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Organizational citizenship behavior at Catholic institutions of higher education: effects of organizational commitment, interpersonal- and system-level trust

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ORGANIZATIONAL CITIZENSHIP BEHAVIOR AT CATHOLIC
INSTITUTIONS OF HIGHER EDUCATION: EFFECTS OF
ORGANIZATIONAL COMMITMENT, INTERPERSONAL- AND SYSTEM-
LEVEL TRUST

by

Justin Ashby Ball

A thesis submitted in partial fulfillment of the requirements
for the Doctor of Philosophy degree in
Educational Policy and Leadership Studies (Higher Education and Student Affairs)
in the Graduate College of The University of Iowa

December 2013

Thesis Supervisor: Professor Alan B. Henkin

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CERTIFICATE OF APPROVAL

PH.D. THESIS

This is to certify that the Ph.D. thesis of

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has been approved by the Examining Committee for the thesis requirement for the Doctor of Philosophy degree in Educational Policy and Leadership Studies (Higher Education and Student Affairs) at the December 2013 graduation.

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I would like to dedicate this dissertation to all of the men and women working in the many areas of Catholic education. Thank you for all that you do.

All your children shall be taught by the LORD, and great shall be the peace of your children.

Isaiah 54:13

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ABSTRACT

The purpose of this study was to conduct an exploratory investigation of OCB, trust, and commitment among faculty and staff within Catholic IHEs. Faculty and staff from two Catholic IHEs were the focus of the study. Twenty-five schools were randomly selected from the 50 largest Catholic IHEs by undergraduate enrollment, identified from the 2012 list of Catholic IHEs officially recognized by the Association of Catholic Colleges and Universities (ACCU). The successful operation of Catholic IHEs appears to require high levels of trust and commitment. They benefit from higher levels of OCB, as they endeavor to work in common with other IHEs and, concurrently, extend efforts to adhere to the norms and expectations of John Paul II's 1990 Apostolic Constitution on Catholic Universities, *Ex Corde Ecclesiae*.

Catholic IHEs are tasked with fostering spiritual growth and the Catholic intellectual tradition of dialogue between faith and reason. To address the study objectives, the relationships between the variables of OCB, employee trust, and organizational commitment within two Catholic IHEs were investigated. The research included (a) investigating the traditional conceptualizations of OCB, trust, and commitment with the goal of further defining them as multi-level concepts; (b) designating core concepts of OCB, interpersonal- and system-level trust, and commitment; (c) developing a model of OCB, employee trust, and commitment refining from existing theoretical bases; (d) application of core concepts to explore the dimensionality of faculty and staff members' OCB; (e) exploring the relationship between OCB constructs and levels of trust and organizational commitment; and (f) identification of any moderating effects by comparing these relationships at the different IHEs.

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CHAPTER I

INTRODUCTION

On April 17, 2008, Pope Benedict XVI addressed Catholic college and university presidents, charging them with a duty to assure the long-term sustainability of Catholic institutions of higher education (IHEs) (Benedict XVI, 2008). His address suggested the growing need for Catholic IHEs to operate more efficiently in order to maintain fiscal viability. Pope Benedict focused, moreover, on long-term needs of survival of Catholic IHEs and, more specifically, the need to provide the opportunity for an education in faith to students at all social and economic levels (Benedict XVI, 2008).

Catholic IHEs typically rely heavily on tuition revenue, and are also characterized by having modest endowments, as well as increasing reliance on public funds (Dee, Henkin, & Holman, 2004). The long-term sustainability of Catholic IHEs depends, in part, on their effectiveness in basic operations such as recruitment and retention of students, on their efficient use of tuition and endowment funds as an operating budget, on consensus and cooperation among faculty, and on fostering charitable relationships with alumni.

Organ (1988) defined organizational citizenship behavior as “an individual’s behavior that is a personal choice, discretionary, and not directly or explicitly recognized by the formal reward system; in the aggregate, it promotes the effective functioning of the organization and is important to its survival.” Empirical research has shown the need for organizational citizenship behavior (OCB) given its direct bearing on organizational effectiveness (Ahearne, MacKenzie, & Podsakoff, 2004; Karambayya, 1990; MacKenzie, Podsakoff, & Ahearne, 1996; Organ, Podsakoff, & MacKenzie, 2006; Podsakoff, Ahearne, & MacKenzie, 1997; Podsakoff & MacKenzie, 1994; Smith, Organ, & Near, 1983) and organizational efficiency (Borman & Motowidlo, 1993; MacKenzie, Podsakoff, & Fetter, 1991, 1993; Organ, 1988; Podsakoff & MacKenzie, 1994, Podsakoff, MacKenzie, & Hui, 1993). OCB’s effects on organizational effectiveness and

efficiency have been shown to be positively related to work group productivity, sales performance, customer satisfaction, sales revenue, operating efficiency, profitability, and financial stability (Organ et al., 2006).

Research on organizations has focused on OCB for three decades (Organ et al., 2006). There has been little research, however, on faculty and staff members' OCB at IHEs. Empirical research conducted within IHEs has traditionally focused on issues and analysis of OCB in the for-profit sector, and on social systems of hospitals and K-12 schools (Somech & Drach-Zahavy, 2004). In a time of decreasing trust in government, organizations, and institutions, including the Catholic Church (Ebener, 2007), increased knowledge of OCBs and trust in Catholic IHEs is essential in order to sustain the tradition of Catholic higher education.

The definitions of OCB have been debated and vary greatly among scholars. Organ (1988) defined OCB as an individual's behavior that is a personal choice, discretionary, and not directly or explicitly recognized by the formal reward system; in the aggregate, OCB promotes the effective functioning of the organization and is important to its survival. Organ et al. (2006) analyzed the major research on OCB and found that it enhanced performance evaluations, reward recommendations, and promotions for individuals. At the organizational level, it increased organizational effectiveness because it improved co-worker and managerial productivity, freed up resources for more productive purposes, reduced the need to devote scarce resources to purely maintenance functions, and served as an effective means of coordinating activities between team members and work across groups. In addition, OCB enhanced the ability to attract and retain the best people, the stability of organizational performance, the ability to adapt to environmental changes, and the creation of social capital (Organ et al., 2006). The operations and functions of IHEs depend, significantly, on human resources, and on voluntary participation and consensus in many areas. High levels of positive OCBs can provide substantial benefits to IHEs, especially to denominational institutions in a sector

of the higher education market subjected to increasing competition from the private sector (Bollag, 2004).

Purpose of the Present Study

The purpose of this study was to conduct an exploratory investigation of OCB, trust, and commitment among faculty and staff within Catholic IHEs. Faculty and staff from two Catholic IHEs were the focus of the study. 25 schools were randomly selected from the 50 largest Catholic IHEs by undergraduate enrollment, identified from the list of Catholic IHEs officially recognized by the Association of Catholic Colleges and Universities (ACCU, 2012). The successful operation of Catholic IHEs appears to require high levels of trust and commitment. They benefit from higher levels of OCB, as they endeavor to work in common with other IHEs and, concurrently, extend efforts to adhere to the norms and expectations of the Apostolic Constitution on Catholic Universities, *Ex Corde Ecclesiae* (John Paul II, 1990).

Catholic IHEs are tasked with fostering spiritual growth and the Catholic intellectual tradition of dialogue between faith and reason. To address the study objectives, the relationships between the variables of OCB, employee trust, and organizational commitment within two Catholic IHEs were investigated. The research included (a) investigating the traditional conceptualizations of OCB, trust, and commitment with the goal of further defining them as multi-level concepts; (b) designating core concepts of OCB, interpersonal- and system-level trust, and commitment; (c) developing a model of OCB, employee trust, and commitment refined from existing theoretical bases; (d) application of core concepts to explore the dimensionality of faculty and staff members' OCB; (e) exploring the relationship between OCB constructs and levels of trust and organizational commitment; and (f) identification of any moderating effects by comparing these relationships at the different IHEs.

Significance of the Study

Empirical research on OCB and trust appears to be defined by differentiated preferences of discipline rather than by generally accepted definitions, concepts, and analytical processes (Nooteboom & Six, 2003). This study was designed to synthesize a model of faculty and staff members' OCB in terms of system-level and interpersonal-level trust and affective organizational commitment. The purpose, here, is to develop a synthesized model and test projected associations of potential interest to both theorists and practitioners. The effort targets improvement in the understanding of OCB and trust in higher education, in particular in Catholic higher education. Improved understanding of the relationships between faculty and staff members' OCB and their trust in and commitment to IHEs may serve both financial and operational ends, and empower decision makers tasked with facilitating efficient and effective performance in increasingly commoditized, competitive markets (Lawler, 1986).

The study context is Catholic higher education. Over 200 Catholic colleges and universities in the United States educate approximately 900,000 students per year (Association of Catholic Colleges and Universities [ACCU], 2011). Approximately 12.5% of the world's 1861 Catholic colleges and universities are in the United States (ACCU, 2011). Although there are shifting ideologies in the levels of Catholicity at U.S. Catholic colleges and universities and in the religious makeup of their students, the long-term sustainability of Catholic IHEs depends on the ability to continue operating effective organizations. Institutional governance of Catholic IHEs has been turned over to lay boards and presidents, and requirements for religious studies have continued to be reduced in favor of a more "practical" curriculum (Burtchaell, 1999; Gleason, 1995). Catholic colleges and universities, given their circumstances, must acknowledge the importance of both Catholic and non-Catholic students attending their institutions. Tuition-driven institutions, including Catholic IHEs, will continue to rely on tuition

dollars for their operating budgets and, consequently, will be expected to accommodate a wide spectrum of students (Dee et al., 2004).

The ACCU (2011) has estimated that approximately 60% of freshmen at Catholic colleges and universities self-identify as Catholic. When ACT, Inc., evaluated the reasons that students attend Catholic IHEs, they found that religious affiliation played a significant role in the decision by incoming freshmen, particularly for females (Sconing, 2010). To attract and retain non-Catholic students, Catholic colleges and universities must create an atmosphere that engages non-Catholics and inspires loyalty. Major areas of study, distance from home, athletics, and institution type and size are other factors that have been cited as motivation for non-Catholics to attend Catholic IHEs (Sconing, 2010). Loyalty to a Catholic IHE, specifically for non-Catholics, may be supported by OCBs. OCB has been shown to be an effective means of coordinating activities between individuals and groups while promoting civic virtue and courtesy (Organ et al., 2006). OCB has also been shown to enhance institutional ability to attract and retain members by contributing to a good reputation, generating loyalty, creating a sense of belonging, and enhancing morale (Organ et al. 2006).

In his address to the ACCU, William Shea (1987) stressed why faith-based institutions play a significant role in the foundation of American higher education:

The glory of denominational education is that it presents to society what public education thinks it cannot, a perspective from which one can sort out what rings true to human experience and what does not, and what is right from what is wrong. Denominational education has displayed to the American public two things: that one can believe and yet think, and that one can serve the common good while deeply involved in the life of a particular community of meaning and value. (p. 8:2)

Engendering and reinforcing OCB in the faculty and staff of Catholic IHEs are increasingly important strategies for achieving a level of organizational effectiveness and sustainability, and may enable conciliation and the resolution of theological issues that, in turn, support students' right to an education in the Catholic faith (Benedict XVI, 2008).

Research Questions

This study of faculty and staff members' OCB included consideration of its manifestation as two dimensions: one in which the OCB immediately benefits particular individuals and indirectly benefits the organization, and the other in which OCB benefits the organization as a whole and focuses on the organization. It also included exploring the relationship between the levels of dimensions of OCB and interpersonal-level trust, system-level trust, and organizational affective commitment. The purposes of this study were to (a) examine the multidimensionality of faculty and staff members' OCB within Catholic IHEs; (b) investigate and identify the relationships between faculty and staff members' OCB, trust, and organizational commitment; and (c) explore the moderating effects of demographic variables on the levels of OCB and between the levels of OCB and trust and organizational commitment. To fulfill these purposes, 10 research questions were posed for the study. Responses to the questions are rephrased as hypotheses in Chapter II using terminology specifically related to the model and testing.

Question 1: Can perceptions of faculty and staff organizational citizenship behavior be characterized by two dimensions: immediate benefits for a particular individual and indirect benefits for the organization, and benefits for the organization as a whole with a focus on the organization?

Question 2: Will higher levels of faculty and staff interpersonal-level trust be associated with higher levels of organizational citizenship behavior?

