choice to select or not select certain types of health IT or certain vendors and their observations regarding the implementation process and the outcomes of health IT in their nursing homes. Topics covered with staff included reactions to the announcement of health IT adoption, observations and emotions regarding the implementation process, and perceptions about how health IT adoption impacted workflow and care in the nursing home.

Participants in the in-depth management interviews consisted primarily of nursing home administrators, executive directors, and directors of nursing. They ranged in age from approximately their mid-twenties to their mid-sixties and included an even mix of men and women. In total, approximately ten participants were included in the management interviews. Finally, participants in the management interviews were both users of the health IT systems, and facilitated and directed the adoption process (where applicable). Participants in the floor staff focus groups were primarily members of the nursing staff of each facility. They consisted of a mix of Certified Nursing Assistants, Licensed Practical/Vocational Nurses, Registered Nurses, and health IT coordinators. These participants, primarily women with a few men, ranged in age from eighteen to approximately sixty years old. These participants were the primary end users of the health IT systems (where applicable). Most of these participants had been with their organizations for over a year. In total, approximately forty participants were included in the floor staff focus groups. Once the administrator interviews and focus groups were recorded and observations were made, they were transcribed verbatim. In total, two-hundred and sixteen pages were transcribed. The transcripts were circulated for analysis by the entire research team, including the researchers and two graduate students. Each member of the research team individually analyzed both the management and floor staff transcriptions, and the team shared and compared their analyses. After comparison, overall themes were decided upon to use in the drafting of the survey.
We combined our qualitative results with those of Kramer et al. (2009), who reported a table showing all of the issues reported in their four case studies. We also consulted the results reported by Lipsky, Avgar and Lamare (2009). We created a long list of items relating to outcomes mentioned by multiple participating nursing homes in our case studies, or multiple nursing homes mentioned by the qualitative studies we reviewed. Items that were substantially similar were combined, and the entire team participated in decisions to drop certain items that did not appear very important given their context in the interviews. The draft survey was sent for comment to several researchers and the administrators of the nursing homes participating in the qualitative portion of the study, and pilot tested in another group of nursing home administrators. The final survey contained 15 expected outcomes of the implementation of health IT.

Electronic mail addresses were obtained from several states’ Departments of Health/Aging or nonprofit advocacy organizations for all nursing home administrators in Illinois, South Carolina, Kansas, Texas, Georgia, Minnesota and Missouri. The survey was conducted online between July and October 2011. Online surveys have some disadvantages, such as a lower response rate (Lin & Ryzin, 2012), but their results tend to be similar to those of mailed surveys (Teo, 2013). Three emails containing a cover letter and survey link were sent in one-week increments to 2747 nursing home executives (typically the nursing home's chief executive onsite at the facility, referred to as the Administrator); 284 administrators responded (over three-fourths were the chief executive officer or nursing home administrator, with the remainder being the chief information officer or the director of nursing in most cases). To improve our response rate, during the pilot test, the facilities were contacted via telephone, but this practice was halted after not yielding new survey responses. Our final response rate was 10.34 percent, reflecting the fact that online surveys (Lin & Ryzin, 2012) and surveys of top-level executives have lower response rates. Bias based on access to computers is not likely to be an issue in a sample of executives; it is more likely that data security or email screening programs reduced the response rate. Responding nursing homes had on average 82 beds. 46 percent of the nursing homes were for-profit, 47 percent were nonprofit, and five percent were government owned. Six percent were located within a hospital, and roughly half were part of a chain (multi-facility ownership). In all analysis, we use regulator data to weight the sample to be representative of the population.

Objective regulator data on nursing home facility characteristics and quality outcomes was obtained from the Centers for Medicare and Medicaid Services (CMS) at Medicare.gov. Since each nursing home was given a unique survey identifier, we were able to merge our survey data with data regarding the size, ownership, chain status, occupancy rates and quality indicators. The quality indicators are five star ratings assigned to nursing homes based on regulatory reports. The first indicator assesses the overall quality of care in the nursing home, drawing on objective data reported to the CMS via the Minimum Data Set (MDS). This quality indicator contained nine objective items, such as the percentage of residents with pressure sores, falls or other...
injuries, as well as the percentage of residents who were physically restrained, had urinary tract infections, or reported moderate to severe pain. These measures were adjusted for resident health conditions. The other two indicators we used were health-adjusted total nursing staffing rates (one overall and one specific to registered nurses).