Question 3: Will higher levels of faculty and staff system-level trust be associated with higher levels of organizational citizenship behavior?

Question 4: Will higher levels of faculty and staff organizational commitment be associated with higher levels of organizational citizenship behavior?

Question 5: Will higher levels of faculty and staff interpersonal-level trust be associated with higher levels of system-level trust?

Question 6: Will higher levels of faculty and staff interpersonal-level trust be associated with higher levels of organizational commitment?

Question 7: Will higher levels of faculty and staff system-level trust be associated with higher levels of organizational commitment?

Question 8: Will the relationship between faculty and staff organizational-level trust and organizational citizenship behavior be influenced by the demographic variables of job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation?

Question 9: Will the relationship between faculty and staff system-level trust and organizational citizenship behavior be influenced by the demographic variables of job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation?

Question 10: Will the relationship between faculty and staff organizational commitment and organizational citizenship behavior be influenced by the demographic variables of job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation?

Definition of Terms

Organizational citizenship behavior is an individual's behavior that is a personal choice, discretionary, and not directly or explicitly recognized by the formal reward system; in the aggregate, it promotes the effective functioning of the organization and is important to its survival, as suggested by Organ (1988).

Faculty and staff member trust is the psychological state regarding the intention to acknowledge vulnerability based on the members' positive expectations about the

intentions of their supervisors and their perceived trustworthiness of the systems in the IHE, as suggested by Rousseau, Sitkin, Burt, and Camerer (1998).

Interpersonal-level trust is the extent to which faculty or staff members have confidence in and are willing to act on the basis of the words, actions, and decisions of their supervisors, as suggested by McAllister (1995).

System-level trust is the extent to which faculty or staff members perceive the systems in IHEs as trustworthy and is sometimes equated with organizational trust.

Systems in IHEs refer to the policies, procedures, regulations, and guidelines of the IHE.

Organizational commitment refers to the degree to which faculty or staff members perceive their involvement and identification with the IHE. It is conceptualized in the three components of (a) “a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; (c) a definite desire to maintain organizational membership” (Porter, Steers, Mowday, & Boulian, 1974, p. 604).

Shared values refers to a subset of commonly held organizational values that support the strategic and operating goals of the organization and are evident in its structures, processes, and daily interactions, as suggested by Bennett-Woods (1996).

Limitations of Study

There are several limitations to this study. First, these results may not be generalizable to other IHEs, or even to other Catholic IHEs, given that the data were collected from a sample set of two Catholic IHEs. It is possible that any relationships between OCB, trust, and organizational commitment may be idiosyncratic to the cultures within the Catholic IHEs involved in the study.

A second possible limitation to the study is that faculty and staff members who had lower levels of OCB may have been less likely to participate in the study. Employees who fear retribution for providing negative opinions and who mistrust the motives of

their supervisors or the IHE's administration may have felt uncomfortable participating. If these faculty and staff did not participate, the sample may be biased toward respondents who had relatively high levels of trust or OCB in the IHE.

Finally, results may not be generalizable to IHEs with differing demographic variables, such as significantly different percentages or levels of minority status, age, level of education, teaching experience, time at the institution, or religious affiliation.

CHAPTER II

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

The review of literature focuses on research and conceptualization of OCB, and the variables of interpersonal- and system-level trust and organizational commitment. It is designed to explore the dimensionality of OCB and the methodological approaches that have been used to assess OCB.

Theoretical Foundation for the Model of Faculty and Staff Members' Organizational Citizenship Behavior (OCB)

As IHEs strive for greater organizational effectiveness and encounter greater competition for the resources they depend on, OCB can enhance organizational effectiveness to the extent that it improves co-worker and managerial productivity, frees up resources for more productive purposes, reduces the need to devote scarce resources to purely maintenance functions, and serves as an effective means of coordinating activities between team members and work across groups. OCB also has the potential to enhance IHEs' ability to attract and retain the best people, strengthen the stability of organizational performance, enable organizational capacity to adapt to environmental changes and create social capital (Organ et al., 2006). Many Catholic IHEs face critical financial issues, moreover, and depend on employees to demonstrate OCB linked to increased trust. OCBs that are linked to trust are crucial as they may lower transaction costs in times of crisis (Mishra, 1996).

Prior to 1999, nearly 200 different studies of OCB and its related constructs were conducted (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). In their review of the empirical and theoretical literatures on OCB, Podsakoff et al. (2000) identified over 30 different forms of OCB that had been measured. Organ et al. (2006) evaluated the 10 most frequently used OCB scales and compared their validity and psychometric properties. Organ et al. (2006) found that of those 10 scales measuring OCB, seven

themes or dimensions categorized all of the constructs: helping, sportsmanship, organizational loyalty, organizational compliance, individual initiative, civic virtue, and self-development. LePine, Erez, and Johnson (2002) identified over 40 measures of behaviors that had been qualified as OCBs in the available literature. The majority of research on OCBs has focused on the relationships between OCB and other constructs rather than on defining the nature of the behavior itself (Van Dyne, Cummings, & Parks, 1995).

The research model for this study focuses on the dependent variable of OCB and the intervening variables of interpersonal- and system-level trust and organizational commitment. Organ et al. (2006) stated that “in the case of antecedents of OCBs, among the most prominent mediators that have been identified are trust in one’s leader and the organization, satisfaction, a sense of obligation or a feeling of responsibility, a need to reciprocate, social norms/expectations, a sense of commitment, perceptions of fairness, and liking for the supervisor” (p. 237). The relationship between trust and OCB has been supported in other studies (Organ, 1990; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Both system-level trust (Altuntas & Baykal, 2010; Paille, Bourdeau, & Galois, 2010) and interpersonal-level trust (Appelbaum et al., 2004; Bigley, 1996; Chen, Wang, Chang, & Hu, 2008; Deluga, 1995; Organ, 1990; Podsakoff et al., 1990; Singh & Srivastava, 2009) have been confirmed as antecedents of OCB. The relationship between organizational commitment and OCB was initially found not to be significant by Williams and Anderson (1991), yet a multitude of studies since have suggested that organizational commitment is a mediator of OCB (Morrison, 1994; O’Reilly & Chatman, 1986; Organ, 1990; Organ & Ryan, 1995; Shore, Barksdale, & Shore, 1995; Watrous-Rodriguez, 2010). The literature on OCB suggests that certain independent variables affect corporate employees by having a mediating effect on the relationship between intervening variables and the dependent variable (Organ et al., 2006; Somech & Drach-Zahavy, 2004; Williams, 1988; Williams & Anderson, 1991). Demographic variables of

job type, managerial responsibilities, tenure, gender, minority status, age, level of education, time teaching, time with the institution, shared values, and religious affiliation have been selected as having potentially moderating effects. The hypothesized effects of the control variables and intervening variables of interpersonal- and system-level trust and organizational commitment on OCB are summarized in Figure II-1.

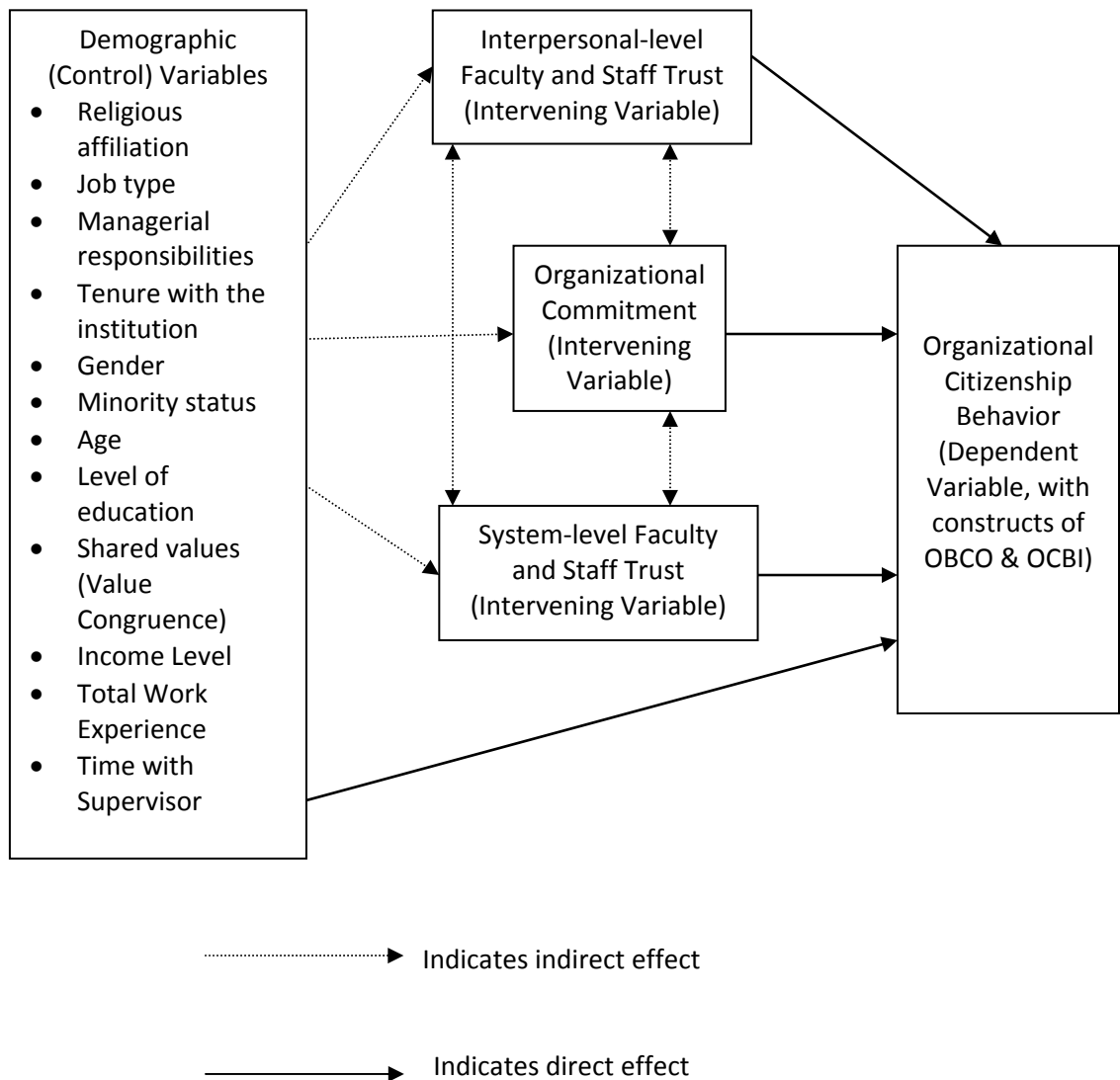


Figure II-1. Path Diagram showing the proposed relationships between Organizational Citizenship Behavior, Interpersonal- and System-level Trust, and Organizational Commitment

Two dimensions of organizational citizenship behavior, as proposed by Williams and Anderson (1991), are tested in the study model: (a) OCB that benefits the organization as a whole (OCBO), and (b) OCB that immediately benefits particular individuals (OCBI). Therefore, the following hypothesis is asserted:

Hypothesis 1: Perceptions of faculty and staff organizational citizenship behavior will be characterized by two dimensions: benefits for the organization as a whole with a focus on the organization, and immediate benefits for a particular individual with indirect benefits for the organization.

Organizational Citizenship Behavior (OCB)

The origins of OCB are traditionally traced back to Barnard (1938), who first analyzed the nature of organizations as a “cooperative system.” Barnard (1938) examined employees’ “willingness to cooperate,” which produced spontaneous contributions by these employees that went beyond explicit job duties and made important contributions to the organization. Barnard also suggested that belief in the ideals of the organization was indispensable to cooperation and to the spontaneous contributions they made to other employees and to the organization itself. He believed that material and monetary compensation were not sufficient to motivate workers to contribute enough for the sustained success of an organization. Barnard (1938) wrote that “willingness to cooperate” is the antecedent of spontaneous contributions [OCB] and that “willingness to cooperate, whether positive or negative, is the expression of the net satisfactions or dissatisfactions experienced or anticipated through alternative opportunities” (p. 85).