To examine whether the implementation of health IT impacted quality of care or nurse staffing ratios, weighted maximum likelihood estimation was used. We used the Heckman (1979) selection correction method. The procedure first estimates the probability of survey response based on the variables we obtained from the CMS. Weights are then applied to the models predicting the outcome variables based on the first stage results. This increases the likelihood that the estimates are representative of the population in the seven states studied, and minimizes non-response bias.

RESULTS

Four themes emerged from the review of our qualitative results, along with the results of the other listed qualitative researchers, regarding how health IT could affect the quality of care: (1) nursing home administrators either experienced, or expected to experience, the availability and completeness of patient related health data to increase. This can improve the quality of care by improving real-time access to pertinent resident health information, allowing management and staff to make decisions based on better data. (2) Nursing home administrators either experienced, or expected to experience, the speed at which resident concerns were addressed to increase. This could improve the quality of care by decreasing the time residents suffer discomfort while waiting for a response to an urgent concern, by improving the handling of emergency situations and by more complete and accurate medication records and doses. (3) Nursing home administrators either experienced, or expected to experience, staff resistance to the implementation of health IT, perhaps resulting in increased staff turnover. Employees also reported resistance to change, and problems with software, especially older nursing staff. Since unhappy employees and nursing staff turnover disrupts the critical relationships that often form between staff and residents, this is expected to decrease the quality of care, at least initially. (4) The productivity of nursing and administrative staff either remained constant or increased, or was expected to remain constant or increase, as a result of EMR implementation. The results appeared to hinge upon who was asked, with administrators and managers more likely to believe that productivity increases had occurred than nursing staff. In addition, nursing home staff actions were expected to be easier to monitor, so staff could be better held accountable for their actions. Potential productivity increases could allow nursing staff to spend more time with residents, improving the quality of care (Kramer et al., 2009). It could also allow the organization to shift resources from administrative staff towards nursing staff or resident
amenities and activities as computerization replaces some administrative functions. Increased staff monitoring and accountability could also improve the quality of care, although it could also increase staff resistance to IT.

Of the nursing homes who responded to our survey, 44 percent had adopted EMRs. The results in Table 1 include the responses of the 111 nursing home administrators who adopted EMRs. Consider first the evidence regarding our first theme. Increases in the availability and completeness of information about residents were moderate to large at a vast majority of nursing homes surveyed. The quality and completeness of census and other reports were also moderately improved on average. In contrast to the views of the administrators, a consistent concern in our nursing staff focus groups was that the safety and accountability features of the electronic systems actually acted as an impediment to their work because the automatic log-out forces them to login frequently, and consequently, not all of the floor staff documented patient information completely. Therefore, the subsequent staff from the next shift had to work with incomplete information. As one nurse succinctly states, “This electronic program seems to have a lot more steps to it to do like maybe it was unintelligible. It was three steps earlier but this program, it may have six or seven steps to do the same thing. So, that’s my biggest problem with the system. It’s not a bad program; it’s just not a good program.”

<table>
<thead>
<tr>
<th>Theme: Improved Data</th>
<th>Number of Responses</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved census reporting</td>
<td>109</td>
<td>2.991</td>
<td>1.213</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Improved completeness of resident information</td>
<td>111</td>
<td>3.423</td>
<td>1.066</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Increased availability of resident information</td>
<td>110</td>
<td>3.782</td>
<td>0.961</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Enhanced information sharing with other health care providers</td>
<td>111</td>
<td>2.865</td>
<td>1.132</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Higher quality and more complete reports</td>
<td>109</td>
<td>3.459</td>
<td>1.085</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Theme: Improved Speed of addressing resident concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faster delivery of services to new residents</td>
<td>110</td>
<td>2.764</td>
<td>1.116</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Improved on-call response time</td>
<td>100</td>
<td>2.220</td>
<td>1.177</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 1: Outcomes of EMR implementation as reported by nursing home administrators
Our second theme regarded the speed at which concerns of the residents and their families were addressed. While the majority of administrators reported moderate improvements in this area, several also found no benefit and so averages were slightly lower for theme 2 than theme 1. Additionally, our results showed that response times to family member inquiries improved more than response times for resident concerns.

It is important not to confuse the speed at which the concerns of residents and their families were handled with the amount of communication between staff and residents. One staff member said, “Earlier, I was spending more time talking with the residents, just chatting with them and making notes, and now more of my time is fighting with the software.” This is consistent with the findings by Yu et al. (2013) who observed that communications between residents and staff decreased after the implementation of health IT, because staff was more concerned with documentation and reporting. It is inconsistent with a qualitative study in New York, where some nursing assistants were spending more time with the residents (Klinger & White, 2010). It is important to note that in the New York case, nursing staff and their unions were involved in the selection and implementation process of the health IT.

Our third theme, regarding nursing staff resistance to health IT, was surprisingly low in the quantitative results given what was found in the employee focus groups, but some employee resistance did exist. However, the administrators who responded to the surveys may be unaware of the extent of the employee resistance. In our qualitative case studies, some administrators experienced resistance from staff directly and took measures to address it. Others thought that the implementation process was effective, but their staff in the employee focus groups refuted this perception. The following quotes from the personal interviews and staff focus groups will
shed more light on this issue. As an administrator said, “And I think the resistance piece plays a major factor in their (floor staff) adjusting to it. They, you know, – I think there is convenience in not learning to do it. And I think some intentionally tried not to have to learn how to do it.” Another nursing home direct or said, “…even if you try to teach them the benefits, I mean, sometimes they just don’t see it.” The concerns expressed by the floor staff in most of the homes related to the lack of proper training. Most of the nursing homes either offered an hour of training that assumed basic knowledge of computers in the nursing staff, or used peer-to-peer training systems that took some staff away from their residents. This culminated in their resistance to the EMRs—they did not believe that they were good for the residents, nor did they feel as though they were included in decisions regarding health IT adoption and implementation. As one nurse commented, “the only incentive to learn or work with the electronic system was to keep our jobs.” Interestingly, our quantitative results indicated that staff turnover was usually not impacted by the introduction of the EMRs.

Regarding our fourth theme, it is not clear whether employee productivity remains constant or increases due to health IT implementation. While Kramer et al. (2009) reported productivity increases after implementation in some of their case studies, the administrators in our case studies had not noticed an improvement in employee performance. In fact, they claimed, “the staff now spends most of their time behind their computers and away from actual face-to-face care, and have become slaves to their computers. It also takes longer for staff to document things” and “the staff are too short-sighted.” The focus groups of floor staff raised concerns about the software and its interoperability, and questioned the application of general electronic systems to specialized care. They claimed that they must document on both paper and the computer. Consequently, “it seems like floor staff are now doing double the work and have added to their workload.” Says one of the nurses, “We are doing double the work for the same outcome.”

Most administrators responding to the survey detected a moderate to large increase in the level of oversight that they had over employees due to the implementation of electronic medical records, and they believed that employee productivity had increased moderately. On average, they also had their systems in place for three years, while the nursing homes in the case studies were usually in their first year of the implementation process. Over fifty percent of administrators, however, responded that there had not been any reduction in the need for administrative staff due to the productivity gains.

Table 2 has the results from our maximum likelihood estimations of the impact of EMR utilization, and the length of time since the rollout of the EMRs, on objective quality data. The first model has as a dependent variable a quality indicator summary taken from MDS, adjusted for resident health. Having EMR in place was not related to this measure of the quality of care. Recognizing that EMR implementation might not have positive results initially, since staff face a
learning curve initially and since some staff may actively resist the change, we also tested whether the length of time since EMR implementation was related to the quality of care. Again, we found no such relationship. Although the administrators and employees reported several benefits of health IT utilization in our qualitative and quantitative analyses, these benefits did not appear to translate into objective improvements in the quality of care. It could be that the negative effects reported in employee groups have diminished the impact of health IT on the quality of care.

### Table 2: The impact of the use of electronic medical records, and the length of their use, on regulator quality data and staffing levels