Katz (1964) made a significant contribution to the development of OCB, when he proposed an analytic framework for understanding employees’ motivational issues within an organization. Katz (1964) created the terms “in-role behaviors,” which were explicitly recognized by the formal rewards system, and “extra-role behaviors,” which were discretionary and promoted organizational effectiveness. Katz and Kahn’s (1966) extra-

role behaviors included gestures by employees that “lubricate the social machinery” of the organization, but that do not directly adhere to the usual notion of task performance. Katz and Kahn (1966) suggested that organizations must evoke both types of role behaviors; however, extra-role behaviors are more difficult to identify because they are spontaneous, innovative, and “so intrinsically cooperative and interrelated that it tends to resemble habitual behavior of which we are unaware” (p. 339). Katz and Kahn (1966) recognized that although rewards can motivate those with high achieving potential, the variance in rewards can violate the sense of equity and thus lower the sense of citizenship.

In 1983, Bateman and Organ (1983) conducted a study that measured several areas of job satisfaction and its effects on citizenship behaviors. Citizenship behavior was measured by a scale developed by Bateman and Organ exclusively as a gauge of supervisors’ evaluations. Although Bateman and Organ (1983) cited Katz and Kahn’s (1966) definition of extra-role behaviors for their citizenship behaviors, they did not measure citizenship behavior according to that definition. Bateman and Organ (1983) believed that, in the majority of cases, citizenship behavior benefited an individual’s supervisor rather than any other person representing the organization. While their sample size of 77 was too small to make confident inferences, the study did suggest that relationships between job satisfaction and the aggregate measure of citizenship behaviors may be more substantial than those typically reported between recent measures of satisfaction and other performance constructs. Bateman and Organ (1983) hypothesized that supportive supervision had a relationship to citizenship behaviors independent of its effects on job satisfaction.

Smith, Organ, and Near (1983) officially began using the term “organizational citizenship behavior” in the first formal study of OCB’s nature and antecedents. Their study sought to assess the extent to which “good citizenship behavior could be accounted for by characteristic mood state, and the extent to which certain environmental forces and

individual difference variables could independently predict citizenship behavior” (Smith et al., 1983, p. 656). Their survey was completed by 220 subjects and showed that there were distinct classes of OCB, which the authors identified as either altruism or generalized compliance. This study laid the groundwork for Podsakoff et al.’s (2000) seven main themes of OCB.

O’Reilly and Chatman (1986) focused on efforts to better define organizational commitment, and measured the effect of organizational commitment on prosocial behavior and extra-role activities; earlier forms of OCB. Their assessment of 244 subjects in educational and corporate settings suggested strong relationships between commitment and OCB. The five items in their instrument measuring OCB each had factor loadings of greater than .65, and a reliability estimate of .86 using Cronbach’s alpha.

Organ and Konovsky (1989) investigated the relationship of cognitive versus affective determinants of OCB. Organ, as a major contributor to the field of organizational research on OCB, pursued the distinction between cognitive versus affective determinants of OCB based on Zajonc’s (1980) finding that cognition and affect were not as closely related as had been believed, and that they were semi-independent systems. Organ and Konovsky (1989) suggested that, if OCB were affectively driven, it would be a function mainly of individual traits, and that administrators could influence OCB primarily by selection. If OCB were cognitively driven, it would depend on the favorability of managers’ appraisals, which Organ and Konovsky viewed as amenable to influence by organizational administrators. Their study of 369 employees found that cognitive determinants had a greater effect on OCB than did affective determinants; however, affective determinants were still strong antecedents of OCB.

In 1990, Organ reviewed the measurement and theoretical framework of OCB in his article, “The Motivational Basis of Organizational Citizenship Behavior.” Organ (1990) also differentiated the construct of OCB from closely related constructs such as

prosocial behavior and organizational commitment. Organ redefined OCB, and included the quality of forbearance, or the willingness of an individual to bear the inconveniences that may occur with beneficial, collective behaviors. In his summary of cognitive versus affective determinants of OCB, Organ (1990) stated that “the robust correlation between job satisfaction and OCB reflects the dominant cognitive component in existing measures of job satisfaction; and we hypothesize that job cognitions relate to OCB to the extent that they reflect fairness judgments” (p. 61).

Farh, Podsakoff, and Organ (1990) proposed that although satisfaction had been the major antecedent of OCB thus far, leader behavior and task characteristics could have an equally strong relationship. They specifically looked at leader fairness and task scope as determinants of the OCB’s distinct classes (Smith et al., 1983) of altruism and compliance. Their study of 195 workers at the Ministry of Communications in Taiwan revealed that altruism and compliance varied in their causal structure, and that satisfaction was more apt to capture affect than either leader behavior or task characteristics (Farh et al., 1990). Their research also found that task scope accounted for more unique variance in the classes of altruism and compliance than did satisfaction, and that leader behavior accounted for unique variance only in the class of altruism (Farh et al., 1990).

Podsakoff et al. (1990) began to seriously examine trust’s role in OCB when they evaluated trust as a mediating variable in the relationship between transformational leadership behavior and OCB. They used Organ’s (1988) expanding definition of OCB that included multiple classes of OCB: altruism, civic virtue, conscientiousness, courtesy, and sportsmanship. They found that trust in a leader had a positive relationship with OCB (Podsakoff et al., 1990).

Williams and Anderson (1991) focused their research on showing the discriminant validity of in-role behavior (IRB) versus extra-role behavior (OCB), as well as the effect of components of satisfaction and organizational commitment on OCB. In

their study, Williams and Anderson (1991) identified two dimensions of OCB; OCB that benefited the organization as a whole (OCBO), and OCB that immediately benefited particular individuals (OCBI). Their study examined a sample of 127 full-time employees who were enrolled in an MBA program, and some of their fellow co-workers and managers. The scale used to measure OCB was originally developed as a part of Williams' (1988) doctoral dissertation. Williams and Anderson (1991) utilized a third scale of in-role behavior to initially demonstrate the discriminate validity of the two OCB dimensions, suggesting that IRB, OCBI, and OCBO were distinct forms of performance with separate constructs.

MacKenzie et al. (1991, 1993) examined the effect of employee productivity; specifically OCB's effect on managers' ratings of performance. Their studies evaluated 372 insurance agents and 312 sales managers, respectively. MacKenzie et al.'s work confirmed that OCB was comprised of distinct constructs per Organ (1988), and that IRB was a distinct construct (Williams & Anderson, 1991). OCB was found to account for some variance in agents' and managers' evaluations (MacKenzie et al., 1991) in the initial study. In the second study (MacKenzie et al., 1993), it accounted for a larger portion of the variance than did objective sales productivity.

Moorman, Niehoff, and Organ (1993) looked at the effects of job satisfaction, organizational commitment, and procedural justice on OCB and fairness. Their evaluation of 420 employees at a national cable company suggested that the use of fair treatment and fair procedures promoted OCB performance (Moorman et al., 1993). Their study suggested that organizational commitment, job satisfaction, and OCBs can be thought of as consequences of the positive impressions afforded by fair procedures (Moorman et al., 1993).

Van Dyne, Graham, and Dienesch (1994) assessed 950 employees in support of the construct validity of a new measurement of OCB. They reconceptualized OCB in terms of civic citizenship consistent with the definitions and theory proposed in political

philosophy. Van Dyne et al. (1969) proposed that OCB is a multidimensional construct comprising obedience, loyalty, and participation, based on the definition of Inkeles (1969). They hypothesized that proposed antecedents would be positively mediated by a covenantal relationship, characterized by mutual trust, shared values, and open-ended commitment, and produce a positive relationship to OCB. Only some of their antecedents benefited from a covenantal relationship.

Moorman and Blakely (1995) assessed the relationship between individualism-collectivism and OCB in their survey of employees at a financial services organization. Their research suggested that if individuals held collectivistic values, they would be more likely to exhibit OCB, specifically between collectivistic values, and the OCB dimensions (Organ, 1988) of interpersonal helping, individual initiative, and loyal boosterism.

In 1995, Organ and Ryan (1995) performed a meta-analytic review of attitudinal and dispositional predictors of OCB. This analysis of 55 studies found that the relationship between job satisfaction and OCB was stronger than that between satisfaction and in-role performance. It also suggested that the relationship between organizational commitment and OCB was just as strong as the relationship between job satisfaction and OCB. Their analysis also showed that subject groups and work settings did not account for significant variance in the relationships examining OCB. Finally, they found that the relationship of dispositional measures with OCB was not as strong as attitudinal measures (Organ & Ryan, 1995).

Research linking interpersonal-level trust and OCB began to develop during the mid-1990s. Deluga (1995) examined the relationship of interpersonal-level trust and OCB in the context of the military. Deluga (1995) hypothesized that in measuring 10 supervisor behaviors that facilitated interpersonal-level trust, he would find a positive relationship with subordinates' OCB. Deluga's findings were consistent with Organ's (1988) prior findings that interpersonal-level trust in a supervisor would inspire

subordinates' OCB. Skarlicki and Latham (1996) examined 152 members of a Canadian labor union to investigate whether educating union officers in implementing principles of organizational justice would increase OCB. They utilized Williams and Anderson's (1991) model of OCB in assessing behavior supporting the union as an organization (OCBO) and behavior supporting union brothers and sisters (OCBI). Skarlicki and Latham's (1996) study found those employees under leaders that received and were implementing organizational justice had higher levels of both OBCO and OCBI. The union workers' perceptions of fairness positively mediated the relationship between training and OCBO, but not the relationship with OCBI. Podsakoff, MacKenzie, and Bommer (1996) studied the effects that substitutes for leadership had on organizational commitment, trust, and OCB. Their research was conducted with 1200 employees from a variety of corporations throughout the United States. The results of their study suggested that there were significant relationships between trust in a leader, organizational commitment, and the classes of OCB of altruism, conscientiousness, courtesy, civic virtue, and sportsmanship. MacKenzie, Podsakoff, and Rich (1999) created and tested a model showing the relationships between transformational and transactional leadership and sales performance. They tested the hypothesis that "trust (interpersonal-level) will be positively related to extra-role performance [OCB]" (p. 122) and found that trust had a significantly strong relationship with OCB classes of helping behavior and sportsmanship.

Somech and Drach-Zahavy (2000, 2004) focused their research efforts on OCB in schools; specifically assessing teachers, staff, and administrators. Somech and Drach-Zahavy utilized William and Anderson's (1991) scale for OCBO and OCBI in assessing its relationship to organizational learning values and structures. The reliability estimates using Cronbach's alpha of the OBCO and OCBI scales were .80 and .81, respectively. Their study confirmed the reliability of Williams and Anderson's (1991) scale, and the construct validity of OCBO and OCBI.

Analysis of system-level trust and OCB did not become prevalent in research until the current decade. Altuntas and Baykal (2010) conducted a study to measure the relationship between system-level trust and OCB. Using a sample of 900 nurses from a variety of hospitals, they sought to measure the nurses' levels of system-level trust and OCB, and the relationship between the two. The results of the study suggested that there was a positive relationship between system-level trust and the OCB classes of conscientiousness, civic virtue, altruism, and courtesy; however, there was no relationship with the class of sportsmanship (Altuntas & Baykal, 2010). Paille et al. (2010) also conducted a study in which system-level trust was tested for a relationship with OCB, specifically OCBO. The researchers tested the relationships between perceived organizational support, intent to leave, and satisfaction to OCB. The subjects were 355 employees of various corporations and across various industries who had graduated from the same business school. Trust was hypothesized and found to have a strong relationship with OCB, perceived organizational support, and satisfaction (Paille et al., 2010).

OCB, in the context of the Catholic Church, schools, and IHEs, can be seen as a factor in discipleship, and as closely linked to the Catholic concept of altruism (Ebener, 2007). Ebener's (2007) study examined the effects of servant leadership on OCB in high-performing Catholic parishes. Discipleship and altruism followed the Catholic teaching that Catholics are to give freely of themselves, expecting nothing in return (Ebener, 2007). Organ (1988) utilized the parable of the Good Samaritan in describing OCB, and Ebener (2007) further suggested that the Catholic terminology of discipleship behaviors was nearly synonymous with the business terminology of OCB. Kutcher, Bragger, Rodriquez-Srednicki, and Masco (2010) studied religiosity as it influenced OCBs and found a positive correlation between religious beliefs, practices, spiritual well-being and OCB.

Within this study, OCB refers to an individual's behavior that is a personal choice, discretionary, and not directly or explicitly recognized by the formal reward system; in the aggregate, it promotes the effective functioning of the organization and is important to its survival, as suggested by Organ (1988). Based on the literature, empirical evidence, and Research Questions 2, 3, and 4 in Chapter I, the following hypotheses are asserted:

Hypothesis 2: Higher levels of interpersonal-level trust will be associated with higher levels of organizational citizenship behavior.