<table>
<thead>
<tr>
<th>Quality Measures</th>
<th>Nurse Staffing</th>
<th>RN Staffing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Medical Records</td>
<td>0.001</td>
<td>0.432*</td>
</tr>
<tr>
<td></td>
<td>[0.268]</td>
<td>[0.234]</td>
</tr>
<tr>
<td>Total months health IT</td>
<td>0.008</td>
<td>-0.015*</td>
</tr>
<tr>
<td>system in place</td>
<td>[0.010]</td>
<td>[0.009]</td>
</tr>
<tr>
<td>Total months health IT</td>
<td>-0.037</td>
<td>0.095*</td>
</tr>
<tr>
<td>system in place squared (/1000)</td>
<td>0.060</td>
<td>[0.053]</td>
</tr>
<tr>
<td>Nonprofit ownership</td>
<td>-0.011</td>
<td>0.796***</td>
</tr>
<tr>
<td></td>
<td>[0.361]</td>
<td>[0.212]</td>
</tr>
<tr>
<td>Government ownership</td>
<td>-0.4</td>
<td>0.722*</td>
</tr>
<tr>
<td></td>
<td>[0.429]</td>
<td>[0.378]</td>
</tr>
<tr>
<td>Number of residents</td>
<td>-0.001</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>[0.002]</td>
<td>[0.002]</td>
</tr>
<tr>
<td>Multi-facility ownership</td>
<td>0.043</td>
<td>-0.254</td>
</tr>
<tr>
<td>(chain)</td>
<td>[0.189]</td>
<td>[0.154]</td>
</tr>
<tr>
<td>Located in a hospital</td>
<td>-0.38</td>
<td>0.246</td>
</tr>
<tr>
<td></td>
<td>[0.339]</td>
<td>[0.291]</td>
</tr>
<tr>
<td>Not Medicaid certified</td>
<td>0.087</td>
<td>0.658*</td>
</tr>
<tr>
<td></td>
<td>[0.404]</td>
<td>[0.363]</td>
</tr>
</tbody>
</table>
Another way that nursing home quality is assessed is by the number of nursing staff hours per resident, although these hours might be reduced by nursing staff productivity. We expected that the number of nursing staff hours per resident might decline because administrators reported that their staff were more productive; however, staff may use the additional free time generated by their productivity to provide a higher quality of service to their residents. A quadratic time trend was used in this analysis because of our findings in the qualitative portion of the study. Initially, the adoption of EMRs may necessitate increased nursing hours as the nurses adapt to the software. Over time, as the nurses adapt to the technology, it makes them more efficient until they have learned all that is necessary and efficiency stabilizes.

Overall, there is little evidence that nursing homes with EMRs utilize fewer hours of nursing care due to productivity gains. In fact, in the second reported analysis in Table 2 (on all nursing staff), nursing homes with EMRs had slightly more hours of care per resident, although

<table>
<thead>
<tr>
<th></th>
<th>Not Medicare certified</th>
<th>Georgia</th>
<th>Illinois</th>
<th>Kansas</th>
<th>Minnesota</th>
<th>Missouri</th>
<th>South Carolina</th>
<th>Constant</th>
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<tr>
<td></td>
<td>0.845</td>
<td>0.516</td>
<td>0.475</td>
<td>0.517</td>
<td>0.367</td>
<td>0.499</td>
<td>0.274</td>
<td>0.499</td>
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<tr>
<td></td>
<td>[0.517]</td>
<td>[0.421]</td>
<td>[0.440]</td>
<td>[0.517]</td>
<td>[0.268]</td>
<td>[0.364]</td>
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<td>[0.249]</td>
</tr>
<tr>
<td></td>
<td>-0.274</td>
<td>0.313</td>
<td>-0.094</td>
<td>0.499</td>
<td>0.268</td>
<td>0.364</td>
<td>0.274</td>
<td>0.274</td>
</tr>
<tr>
<td></td>
<td>[0.499]</td>
<td>[0.364]</td>
<td>[0.374]</td>
<td>[0.499]</td>
<td>[0.304]</td>
<td>[0.347]</td>
<td>[0.274]</td>
<td>[0.274]</td>
</tr>
<tr>
<td></td>
<td>-0.506</td>
<td>0.893***</td>
<td>1.116***</td>
<td>0.506</td>
<td>0.268</td>
<td>0.367</td>
<td>0.274</td>
<td>0.274</td>
</tr>
<tr>
<td></td>
<td>[0.289]</td>
<td>[0.249]</td>
<td>[0.274]</td>
<td>[0.289]</td>
<td>[0.256]</td>
<td>[0.264]</td>
<td>[0.274]</td>
<td>[0.274]</td>
</tr>
<tr>
<td></td>
<td>-0.205</td>
<td>1.445***</td>
<td>1.901***</td>
<td>0.205</td>
<td>0.367</td>
<td>0.470</td>
<td>0.353</td>
<td>0.353</td>
</tr>
<tr>
<td></td>
<td>[0.289]</td>
<td>[0.249]</td>
<td>[0.274]</td>
<td>[0.289]</td>
<td>[0.256]</td>
<td>[0.268]</td>
<td>[0.274]</td>
<td>[0.274]</td>
</tr>
<tr>
<td></td>
<td>0.16</td>
<td>1.036***</td>
<td>1.922***</td>
<td>0.16</td>
<td>0.367</td>
<td>0.470</td>
<td>0.353</td>
<td>0.353</td>
</tr>
<tr>
<td></td>
<td>[0.401]</td>
<td>[0.256]</td>
<td>[0.276]</td>
<td>[0.401]</td>
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<td>[0.264]</td>
<td>[0.276]</td>
<td>[0.276]</td>
</tr>
<tr>
<td></td>
<td>-0.362</td>
<td>0.546*</td>
<td>-0.096</td>
<td>0.470</td>
<td>0.329</td>
<td>0.364</td>
<td>0.353</td>
<td>0.353</td>
</tr>
<tr>
<td></td>
<td>[0.539]</td>
<td>[0.329]</td>
<td>[0.374]</td>
<td>[0.470]</td>
<td>[0.347]</td>
<td>[0.364]</td>
<td>[0.353]</td>
<td>[0.353]</td>
</tr>
<tr>
<td></td>
<td>0.026</td>
<td>1.060***</td>
<td>1.621***</td>
<td>0.026</td>
<td>0.333</td>
<td>0.369</td>
<td>0.360</td>
<td>0.360</td>
</tr>
<tr>
<td></td>
<td>[0.369]</td>
<td>[0.333]</td>
<td>[0.360]</td>
<td>[0.369]</td>
<td>[0.333]</td>
<td>[0.364]</td>
<td>[0.360]</td>
<td>[0.360]</td>
</tr>
<tr>
<td></td>
<td>3.440*</td>
<td>1.141</td>
<td>-0.659</td>
<td>3.440*</td>
<td>0.820</td>
<td>1.884</td>
<td>0.840</td>
<td>0.840</td>
</tr>
<tr>
<td></td>
<td>[1.884]</td>
<td>[0.820]</td>
<td>[0.840]</td>
<td>[1.884]</td>
<td>[0.820]</td>
<td>[0.840]</td>
<td>[0.840]</td>
<td>[0.840]</td>
</tr>
</tbody>
</table>

| Observations  | 219                    | 219     | 218      | 219        |
| Log likelihood| -1088.349              | -1054.239| -1051.952|
| chi2          | 15.36***               | 118.494***| 137.19***|

Notes: *, **, and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively, in two-tailed tests. Maximum likelihood estimation with selection correction weights applied. Sample selection equation included ownership, chain status, location within a hospital, number of residents, percentage of occupied beds, Medicaid or Medicare payment, and state. Omitted ownership category is for-profit. Omitted state is Texas.
this was declining over time and marginally significant. It is important to note that this pattern of results was not observed when RN staffing levels were considered—EMR implementation was unrelated to their staffing levels.

DISCUSSION

The primary findings of this study are that while health IT appears to impact the proximal outcomes reported by administrators, these outcomes do not translate into noticeable differences in objective quality of care measures, and administrator perceptions of outcomes of EMR implementation are not always shared by staff. The exception was a weak tendency for more staff hours per patient, which are lower in nursing homes that adopted EMRs earlier, suggesting perhaps that nursing FTEs rise only initially after EMR implementation. Regardless, these results suggest that the efficiency gains reported by the executives do not result in fewer nurses on staff. The administrators in the survey reported that staff were more productive, but this did not appear to have reduced nursing hours per resident day. Our survey outcomes also shed light on this finding, as reductions in administrative staff and increases in staff turnover did not occur when health IT was introduced. Since the fear of being made redundant due to technology improvements increases resistance to health IT, this may be an important finding for gaining staff buy-in for health IT initiatives, which is important for successful health IT implementation (Lipksy et al., 2009).