Hypothesis 3: Higher levels of system-level trust will be associated with higher levels of organizational citizenship behavior.

Hypothesis 4: Higher levels of organizational commitment will be associated with higher levels of organizational citizenship behavior.

Faculty and Staff Members' Trust

Prior research on trust identified distinctions and classifications between different types of trust at the interpersonal, the group, and organizational (system) levels (Barber, 1983; Hughes, 1974; Likert, 1967; Shapiro, 1987; Zucker, 1986). Rotter (1967) defined interpersonal trust as the ability of an individual or group to rely on the commitment of another individual or group, and acknowledged prior work on the conditions of interpersonal trust regarding game theory (Deutsch, 1958, 1960; Rapoport & Orwant, 1962; Scodel, 1962). Barber (1983) defined the term "system-level trust" in regard to the legal system; whereas both individuals and formal groups of individuals trusted the bureaucratic system, the sanctions and safeguards that were in place in the legal system could be trusted to protect the innocent and punish the guilty. System-level trust was needed because societal interactions and exchanges that were based solely on interpersonal trust with individuals and not with businesses and institutions were too risky and unpredictable (Lewis & Weigert, 1985).

Smith and Shoho (2007) indicated that “the prospects of continued fiscal constraints, expanding institutional responsibilities, and emerging federal and state pressures for higher education accountability highlight the need for stakeholder trust in colleges and universities” (p. 129). Minimal research on trust and higher education has focused on these types of trust, with more emphasis on students’ trust of higher education (Ghosh, Whipple, & Bryan, 2001), faculties’ trust of administration and their institutions (Dufty, 1980; Park, 2001), trust among faculty (Vineburgh, 2010), and the public’s trust of faculty (Fairweather, 1996). This study will focus on the interpersonal-level and system-level dimensions of trust. The model used in the study examines faculty and staff at Catholic IHEs as the trusting parties, and their supervisors, other members of the faculty and staff, and administration as those being trusted. Interpersonal-level trust will be evaluated in terms of faculty and staff members’ trust in their supervisors and other institutional decision makers (i.e., mid-level management, department chairs, deans, cabinet, etc.), whereas system-level trust will be considered in terms of faculty and staff members’ perceptions of organizational support and organizational justice. This distinction is made because these dimensions differ in their antecedents and outcomes (Tan & Tan, 2000). Empirical studies have shown that faculty trust among colleagues, clients, and administrators improves institutional efficiency and productivity (Hoy & Sweetland, 2000, 2001; Hoy et al., 1992; Smith & Shoho, 2007).

Trust, as it relates to research on Catholic education, has been examined in only a few limited studies (Bijura, 2006; Ochterski, 2001; Okpogba, 2011). Ochterski’s (2001) research focused on trust as a form of power in two Catholic secondary schools for women. Trust, as a form of power, was found to exist between teachers and individuals who had worked together and faced adversity as a team. Ochterski (2001) found that high levels of trust allowed for the empowerment of teachers and staff. Bijura (2006) assessed the leadership behavior of two vice-chancellors of Catholic universities in East Africa. Bijura (2006) confirmed and described the importance of trust between

transformational leaders and their followers. Okpogba's (2011) study of faculty at Catholic IHEs suggested that, unlike their K-12 counterparts, faculty collective trust did not have a positive effect on teaching, self-efficacy, or the belief that individual faculty could succeed in teaching students.

Interpersonal-level Trust

Giffin (1967) first proposed the multidimensionality of interpersonal trust with regard to communication. Giffin (1967) based his definitions on Deutsch's (1958, 1960, 1962) research on the concept of trust that went beyond just the concepts of predictability and expectation. Giffin's and Deutsch's work laid the foundation for the study of interpersonal trust that evolved through a variety of academic disciplines including business, economics, political science, psychology, sociology, and social work (Kramer & Cook, 2004). The definition has evolved beyond Giffin's (1967) definition of interpersonal trust as the reliance on another person to achieve an objective in a risky situation, into a definition that is now the single most important variable to influence interpersonal behavior (Golembiewski & McConkie, 1975). The study of interpersonal trust in education has received inadequate attention, and IHEs could benefit from its study as have corporations and businesses (Nooteboom & Six, 2003).

Rotter (1967, 1971) took the research on interpersonal communication to the next level, going beyond its perspective in social learning theory. The social learning theory perspective studies at that time included those involving the prisoner's dilemma (Vinacke, 1969), source credibility (Giffin, 1967), and deferring immediate rewards in favor of larger rewards (Mischel, 1966). Rotter (1967) created a reliable survey known as the Interpersonal Trust Scale to formally evaluate the verbal reliability of others through an additive scale. One of the most unexpected outcomes of his research showed that socioeconomic status, the subjects' religion, and the religious differences between parents were highly significant. These results provided further support of the relationship between religion and interpersonal-level trust. Rotter's (1971) later work went beyond

his initial study of trust and other studies of interpersonal trust at the time to include four classes of interpersonal trust variables: (a) behavior potentials, (b) expectancies, (c) reinforcement values, and (d) situations. Rotter's and others' (e.g., Gibb, 1964) expansion of Deutsch's initial trust research evaluating interpersonal trust prepared the subject for its major transition to evaluation in the context of managerial problem solving (Zand, 1972).

Zand's (1972) breakthrough research on interpersonal trust among decision makers, managers, and subordinates utilized experimental high-trust and low-trust groups who worked on a manufacturing-marketing problem-solving effectiveness exercise. Zand found that lower levels of interpersonal-level trust caused distorted perceptions of the problem, less willingness to take risks, and fewer comprehensive, realistic solutions. He used both qualitative and quantitative information to show that interpersonal trust as a social phenomenon could significantly affect managerial problem-solving effectiveness (Zand, 1972).

Interpersonal trust continued to evolve from confidence in others' words and actions (Cook & Wall, 1980; Deutsch, 1958; Giffin, 1967) to willingness to act as if future actions and behaviors of others were certain, understanding the potential negative consequences of those involved (Lewis & Weigert, 1985). Cook and Wall (1980) continued the work on both Rotter's scales and Zand's research in business situations to develop an interpersonal trust scale specifically for the workplace that measured faith and confidence in co-workers. Lewis and Weigart (1985) began to evaluate trust in even greater dimensions as they proposed that "trust was seen to include both emotional and cognitive dimensions and to function as a deep assumption underwriting social order" (p. 967). Levels of trust depended on the individuals and their particular situation, such as trust in family, government, doctors, business partners, and so on. Gambetta (1988) further defined trust as a conceptualization in the sociological perspective of a level of subjective probability of another individual's actions before they can be monitored and

when they directly affect the trustor. Butler and Cantrell (1984) expanded the field of research on interpersonal-level trust in evaluating its determinants with behavioral decision theory. They concluded that integrity, competence, and consistency were statistically significant predictors of interpersonal trust. Whitener, Brodt, Korsgaard, and Werner (1998) developed predictors of trust as behavioral consistency, behavioral integrity, delegation of control, demonstration of concern, and communication.

Many authors have studied interpersonal trust in terms of the willingness to assume risk and risk as an antecedent or outcome of trust (Coleman, 1990; Giffin, 1967; Lewis & Weigert, 1985; Luhmann, 1988), Mayer et al. (1995) insisted that the issue of how risk is associated with trust was never actually resolved. They asserted that “there is no risk taken in the *willingness* to be vulnerable, but risk is inherent in the behavioral manifestation of the willingness to be vulnerable” (p.724). Risk taking in a relationship was a more appropriate concept because it allowed for the evaluation of the affective relationship built between the trustor, the trustee, and the trustor’s willingness to allow personal vulnerability (Mayer et al., 1995).

As the concept of interpersonal-level trust was studied further in the workplace, it began to be seen as the most important component of collaborative effort (Costigan, Ilter, & Berman, 1988), long-term stability, and the well-being of organizational members (Cook & Wall, 1980). Recent workplace initiatives of team work and diversity, which are still high priorities of educational and business institutions today, were also found to benefit from, if not necessitate, interpersonal-level trust (Costigan et al., 1988; Mayer et al., 1995). There are benefits to building interpersonal trust among team members: greater innovation, shared feelings, team members acting as resources for one another, and learning accomplished at the team level (Costigan et al., 1988). Because bureaucratically structured organizations are not expected to perform as well as team-based organizations in terms of production quantity and quality, innovation, and professional development of employees, the payback of interpersonal trust at the team

level is even more important to institutions' success and sustainability (Costigan et al., 1988). Diversity in the workplace has been increasing and is expected to continue to increase; therefore, industries must find ways to strengthen the willingness of these diverse employees to work together despite different backgrounds, experiences, and cultures. Interpersonal trust can provide a means for connecting these employees and encouraging their collaboration and teamwork (Mayer et al., 1995). Although constant collaboration is expected to continue to build trust (Mayer et al., 1995), especially among diverse teams, it is important to remember that managers, and even team leaders, must take the first steps in initiating trust in order to facilitate reciprocity (Whitener et al., 1998).

Several studies that specifically examined the relationship of interpersonal-level trust and OCB were not initially included in this review of literature on OCB. For example, Bigley (1996) examined interpersonal trust within three dimensions: role performance trust, affective bond trust, and ethical integrity trust. He hypothesized that all three dimensions of trust would mediate the relationship between leadership behaviors and OCB, but only affective bond trust was found to do so (Bigley, 1996). Bigley specifically looked at the antecedent of time worked for supervisor, which he found to moderate the relationship between disposition-based trust and OCB. Appelbaum et al. (2004) examined the negative relationship between job dissatisfaction and low trust, and the negative relationship between low trust and OCB. Chen et al. (2008) surveyed 200 nurses and their supervisors to evaluate the effects of leader-member exchange, trust, and supervisor support on OCB. Chen et al. found strong statistical evidence to support the assertion that leader-member exchange had a very significant effect on OCB and was mediated by interpersonal-level trust. Singh and Srivastava (2009) examined 303 manufacturing and service executives to evaluate determinants of interpersonal-level trust and its impact on OCB. They reported that interaction frequency, consistency, and competence were all significant predictors of interpersonal trust, and that interpersonal-

level trust was positively associated with OCB. The interpersonal-level trust and OCB relationship was found to be mediated by the individual interpersonal-level trust factors. Singh and Srivastava (2009) ultimately suggested that the development of interpersonal-level trust was a strategy that could motivate OCB at both the individual (OCBI) and organizational (OCBO) levels.

Research on trust, beginning in 2000, revealed additional insights into the knowledge base of trust that was established in the 20th century. Tan and Tan (2000) found that efforts to increase interpersonal trust also increased innovation and satisfaction, but it was most effective when paired with efforts to increase system-level trust that simultaneously increased commitment and lowered attrition. Schoorman, Mayer, and Davis (2007), after revisiting their 1995 work in terms of the length of the trusting relationship, found that time was a variable factor for interpersonal-level trust. They also found that other trust relationships should have a significant effect on and demonstrate more predictable results of trust. Schoorman et al. (2007) also identified the reciprocity of trust, international and cross-cultural trust, and trust violations and repair as important future avenues of trust research to pursue.

Within this study, interpersonal-level trust refers to the extent to which faculty and staff members of Catholic IHEs have confidence in their supervisors and are willing to act on the basis of their words, actions, and decisions, as suggested by McAllister (1995). Based on the literature and Research Questions 3, 5, and 7 in Chapter I, the following hypotheses are asserted:

Hypothesis 3: Higher levels of interpersonal-level trust will be associated with higher levels of organizational citizenship behavior.

Hypothesis 5: Higher levels of system-level trust will be associated with higher levels of interpersonal-level trust.

Hypothesis 7: Higher levels of interpersonal-level trust will be associated with higher levels of organizational commitment.

System-level Trust

As research on trust expanded during the second half of the 20th century, it became apparent that the dimensionality of trust expanded beyond mere social relationships. Specifically within the workplace, it had expanded beyond colleagues, supervisors, and top-level leadership (Lewis & Weigert, 1985). Much earlier, Durkheim (1997) recognized that society was simultaneously influenced by trust among individuals as well as by trust in social institutions; he believed that people's system-level trust had an effect on their interpersonal-level trust. In *The Elementary Forms of the Religious Life*, Durkheim (1912) specifically discussed how the Church was the most fundamental social institution; through believers' trust in God, they would behave in certain ways and work within specific ethics and guidelines, creating collective consciousness. He maintained that all other social institutions would stem from the Church, and that the Church would provide a framework for governing or essentially building system-level trust (Durkheim, 1912).