The efficiency gains may translate to less measurable quality outcomes, such as increases in communication between residents and staff and improvements in the moods or emotions of residents, which were not reflected in the quality index. The results of our case studies suggest that this is not the case, at least not within the first year of implementation. In addition, a recent study of health IT implementation in ten nursing homes found no differences in resident-reported outcomes, including mood outcomes, in nursing homes with health IT, with the exception that behavioral problems observed by the researchers (e.g., disruptive behavior) increased in the nursing homes that implemented health IT (Pillemer et al., 2012). The researchers also noted that most residents reported positive attitudes towards the computerization overall. Only a small minority believed that hand-held devices caused staff to spend less time with the residents. Their research was based on a case-control quasi-experimental design with only 10 nursing homes, so the differences between the experimental and control nursing homes could be due to other events taking place at the nursing homes during the nine months between their pre- and post-tests of resident moods. Future research should examine changes in resident outcomes and other measures of the quality of care in studies with greater numbers of nursing homes or studies employing experimental design. In addition, it is important for future research to ascertain the
We also found that administrators reported that the time it took for transferred patients to receive care was reduced as a result of health IT, which is consistent with Olson and Adamek’s (1995) finding that paperwork for transfers of residents from one facility to another facility was reduced when technology is used. In addition, the administrators reported that call lights, used when a resident has an urgent need, were answered more quickly after the EMRs were introduced and family member inquiries were answered more quickly. Our cases showed that administrators believed that they should see less medicine wastage, increased efficiencies, fewer medical errors, and better documentation. However, they contended that this depended on how fast the floor staff adjusted to the electronic systems. One nursing home administrator saw reductions in the time needed to address errors, and reported that staff could catch errors faster, because they were flagged by the electronic system before making errors. As he claimed, “it is an advantage that the computer removes the decision-making ability from the human.” He further stated, “There is a more positive attitude in employees regarding the benefits of EMR, and that frustration arises primarily with the computers being slow, and flaws relating to them.” Many floor staff were in general agreement that the IT system in place was positive overall at that nursing home, for “it makes it easier and faster to find paperwork and there is a lesser chance of losing important paperwork. It reduces the use of paper too.” Successful outcomes could critically depend on the type of systems introduced and the speed with which employees adapt to them.

One limitation of our study is the low response rate. Our sample is of top executives, and they are often less likely to have the time of fill out surveys than employees lower in the organizational hierarchy, and web-based surveys have lower response rates than paper surveys (Manfreda et al., 2008). A low response rate might lead to non-response bias. We attempted to minimize bias in our estimates by using a two-step estimation procedure, where observations were weighted to improve their representativeness of nursing homes in the states we studied.

A second limitation of our study, and other studies that rely on administrator reports, was that the administrators may overestimate the improvements in the facility due to the introduction of health IT, especially if they made the decision to implement health IT, for self-serving reasons. While the administrators reported that the most improvements resulting from the health IT introductions were in information sharing and reporting, it could also be that these changes were the most noticeable to them. The fact that objective quality data did not relate to health IT utilization increased the likelihood that the administrator perceptions were biased. Also, de Veer & Francke (2010) found that managerial staff were more likely than non-managerial staff to report favorable opinions of health IT. It should be noted, however, that the types of changes likely to occur with health IT—are those that we found in our quantitative and qualitative research—
were not included as components in the objective measure of quality that we used. Future research should compare administrator ratings of the health IT outcomes with those from other participants and objective measures.

CONCLUSION

Using a mixed methods approach, we analyzed the impact of health IT on the quality of care in nursing homes. We found that administrators reported more positive than negative effects of implementing health IT. Administrators reported rather large increases in the quality of data they used. Perhaps because of the increases in data quality, the speed at which staff were able to respond to residents’ and their families’ concerns increased, which could potentially improve the satisfaction of residents and their families with care. Administrators also reported that the level of oversight that they had over their employees increased significantly after health IT implementation. Overall, the administrators seemed positive about their experiences with Health IT.

Administrators reported a few negative outcomes of health IT, but most were temporary. Nursing staff were usually resistant to change, although most administrators reported that the level of resistance was relatively small. Very few administrators reported that they reduced administrative staff, or that turnover increased, after the introduction of EMRs. While this may not be a good efficiency result, it may be positive when considering quality outcomes since turnover decreases the quality of care (Castle, 2001).

Administrator reports stand in contrast to the findings of our analysis of the impact of health IT utilization on objective quality measures. Using MDS measures, we found no evidence of quality improvements resulting from EMRs. We also found that staffing levels may actually be higher in organizations that use health IT. Qualitative data from nursing home staff also showed that administrator reports of the effects of health IT on quality outcomes may be too optimistic; they reported difficulty with the software and sometimes less time for patient care. Since the case studies occurred in nursing homes recently introducing health IT while the survey included nursing homes at varying levels of system maturity, future research should determine whether the negative impacts of health IT on the quality of care are short lived.

REFERENCES