Although Sztompka (1999) was not the first scholar to formally define system-level trust, his comprehensive definition indicated that system-level trust was a “combined effect of institutional, technological, and commercial trust: the belief that institutions, technological systems, and products are dependable, reliable, and functioning smoothly” (p. 50). Lewis and Weigert (1985) asserted that system-level trust was indispensable in maintaining legitimacy in the monetary system, politics, and educational and religious institutions. If people did not have system-level trust, the aforementioned systems would lose legitimacy and ultimately disintegrate (Lewis & Weigert, 1985). They viewed trust as the essential assumption needed to make transactions in society and to keep order and control among failures and incompetency outside of the formal court system.

Culbert and McDonough (1986) argued that system-level trust allowed individuals and groups to deal with anomalies and occasional problems that they

encountered within the workplace and to maintain organizational effectiveness. They asserted that empowerment was the key to understanding system-level trust; consequently, they focused their research on individuals' internalization of the system's goals. They examined the consequences of individuals who did not trust the system and became disempowered. When employees shifted their orientations to be more protective and conservative, they debilitated the system and spent time and effort discriminating between their own needs and the viability of the system's needs (Culbert & McDonough, 1986).

Zucker (1986) scrutinized system-level trust as a commodity that could be manufactured by individuals, institutions, and industries. System-level trust was described as a combination of formal and intermediary mechanisms not dependent on the unique characteristics of an individual (Zucker, 1986). Zucker used the stock market as an example of system-level trust creating industry, because there are standards at all levels to create trust and a history of trust established as more people buy into a particular market such as the New York Stock Exchange. Professionalization, such as certifications and professional organization memberships, assists in creating and maintaining system-level trust at the individual level. The creation of system-level trust as a commodity allows individuals, institutions, and industries greater ability to assure their constituents against problems at a variety of levels.

Hart's (1988) research on system-level trust provided the field with knowledge on top managers' roles in creating system-level trust. If they properly influence the culture of the organization and departments, top-level executives can create an institution conducive to system-level trust. When top executives create images to supplant actual interactions with employees, they can create and influence culture and build system-level trust by institutionalizing collective habits (Feldman, 1986; Hart, 1988). This concept of impersonal trust, or the creation of trust in individuals or institutions that individuals or groups do not deal with directly, was explored further by Shapiro (1987).

Shapiro (1987), Zucker (1986), and Lane (1988) argued that as societies develop and become more complex, there is a growing need for impersonal trust and less need to know the exact details of business transactions. Agency, giving another individual or institutions the power to do business on your behalf, complicates the conceptualization of personal relations in regard to all types of trust. Shapiro (1987) suggested that procedural norms, structural constraints, selection procedures, policing mechanisms, risk spreading, and insurance-like agreements would build enough impersonal trust to motivate making transactions with agents and institutions in which no personal relations existed (Park, 2001). Regulatory institutions are an example of Shapiro's concept of impersonal trust (1987).

McCauley and Kuhnert (1992) set out to design an empirical study to assess system-level trust. Within a large government training organization, McCauley and Kuhnert received completed surveys from 358 employees and assessed the employees' system-level trust based on the following variables: perception of their professional development opportunities, job security, fairness of the organization's performance appraisal system, participation and autonomy, feedback, supportive supervisor behavior, and communication. Their research concluded that employees monitor the organizational environment to assess whether it is conducive to trust, and if so, they will build system-level trust. They also found that the system-wide variables of employees' perception of their professional development opportunities, job security, and fairness of the organization's performance appraisal system contributed significantly beyond the job and relational variables to system-level trust. McKnight, Cummings, and Chervany (1998) built on this empirical research on system-level trust to assess why initial trust in the workplace might be high, yet not due directly to the situation or persons involved.

Sztompka's (1999) comprehensive work, *Trust: A Sociological Theory*, extended system-level trust research by examining the involvement of technological systems. The vast complexity of knowledge associated with today's technology makes it difficult for

people to comprehend all of the systems in place and to decide whether to trust them (Sztompka, 1999). Sztompka conceded that trust in these technological systems that people do not understand are now a necessary part of everyday lives and that they are vital to our survival. These systems include telecommunications, transportation systems, computer networks, and financial markets, among others (Moye, 2003). This technological aspect of system-level trust is increasingly important within institutions as more processes are automated and computers play more important roles in day-to-day functions and operations.

Although a few studies specifically examined the relationship of system-level trust and OCB (Altuntas & Baykal, 2010; Paille et al., 2010), two recent dissertations examined system-level trust between faculty and staff members and their IHEs (Park, 2001; Vineburgh, 2010). Park (2001) evaluated the effect of system-level trust on 554 faculty members' commitment levels at Korean IHEs. His results strongly suggested that both system-level trust and interpersonal-level trust were highly associated with organizational commitment. Vineburgh (2010) examined system-level trust and its relationships with empowerment, resistance to change, support for innovation, and interpersonal conflict at historically Black colleges and universities (HBCUs). He found that the demographic variables of age, level of education, administrative experience at current institution, involvement in implementing innovation, institutional type (two- and four-year institutions), gender, race, and field affected system-level trust (Vineburgh, 2010).

Within the current study, system-level trust is conceptualized as the extent to which faculty or staff members perceive the systems in IHEs as trustworthy. Systems in IHEs refer to the policies, procedures, regulations, and guidelines of the IHE. Based on the literature and Research Questions 2, 5, and 6 in Chapter I, the following hypotheses are asserted:

Hypothesis 2: Higher levels of system-level trust will be associated with higher levels of organizational citizenship behavior.

Hypothesis 5: Higher levels of system-level trust will be associated with higher levels of interpersonal-level trust.

Hypothesis 6: Higher levels of system-level trust will be associated with higher levels of organizational commitment.

Organizational Commitment

In an early study of managers' commitment to the organizational process, Buchanan (1974) summarized the definitions of organizational commitment as the "partisan, affective attachment to the goals and values of an organization, to one's role in relation to goals and values, and to the organization for its own sake, apart from its purely instrumental worth" (p. 533). Research on commitment until that time had focused primarily on the number of years of organizational service, social interactions in the workplace, job achievement, and advancement as determinants (Buchanan, 1974). Buchanan's study of managers' work experiences during their first five years with an organization utilized three main components to measure organizational commitment in managers: identification, defined as the adoption of one's own goals and the values of the organization; involvement, or the psychological immersion or absorption into the activities of one's work role; and loyalty, defined as the feeling of affection for and attachment to the organization. Buchanan found that work experience was the most important predictor of commitment in various forms; specifically experiences related to current group attitudes toward the organization, personal importance, and first year job challenges.

Buchanan's (1974) evaluation of work experiences that influenced organizational commitment provided Steers (1977) with the framework for his model of antecedents and outcomes of employees' commitment to organizations. Research, up to that point, had specifically produced outcomes of organizational commitment of retention and higher

performance in employees, and greater effectiveness of organizations (Koch & Steers, 1976; Mowday, Porter, & Dubin, 1974; Steers, 1975; Porter et al., 1974). Although Steers' research still showed that work experiences were most closely related to commitment, he acknowledged the importance of personal and job characteristics and made a critical discovery regarding the effect of level of education on commitment. Where well-educated individuals may find that the organization cannot provide adequate rewards in return for their higher level of education, they may be more committed to their profession or trade than to the institution (Steers, 1977). Steers asserted that his study focused on affective response and not as much on the behavioral intentions of employees as in past studies. He did not find substantial relationships between commitment and performance as reported in prior research.

Stevens, Beyer, and Trice (1978) conducted a similar study regarding organizational commitment. Number of years in the organization was a positive predictor of commitment, as expected, but years in the current position, education, positive attitude toward change, and work overload were all negative predictors (Stevens et al., 1978). Stevens et al. (1978) suggested that if employees have a positive attitude toward change, then they are more likely to be open to a change of employers for greater personal gain, or as a response to increasing demands. Job involvement was also a strong positive predictor of organizational commitment, which showed the importance of psychological predispositions toward work (Stevens et al., 1978). Although Stevens et al. (1978) hypothesized that the organizational variables in their study of organization could have some positive or negative impact, the variables of number of employees, centralization of authority, and percentage of authority (total number of supervisors divided by total number of employees) had no significant effect on commitment.

Cook and Wall (1980) sought to measure quality of life using the variables of interpersonal trust, organizational commitment, and job involvement, among others. Cook and Wall's (1980) conceptualization of affective organizational commitment was

defined as “feelings of attachment to the goals and values of the organization, one's role in relation to this, and attachment to the organization for its own sake rather than for its strictly instrumental value” (p. 40). Cook and Wall's (1980) research showed a strong association between interpersonal-level trust and organizational commitment ($r=.56$, $p<.001$). Dirks and Ferrin (2001) later conducted a meta-analysis of trust in leadership that also revealed a strong association between trust and organizational commitment ($r=.49$). Dirks and Ferrin's (2001) between-class chi-square testing revealed that the referent acted as mediator in trust outcomes; the relationship between trust and commitment was notably higher (.57 and .44) with management as the referent as opposed to a direct supervisor (Moye, 2003). Morgan and Hunt (1994) described a similar relationship between trust and commitment ($r=.549$, $p<.01$) in their commitment-trust model of relationship marketing.

Reichers' (1985) research suggested that the organizational commitment experienced by one employee may be decidedly different from that of another. He suggested that organizational commitment was primarily a function of the individual's perception of the organization which can vary greatly between employees; one individual's perception might be influenced by productivity while another's by the way the institution values its employees (Reichers, 1985). Because the employees' perceptions of the institution can change with the institution itself, their organizational commitment can also fluctuate (Reichers, 1985). This hypothesized relationship was not measurable with the variables used in studies of commitment.

O'Reilly and Chatman (1986) were among the few researchers to utilize university employees and students in their research on organizational commitment. Their survey assessed the organizational commitment of undergraduate and graduate students, as well as university staff members, in a model that included constructs of compliance, identification, and internalization. O'Reilly and Chatman's (1986) work concluded that they could measure organizational commitment with compliance, when attitudes and

behaviors are adopted to gain specific awards; identification, when an individual can feel proud to be part of a group; and internalization, or value congruence.

Meyer and Allen (1984) made an important observation regarding the dual conceptualization of organizational commitment. Commitment could be distinguished as continuance commitment, which is essentially that the economic loss is too great to leave, or as normative commitment, which is essentially the loyalty or obligation that an individual has developed toward an institution (Meyer & Allen, 1984). Allen and Meyer (1990) later developed a three-component model of organizational commitment. Their third conceptualization was affective commitment, or the emotional attachment to, identification with, and involvement in the institution. Affective, continuance, and normative commitment were all found to be empirically distinguishable components of organizational commitment with distinct correlates (Allen & Meyer, 1990).

Primary studies (Bateman & Organ, 1983; Organ, 1988, 1994; Watrous-Rodriguez, 2010) and meta-analyses (Dalal, 2005; Hoffman et al., 2007; LePine et al. 2002; Organ & Ryan, 1995) have supported a relationship between organizational commitment and OCB, specifically affective organizational commitment (Van Scotter, 2000; Wagner & Rush, 2000) and OCB. Several studies that specifically examined the relationship of organizational commitment and OCB were not included in regard to organizational commitment in the review of literature on OCB (Morrison, 1994; Organ, 1990; Shore, Barksdale, & Shore, 1995; Watrous-Rodriguez, 2010). In his analysis of the motivational basis of OCB, Organ (1990) identified organizational commitment as a well-researched determinant of OCB, with organizational commitment viewed as both as an attitude and a set of intentions. Morrison's (1994) survey of clerical workers revealed that the higher the level of organizational commitment, motivated employees tend to think of their job responsibilities more broadly, and more broadly defined job responsibilities lead to increased OCB. Morrison's (1994) work affirmed the ideas of O'Reilly and Chatman (1986) by suggesting that job definitions mediated the relationship

between organizational commitment and OCB. Shore et al. (1995) assessed how OCB predicted manager-rated organizational commitment. They concluded that a significant association suggested that “managers view citizenship as providing greater information about a person's underlying motivation for remaining with an organization than behavior that is required by a job role” (p. 1608). Recently, Watrous-Rodriguez (2010) studied personality and organizational commitment as predictors of OCB. Her study again demonstrated the relationship between affective organizational commitment and OCB, and validated Podsakoff and MacKenzie's (1997) argument that it is possible that engaging in OCB makes work more attractive for employees, inherently increasing their organizational commitment.

Despite a growing amount of empirical research on organizational commitment, its outcomes, and its antecedents, there are few studies regarding organizational commitment to IHEs, and even fewer examining Catholic educational institutions (O'Reilly & Chatman, 1986; Park, 2001; Vineburgh, 2010). Niehoff (1995) assessed the relationship of organizational commitment and job satisfaction with the importance of mission and values of faculty and staff at a Catholic IHE. Niehoff's (1995) results suggested that religious affiliation was a strong determinant of organizational commitment at Catholic IHEs, particularly of those faculty and staff members who identified themselves as Roman Catholic and Christian. Tiernan (2000) measured the commitment levels of Catholic versus non-Catholic teachers at Catholic elementary schools. Catholic teachers demonstrated higher levels of organizational commitment than did their non-Catholic counterparts, whereas non-Catholic teachers demonstrated consistently higher professional commitment (Tiernan, 2000). Tiernan confirmed prior research (Hall, 1968; Sirotnik, 1990) showing that professional ethics are tied to moral commitment. Carroll (2008) studied the relationship of religious affiliation as a predictor of work-related outcomes including organizational commitment. Carroll (2000) found that individuals' religious preference and spirituality had an effect on their work-related

outcomes and that non-faculty (staff) had a greater level of organizational commitment than faculty counterparts.

In this study, organizational commitment is measured as faculty and staff commitment, and refers to the level of a faculty or staff member's involvement and identification with the IHE. Based on the research and literature showing the relationship between OCB and organizational commitment and Research Questions 4, 6, and 7 in Chapter I, the following hypotheses are asserted:

Hypothesis 4: Higher levels of organizational commitment will be associated with higher levels of organizational citizenship behavior.

Hypothesis 6: Higher levels of system-level trust will be associated with higher levels of organizational commitment.

Hypothesis 7: Higher levels of interpersonal-level trust will be associated with higher levels of organizational commitment.

Demographic Variables

Research has suggested that employees trust others in their workplace more if they perceive that they share similar characteristics (Kipnis, 1995). Throughout this review of literature, justification for inclusion of the selected demographic variables was presented (Angle & Perry, 1981; Buchanan, 1974; Mathieu & Zajac, 1990; Morrow & Wirth, 1989; Porter et al., 1974; Posner, Kouses, & Schmidt, 1985; Steers, 1977; Stevens et al., 1978; Vineburgh, 2010; Walker, 2005). The demographic variables of job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation were suggested as having potential in terms of moderating effects on trust.

Based on Research Questions 8, 9, and 10 in Chapter I, the following hypotheses are asserted:

Hypothesis 8: The relationship between system-level trust and organizational citizenship behavior will be influenced by the demographic variables of job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation.

Hypothesis 9: The relationship between interpersonal-level trust and organizational citizenship behavior will be influenced by the demographic variables of job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation.

Hypothesis 10: The relationship between organizational commitment and organizational citizenship behavior will be influenced by the demographic variables of job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation.

CHAPTER III

METHODOLOGY

This chapter includes the methodology and procedures that were used to test the model of interpersonal- and system-level trust presented in Chapter II. The sample and data collection are described, the measures used in the study are explained, and the statistical procedures (factor analysis, path analysis, and multiple regression) used to test the model are presented.

Participants and Data Collection

Utilizing a list of the largest 50 Catholic colleges and universities by undergraduate enrollment (U.S. Dept. of Education, 2012), 25 were chosen at random and invited by phone and email to participate in the study. Of the 25 institutions invited to participate, only two accepted, and the participants in the study were the faculty and staff members from these two IHEs. One of the institutions was a diocesan Catholic university and the other was a Benedictine Catholic university. One of the universities was located in the South, and the other in the Midwest. The universities employed significant numbers of faculty and staff (including adjuncts and part-time) that totaled 1918 and 925, respectively.

Given comparability in terms of sample settings, extraneous variables were controlled for adequately. The educational settings of these universities were considered sufficiently parallel. All faculty and staff were included in the study sample.

Data were collected in September 2012 and November 2012 by means of online surveys. An email link to the survey and a cover letter were emailed to faculty and staff members by the Provost or Vice President for Academic Affairs of each institution. The cover letter, shown in Appendix A, explained the purpose of the study and assured faculty and staff that providing the information was voluntary and confidential. The survey did not contain any personally identifiable information. In a study of over 1.3 million online surveys, Knapton and Myers (2005) found that response rates increased

with the level of education that a respondent had achieved. Respondents with some college or technical school education responded at a rate of 22.0%, those with bachelor's degrees at 23.2%, and those with a graduate education at 24.1% (Knapton & Myers, 2005).

In an effort to achieve the highest response rate possible, a follow-up email was sent 10 business days after the first email to remind faculty and staff members to complete the survey. King and Delana (2002) analyzed response rates for Web-based surveys and found that reminder emails resulted in an increase of approximately 8 to 15% and that the results were not specific to industry type or size. Two weeks after the reminder email was sent, the response rate for this study was 12.59%, yielding 358 total surveys taken, of which 265 or 9.32% were complete. In their meta-analyses of web based surveys, Cook, Heath, and Thompson (2000) found that response representativeness is more important than response rate, and that very small samples can more adequately reflect a population if they are more representative of the population than a greater number of responses. Although the return rate for the survey was somewhat modest, the aggregate characteristics of the survey respondents closely approximate those same aggregate characteristics of all of the faculty and staff of the institutions in the study. Babbie (2004) suggested that low response rates are still valid when there is a less significant chance of a non-response bias (p. 272). By comparing known values of respondents such as gender, job type, full versus part time status, and religious preference to the values reported by the universities in the study about all potential participants, the survey respondents were shown to be representative of the universities' populations. There is, consequently, a low likelihood of non-response bias. While this survey was anonymous, because it asked personal and professional questions about trust, commitment, and religious preference, participants may have been less likely to complete the survey.

Measures Used in This Study

This section includes a description of each of the measures used in this study. The following sections include explanations about how variables in the study model were measured. The survey instrument contained questions to assess demographic variables and items to measure faculty and staff members' organizational citizenship behavior, interpersonal trust between themselves and supervisors/managers within the IHE, their perception of organizational system trust, and their commitment to the organization. All measures incorporated into the survey instrument for this study can be found in Appendix B.

Measures for Organizational Citizenship Behavior of Faculty and Staff

To measure faculty and staff members' organizational citizenship behavior, the researcher used the 13-item scale of Williams and Anderson (1991), modified by Somech and Drach-Zahavy (2004). The questionnaire consisted of two subscales: seven items on OCB that immediately benefited particular individuals and indirectly benefited the organization (OCBI), and six items on OCB that benefited the organization as a whole and focused on the organization (OCBO). Reliability estimates using the Cronbach's alphas for the OCBI and OCBO measures were .75 and .88, respectively. Although Somech and Drach-Zahavy (2004) utilized a 7-point Likert-type scale to assess the frequency with which individuals engaged in each behavior, the scale in the current study was reduced to a 5-point scale to be consistent with other response scales used in the study.

The scale was originally developed as a part of Williams' (1988) doctoral dissertation, *Affective and nonaffective components of job satisfaction and organizational commitment as determinants of organizational citizenship and in-role behaviors*. Subsequently, Williams and Anderson (1991) identified two dimensions of OCB: OCB that benefited the organization as a whole (OCBO) and OCB that immediately benefited

particular individuals (OCBI). Williams' measures of the constructs of OCBO and OCBI were modifications of prior research by Bateman and Organ (1983), Graham (1986), Organ (1988), and Smith et al. (1983). Williams and Anderson (1991) utilized a third scale of in-role behavior to initially demonstrate the discriminate validity of the two OCB dimensions. Their study examined a sample of 127 full-time employees who were enrolled in an MBA program and included some of their fellow co-workers and managers. Williams and Anderson (1991) found that the items on all three scales had their highest loading on appropriate factors and that the loading met the .35 criterion with the exception of one item, "conserves and protects organizational property."

Somech and Drach-Zahavy (2004) left the exceptional item out of their scale; reliability estimates using the Cronbach's alphas for their OCBI and OCBO scales were .80 and .81, respectively. Williams and Anderson (1991) found that the OCBI and OCBO factors were correlated at .43, suggesting that the factors were relatively distinct forms of OCB (Organ et al., 2006). Two additional studies were conducted to test the structure of Williams and Anderson's (1991) model with OCBO, OCBI, and IRB: Randall, Cropanzano, Borman, and Birjulin (1999) and Turnley, Bolino, Lester, and Bloodgood (2003). The internal reliabilities of the three studies averaged .85 for the OCBI scale and .76 for the OCBO scale, making the measures reasonably reliable (Organ et al., 2006).

Measures for Interpersonal-level Faculty and Staff Trust

To measure the interpersonal-level trust of faculty and staff members, two scales were used: McAllister's (1995) scale to measure perceived decision-maker's behavior and one subscale of Nyhan and Marlowe's (1997) Organizational Trust Inventory. These scales were used by Moye (2003) to measure interpersonal-level trust. The measure included eleven items from McAllister's (1985) measure and all four items from Nyhan and Marlowe's (1997) organizational subscale (Moye, 2003).

According to McAllister (1985), interpersonal-level trust had both cognition- and affect-based foundations, and his study examined the building and developing of these two types of trust in the relationships between professionals and managers. Cognition-based trust was established when individuals chose to trust another individual based on their knowledge of that individual. Affect-based trust was established when there was an emotional bond between individuals, and they made an emotional investment in a trust relationship (McAllister, 1985).

Based on prior research on interpersonal-level trust (Cook & Wall, 1980; Johnson-George & Swap, 1982; Rempel et al., 1985; Rotter, 1971), McAllister created an initial instrument that included 48 items. With the help of McAllister's colleagues, confirmatory factor analysis, and a pre-test of MBA students, the scale was reduced to 11 questions; six questions measured cognition-based trust and five questions addressed affect-based trust (McAllister, 1985). McAllister's research subjects were 194 EMBA students and peers from within their own organizations. The reliability estimates using Cronbach's alpha for the subscales of cognition-based interpersonal-level trust and affect-based interpersonal-level trust were .91 and .89, respectively. Although authors have affirmed the connection between interpersonal-level trust and OCB (Organ, 1990; Podsakoff et al., 1990), McAllister (1985) found that managers' cognition-based interpersonal-level trust might have a negative effect on their affiliative- and assistance-oriented citizenship toward peer managers. The 11 questions based on Moye (2003) that were used in this measure were modified to evaluate the relationships with peers and supervisors in general as opposed to specific individuals. On a scale from 1 (*strongly disagree*) to 7 (*strongly agree*), respondents indicated their agreement with the 11 statements measuring interpersonal-level trust.

Nyhan and Marlowe (1997) developed the Organizational Trust Inventory (OTI) to assess an individuals' trust in their supervisors, and in the organization as a whole, but at a departmental level. The OTI was designed with the goal of following the

differentiation of system-level trust and personal-level trust as outlined by Luhmann (1979). The 12-item scale had eight items measuring individuals' trust in their supervisor and four items measuring their trust in the department. The supervisor subscale measured trust in the immediate supervisor, as they were the most critical mediator of organizational complexity (Nyhan & Marlowe, 1997). The organizational subscale was designed to differentiate attitudes of trust toward the individual's department. Creed and Miles (1996) suggested that supervisors controlled the flow of information by individuals in their organization, and the access to that information was a key manifestation of the level of trust in an organization. Nyhan and Marlowe (1997) used this information to develop the four-question organizational subscale that measured interpersonal-level trust at the departmental level.

Nyhan and Marlowe (1997) examined seven total studies that tested the OTI with a total of 779 subjects and reported that it was psychometrically adequate and stable, and was a reliable and valid two-dimensional measure of interpersonal-level trust for both supervisors and the organization (department). They found the OTI to have internal homogeneity, internal consistency, temporal reliability, and discriminant and convergent validity. The internal reliabilities of the final three studies testing the OTI produced coefficient alphas of .9597, .9599, and .9495, respectively (Nyhan & Marlowe, 1997).

The organizational subscale of the OTI consisting of four items was used in this study. Nyhan and Marlowe's (1997) original 7-point scale, ranging from 1 "*Nearly Zero*" to 7 "*Near 100%*," was reduced to a similar 5-point scale for consistency with other scales in this study.

Measure for System-level Faculty and Staff Trust

To measure the system-level trust of faculty and staff members, Moye's (2003) modified measures of Bryan's (1995) modification of Butler's (1991) Ten Conditions of Trust (CTI) scale and Bryan's (1995) modification of Moorman, Zaltman, and Deshpande's (1992) trust scale were used. There have been very few measures created

and tested to measure system-level trust, and the two scales used by Moyer (2003) were selected because they measured trust that is distinct from interpersonal-level trust and from antecedents of system-level trust (Park, 2001). Moyer's (2003) instrument included four items to measure overall trust from Bryan's (1995) modified eleventh scale of CTI measure and three items from Bryan's (1995) modified trust scale of Moorman et al. (1992). The scales were modified from a 7-point Likert-scale format to a 5-point scale with a similar range.

Bryan's (1995) dissertation study examined individuals' trust in their organization in the setting of higher education. Bryan's (1995) model measured the effect of trust on behavior in a relationship and the effects of 10 antecedents of trust on the dynamic development of trust. Bryan (1995) modified the scales of Butler (1991) and Moorman et al. (1992) and changed the references of the questions from personal relationships to parasocial relationship. Moyer (2003) later modified the text of the questions to fit the context of system-level trust in a business organization. The trust scales that Bryan (1995) developed had a reliability estimate using Cronbach's alpha of .88.

Butler's (1991) Ten Conditions of Trust Inventory (CTI) was created to measure a content theory of trust conditions. After interviewing 84 leaders across a variety of industries, Butler created 10 scales corresponding to 10 conditions of trust that included availability, competence, consistency, discreteness, fairness, integrity, loyalty, openness, promise fulfillment, and receptivity. He then added an eleventh scale, overall trust, which allowed for the assessment of the relationships between the 10 conditions and overall trust in the individual. Reliability, homogeneity, response bias, convergent and discriminant validity, and construct validation were all supported through additional tests by Butler (1991). The overall trust scale was selected for this study. Butler (1991) calculated the reliability estimate of this eleventh scale using Cronbach's alpha of .97.

Moorman et al. (1992) developed a trust scale to examine how users' trust in researchers influenced various relationship processes and how these relationships varied

when evaluated across dyads. Their evaluation of 779 users suggested that trust and the quality of interaction contributed most significantly to research utilization, and they found indirect effects of trust on other relationship processes as well (Moorman et al., 1992). Their research surprisingly demonstrated that trust between users and researchers needed to be reciprocal and that if trust was not bidirectional, it was likely to dissolve on both ends (Moorman et al., 1992). The trust subscale was selected for this study. Moorman et al. (1992) calculated the reliability estimate of this subscale using Cronbach's alpha of .84.

Measure for Organizational Commitment of Faculty and Staff

To measure the organizational commitment of faculty and staff members, Mowday, Steers, and Porter's (1979) modification of the Porter et al. (1974) Organizational Commitment Questionnaire was used, as utilized by Moye (2003), to measure organizational commitment. The questionnaire included 15 questions that measured organizational commitment characterized by acceptance of and belief in organizational goals and values, willingness to expend great amounts of effort on behalf of the organization, and the desire to maintain membership in the organization (Porter et al., 1974). The response scale was modified from the original 7-point Likert scale to a 5-point scale for consistency in this study, and six of the 15 items were reverse scored to reduce response set bias, as used by Moye (2003).

Porter et al. (1974) originally developed the Organizational Commitment Questionnaire to assess changes across time in measures of organizational commitment and job satisfaction as they related to turnover. The measure of overall commitment was derived by taking the mean score across all items. Porter et al. (1974) defined organizational commitment as the degree to which a faculty or staff member perceived their involvement and identification within the organization. Mowday et al. (1979) analyzed the instrument further in their assessment of 2,563 subjects. This instrument is

highly regarded as a measure of organizational commitment in research and has produced an average reliability estimate using Cronbach's alpha of .88 in over 90 studies (Mathieu & Zajac, 1990; Moya, 2003). The instrument has also been found to discriminate well against other attitudinal measures and has been consistently found to measure a single construct (Morrow, 1993; Mowday, Porter, & Steers, 1982; Moya, 2003; Price, 1997).

Validity, Reliability, and Construction of the Survey Instrument

The validity of the survey has benefitted from being comprised of established instruments that have been tested to show acceptable construct validity (Bryan, 1995; Butler, 1991; McAllister, 1985; Moorman et al., 1992; Mowday et al., 1979; Moya, 2003; Nyhan & Marlowe, 1997; Porter et al., 1974; Somech & Drach-Zahavy, 2004; Williams & Anderson, 1991). Statistical models of causal explanation are always acceptable for two key problems: measurement error (errors in variables) and specification error (errors in equation) (Shadish, Cook, & Campbell, 2002). Because observed variables almost always contain measurement error, these errors can potentially attenuate the relationship among variables (Shadish et al., 2002). The instrument was reviewed by experienced professional colleagues for clarity and conciseness to assist in collecting consistent, clear data. When modifications were made to these questions in this survey, they were revised specifically to match the context to IHEs. Specification error occurs when path models are not specified correctly and cause biased path coefficients; the correctness of the model is vital to valid analysis (Shadish et al., 2002). As Pedhazur (1997) stated, "Path analysis is intended *not* to discover causes but to shed light on the tenability of the causal models a researcher formulates based on the knowledge and theoretical considerations" (pp. 769-770). To avoid specification error, the model was created with sufficient knowledge of the crucial constructs and how they related to each other as based on current literature and research, both theoretical and empirical.

Although the measures all demonstrated acceptable levels of internal reliabilities using Cronbach's alpha, exploratory factor analysis was conducted to establish the construct validity of this survey specifically. Using exploratory factor analysis from previous studies, the dimensions of the survey were evaluated for construct validity of the constructs of OCB, faculty and staff members' trust, and organizational commitment. The number of dimensions extracted among the variables was determined by the eigenvalue-greater-than-one rule. A principal component analysis with a varimax rotation was used to determine significant factor loadings in the study.

Control Variables

Job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation were used as control variables in this study and had been found to have effects related to trust and organizational commitment (Angle & Perry, 1981; Buchanan, 1974; Mathieu & Zajac, 1990; Morrow & Wirth, 1989; Porter et al., 1974; Posner et al., 1985; Steers, 1977; Stevens et al., 1978; Walker, 2005).

Shared values were shown to impact trust throughout a variety of studies. In 1961, Kelman proposed that all people's attitudes and behaviors were derived from three components, one of which was shared values. When an individual shares values with another individual, then they will inherently accept influence and adopt behaviors due to the congruency of their value systems (Kelman, 1961). Although empirical work on shared values did not appear for several decades, many of Kelman's hypothesized antecedents and consequents of shared values ultimately were confirmed.

In the 1980s, shared values surfaced as a popular topic in the subjects of marketing and business. Barber (1983) asserted that there was a reciprocal relationship between shared values and trust in his analysis of the logic of trust. Shared values are an important component in the creation of a relationship built on trust, and trust in turn serves to maintain and express those shared values (Barber, 1983; Gillespie & Mann,

2001). Dwyer, Schurr, and Oh (1987), in their evaluation of developing the buyer-seller relationship, theorized that shared values contributed to the development of both commitment and trust. Hunt, Wood, and Chonko (1989) reported that shared values were a substantive predictor of commitment to the organization in their study of over 1400 marketing professionals. When Jones and George (1988) researched the evolution of trust in cooperation and teamwork, they proposed that “the experience of trust is determined by the interplay of people's values” (Jones & George, 1988, p. 531); they found that “values provide standards of trust that people strive to achieve in their relationships with others” (p. 535). Shared values were shown to be the primary vehicle through which people experienced unconditional trust, an experience of trust in which trustworthiness was assured between parties (Gillespie & Mann, 2001; Jones & George, 1988). In an empirical study of perceived departmental power in which departments shared values with top management, Enz (1988) created a two-staged procedure to measure shared values. Enz (1988) formulated the shared values scale by surveying employees on the degree to which they agreed and the degree to which they believed their management would agree with statements regarding values.

In an empirical study on selection and socialization in accounting firms, Chatman (1991) argued that shared values were the best measure of person-organization fit in employment settings. Morgan and Hunt's (1994) empirical work using their commitment-trust model of relationship marketing demonstrated a strong association between shared values and trust ($r=.519, p<.01$); this association was virtually as strong as the association between trust and commitment ($r=.549, p<.01$). Nearly three quarters of the variance in the trust variable in the study was explained ($SMC = .743$) by the direct effects of shared values, communication, and opportunistic behavior (Morgan & Hunt, 1994). The measure for shared values in their study was a version of Enz's (1988) two-staged procedure studying the degrees to which respondents agreed with corporate ethical values and the degree to which they believed that their major supplier agreed; results

were “then calculated as the difference between the two responses subtracted from 7 (to make high numbers indicate high shared values)” (Morgan & Hunt, 1994, pp. 28-29). A study of trust and distrust by Lewicki, McAllister, and Bies (1998) found that high-trust relationships were significantly determined by the degree to which the trustor and trustees shared values.

Bakari, Bennet-Woods, and Stock (1997) attempted to identify and measure shared values between faculty, staff, and administration and the organizational values of their IHE; historically there had been little agreement among researchers on the origin or evolution of shared values, the basis upon which they could be shared, and the efficacy of specific values. Bennet-Woods (1996) previously proposed a three-factor model of shared values that was used to build a measurement instrument. The three factors were personal values, espoused organizational values, and organizational structures, processes, and interactions. Their methodology was validated by the research, yet the numbers of respondents were too low to create a strong causal relationship (Bakari et al., 1996). They also concluded that employees could not differentiate between diversity and social-responsibility as distinct constructs.

By conveying a vision for the future grounded in values, supervisors, managers, and other leaders can develop shared values with employees, which in turn foster trust (Bennis & Nanus, 1985; Bryman, 1992; Fairholm, 1994; Gillespie & Mann, 2001; Sashkin, 1988,) and provide followers with individualized support. This development of shared values builds interpersonal trust as it exhibits the value of the employees and their individual needs and development (Gillespie & Mann, 2001). Gillespie and Mann (2004) created a distinctly different empirical study from that of Bennet-Woods (1996); they hypothesized that the extent to which team members perceived shared values with their leader would associate with interpersonal trust. Their study utilized two items measured on a 7-point scale ($\alpha=.78$) and found a very strong association between trust and shared values ($r=.73$, $p<.01$). Shared values were also highly associated with extra effort ($r=.69$),

leader effectiveness ($r=.70$), and leader satisfaction ($r=.75$). Shared values, along with consultative decision-making, reduced uncertainty about leaders' future behavior and their likeliness of breaching trust (Gillespie & Mann, 2004).

Niehoff's (1995) study of the relationship of organizational commitment and job satisfaction to the importance of mission and values of faculty and staff at a Catholic IHE suggested that "the personal and religious values of these two religious affiliation groups (Roman Catholic and Christian) may make it easier, or more likely, for an employee to identify with the organizational mission characteristics (Catholic, Jesuit, and humanistic) and mission values (community, respect for persons, and service)" (p. 203). Within this study, shared values were measured as the congruence of commonly held individual and espoused, organizational values, which supported the strategic and operating goals of the organization and were evident in its structures, processes, and daily interactions, as suggested by Bennett-Woods (1996). Participants' responses to two statements in the survey were summed, ranking them into one of three categories of value congruence (shared values): low, moderate, and high. The question was taken from Posner et al.'s (1975) Scale of Shared Values.

Statistical Methodology

Structural equation modeling measures the important variables, and using covariances or correlations among these measures, models the presumed causal relationships and controls for confounds with statistical manipulation (Bollen, 1989; Tanaka, Panter, Winborne, & Huba, 1990; Shadish et al., 2002). Before conducting statistical procedures, tests were run against the data for multicollinearity, normality, linearity, homoscedasticity, and independence of residuals. The statistical methods of principal components analysis, multiple regression, and path analysis were used to analyze the data. Principal components analysis was completed through confirmatory factor analysis. Confirmatory factor analysis is used to categorize variables into coherent subsets that are relatively independent of one another and to combine correlated variables

that may be mainly independent of other subsets into factors (Tabachnick & Fidell, 1989). These factors usually reveal underlying processes that have generated the correlations among the variables (Tebachnick & Fidell, 1989). Hypothesis 1 was explored by conducting a factor analysis to identify the dimensionality of OCB (OCBO versus OCBI).

Multiple regression allows for the assessment of the relationship between one dependent variable and several independent variables, and it describes the magnitude and direction of each independent variable's effect on the dependent variable (Tebachnick & Fidell, 1989; Pedhazur, 1997). The net effect of each independent variable (beta weight, beta-symbol) on a dependent variable, controlling for all of the variables, demonstrates the importance of each independent variable. When performing regressions, the researcher controlled for job type, managerial responsibilities, tenure, gender, minority status, age, level of education, time teaching, time with the institution, shared values, and religious affiliation. Hypotheses 2 through 10 were tested using this statistical method. The respective dependent variable was regressed on each of the independent variables within each hypothesis to test for significant relationships.

Path analysis is a statistical method for studying the direct and indirect effects of variables hypothesized as causes of variables treated as effects (Pedhazur, 1997). As Pedhazur (1997) stated, "Path analysis is intended *not* to discover causes but to shed light on the tenability of the causal models a researcher formulates based on the knowledge and theoretical considerations" (pp. 769-770). The causal linkages proposed by the researcher in Hypotheses 2 through 10 were examined by this method.

CHAPTER IV
ANALYSIS OF DATA AND FINDINGS

This chapter includes validation, construction, and the testing of the reliability of the instruments, a discussion of the assumptions for statistical procedures, demographic characteristics of the respondents, and findings of the statistical analyses related to the hypotheses presented in Chapter II. The nomenclature used for the attitudinal variables is shown in Table IV-1.

Table IV-1

Nomenclature for Study Variables

Symbol	Name
OCBI	Organizational Citizenship Behavior - Individual
OCBO	Organizational Citizenship Behavior - Organization
ILT	Interpersonal-Level Trust
SLT	System-Level Trust
OC	Organizational Commitment
Administrator	Job Type is Administrator
Full_Time_Fac	Job Type is Full Time Faculty
Part_Time_Fac	Job Type is Part Time Faculty
Staff	Job Type is Full Time Staff
Part_Time_Staff	Job Type is Part Time Staff
Manager	Managerial Responsibilities
Gender	Gender
Minority	Minority Status
Degree	Level of Education
TotalWork	Total Work Experience
CurrentWork	Tenure with the Institution
SameSuper	Time with Supervisor
Compat	Shared Values (Value Congruence)
Catholic	Religious Affiliation
Age	Age
Income	Income Level

Validation and Construction of the Instruments

Items used for the study were derived from established instruments as discussed in Chapter III. Exploratory factor analysis with the data from this study was conducted. Generally, previous studies examining the psychometric properties of these instruments relied on exploratory factor analysis and Cronbach's alpha to establish construct validity and reliability of the instruments.

A principal components analysis with varimax rotation was used to establish the construct validity of the survey instrument following the collection of the data. SPSS Statistics Base 19 (2010) stated that a varimax rotation simplifies the interpretation of factors within a principal components analysis using "an orthogonal rotation method that minimizes the number of variables that have high loadings on each factor." Table IV-2 shows the results of the principal components analysis. Because more current research has not shown that there are specific guidelines or cutoff points that can best determine component selection criteria (Sharma, 1996), Kaiser's (1960) eigenvalue-greater-than-one rule of thumb was used to evaluate component selection criteria. Kaiser (1960) suggested that an eigenvalue of less than one would imply that the score on the component would have negative reliability. While there were nine factors that had eigenvalues greater than one in the component analysis, only seven factors were used in the analysis. It can be seen from the factor patterns matrix in Table IV-2 that the items measuring interpersonal-level trust, system-level trust, and organizational commitment had high loadings on the first factor. Sharma (1996) suggested that the high loadings on first two components might represent general factors within the analysis. Because the first two general components affected the loadings from the other factors, the loadings on the other factors, Factor 3 through Factor 7, were relatively lower than those of Factor 1 and Factor 2 (Sharma, 1996). DiStefano, Zhu, and Mindrila (2009) suggested that the use of a cutoff value in evaluating factor loadings is an arbitrary decision made by researchers so as to create "marker" variables in the computation. Comrey (1973)

suggested that there were ranges to evaluate the measure of a factor, with loadings greater than .71 considered excellent, .63 very good, .55 good, .45 fair, and .32 poor.

Tabachnick and Fidell (1989) suggested that only loadings greater than .30 should be interpreted. Accordingly, the arbitrary cutoff point as a rule of thumb for choosing significant factor loadings in this study was as low as $\pm .20$.

Factor 1 was made up of all of the factors measuring interpersonal-level trust (ILT) and system-level trust (SLT) and some measures of organizational commitment (OC). Factor 1 reflected faculty and staff members' trust in the IHE and in this context shows that interpersonal-level trust and system-level trust were correlated in this study. This is consistent with the research on the relationship between interpersonal-level and system-level trust (Barber, 1983; Hughes, 1974; Likert, 1967; Shapiro, 1987; Zucker, 1986; Tan & Tan, 2000). This general component will be decomposed into subscales on Factor 6 and Factor 9. All of the factor loadings for ILT and SLT except for two (items 9 and 25), were greater than .65.

Factor 2 was made up of the 15 factors measuring organizational commitment (OC), and some measures of both interpersonal-level trust (ILT) and system-level trust (SLT). Factor 2 reflected faculty and staff members' commitment and general attachment to the IHE and in this context shows that organizational commitment, interpersonal-level trust, and system-level trust were correlated. This is consistent with the research on organizational commitment being correlated with both interpersonal-level and system-level trust (Cook & Wall, 1980; Dirks & Ferrin, 2001; Moorman, Zaltman, & Deshpande, 1992; Morgan & Hunt, 1994; Moye, 2003; Park, 2001). This general component will be decomposed into subscales on Factor 4, Factor 6, and Factor 9. While item 6 loaded slightly on Factor 2, it was extraneous and was disregarded.

Table IV-2

Principal Component Analysis with Varimax Rotation

	Component						
	1	2	3	4	5	6	7
OCBI1	.102	.060	.713	-.004	.101	-.007	.262
OCBI2	.107	.075	.757	.166	.137	-.019	.192
OCBI3	.115	.052	.460	.478	.189	-.046	.017
OCBI4	.125	-.064	.483	.105	-.004	.460	-.158
OCBI5	.161	.120	.757	-.006	-.030	.063	-.029
OCBI6	.015	.203	.698	-.033	-.011	.198	-.125
OCBI7	.180	.012	.641	.095	.012	.079	-.050
*OCBO8	-.032	-.016	.138	.016	.043	.206	.101
*OCBO9	.082	.060	.181	-.041	.108	.666	.219
OCBO10	.010	.113	.169	-.006	.796	.029	.101
OCBO11	.111	-.005	-.001	.014	.761	.053	-.009
OCBO12	.185	.086	.087	.097	.219	.027	-.114
*OCBO13	.053	-.001	.085	-.023	.060	.053	.776
ILT14	.706	.433	.129	.059	.071	.209	.129
ILT15	.752	.329	.145	.119	.056	.294	.039
ILT16	.509	.371	.278	-.010	.048	.369	-.116
ILT17	.657	.325	.175	.056	.085	.402	-.031
*ILT18	.817	.139	.138	.110	.024	-.077	-.065
*ILT19	.882	.109	.095	.186	.047	-.059	-.097
*ILT20	.877	.101	.085	.164	.054	-.024	-.102
*ILT21	.692	.206	.322	.052	-.001	-.256	-.011
*ILT22	.808	.257	.013	-.074	-.013	-.132	-.140
*ILT23	.809	.227	.096	-.009	-.077	-.162	-.027
*ILT24	.673	.310	.198	-.103	-.019	-.048	.058
*ILT25	.758	.372	.121	-.039	.027	.145	.001
*SLT26	.657	.316	.118	-.176	-.003	.100	.101
SLT27	.692	.316	.048	.027	.151	.147	.251
SLT28	.706	.358	.168	.053	.048	.135	.200
*SLT29	.675	.436	-.038	.061	.054	.191	.104
SLT30	.707	.365	.088	.040	.091	.173	.278
SLT31	.726	.378	.091	.094	.011	.173	.211
SLT32	.608	.327	.050	.252	.138	.141	.258
*OC33	.180	.421	.472	-.045	-.010	-.202	.041
*OC34	.437	.703	.157	.146	.072	.047	-.051
*OC35	.252	.620	.124	-.218	.192	-.018	-.025
OC36	.181	.389	.099	.590	-.177	-.024	-.030
*OC37	.450	.575	.104	.188	-.257	.109	-.048
*OC38	.462	.742	.138	.009	-.020	.106	-.044
OC39	.146	.508	.148	.594	.057	.076	-.034
OC40	.549	.548	.136	.252	-.044	.074	-.064
*OC41	.331	.659	-.024	.128	.021	.106	.180
OC42	.484	.675	.055	.260	-.097	-.003	.092
*OC43	.413	.649	-.014	.026	.113	-.093	.136
OC44	.498	.392	.052	.300	.056	.078	.017
*OC45	.166	.778	.178	.069	.118	.001	-.082
OC46	.407	.673	.120	.313	-.005	-.080	-.002
*OC47	.448	.649	.024	.069	-.152	.105	.068
Eigenvalue	19.369	3.438	2.412	1.803	1.498	1.272	1.039
Explained Variance (%)	41.211	7.315	5.131	3.837	3.188	2.706	2.211
Cumulative Variance (%)	41.211	48.526	53.657	57.494	60.681	63.388	65.599

Note: *Indicates omitted items

Factor 3 was made up the seven items intended to measure OCBI (OCBI).

Factor 4 was made up of six items intended to measure organizational commitment (OC). While items 33, 34, 35, 37, 38, 41, 43, 45, and 47 loaded slightly on Factor 4, they were omitted from the scales measuring organizational commitment (OC).

Factor 5 was made up of three items intended to measure OCBO (OCBO). While items 8, 9, and 13 loaded slightly on Factor 5, they were omitted from the scales measuring OCBO (OCBO).

Factor 6 was made up of the four items taken from the scale intended to measure interpersonal-level trust (ILT). While items 18, 19, 20, 21, 22, 23, 24, and 25 loaded slightly on Factor 6, they were omitted from the scales measuring interpersonal-level trust (ILT).

Factor 7 was made up of five items intended to measure system-level trust (SLT). While items 26 and 29 loaded slightly on Factor 9, they were omitted from the scales measuring system-level trust (SLT).

In sum, a principal components analysis was used to determine which items made up the scales measuring the hypothesized dimensions of OCBI, OCBO, interpersonal-level trust, system-level trust, and organizational commitment. Twenty-two items were omitted from the original instruments. The instrument for measuring faculty and staff members' OCBI, OCBO, interpersonal-level trust, system-level trust, and organizational commitment was composed of 25 items.

The factor loading pattern observed in this study was in some ways similar and in some ways different from the factors found in earlier studies. Thus, the structure of the model used in this study can be identified by five groups as derived from the original measure. This means that faculty and staff members at Catholic IHEs recognized the dimensions of OCBI, OCBO, and system-level trust in ways similar to the original studies, yet at the same time they did not always recognize interpersonal-level trust and organizational commitment the same as participants in the original studies.

Reliability of the Instruments

Cronbach's coefficient alpha was computed to assess the internal consistency in measurement of each of the instrument scales. Cronbach's coefficient alpha is a measure of internal consistency that describes the extent to which the survey items measure the same construct (Cronbach, 1951). Cronbach's coefficient alphas were computed for each of the scales (OCBI, OCBO, interpersonal-level trust, system-level trust, and organizational commitment) using IBM SPSS Statistics Version 19. Churchill (1979) suggested that as Cronbach's coefficient alpha approaches 1, the items being evaluated are correlated highly with true scores, while the opposite is true as the alpha approaches 0.

A reliability estimate of the newly modified and composed instrument by the principal component analysis results for the 25-item measure was .931. Reliability estimates for each of the five components were calculated, as shown in Table IV-3, and ranged from .923 for the items measuring system-level trust to .503 for the items measuring OCBO. Each factor had a relatively high reliability estimate except for OCBO. Nunnally (1967) suggested that a reliability above .50 is acceptable for basic research, yet a reliability of at least .90 is desirable for situations where important decisions are based on test scores. Because none of the estimates fell below .50, the scale items were considered to be adequate for this study.

Table IV-3

Comparison of Reliabilities by Factors (Cronbach's Coefficient Alphas)

Factor	Reliability
Overall	.931
OCBI	.837
OCBO	.503
ILT	.919
SLT	.923
OC	.870

Assumptions

Prior to proceeding with statistical analyses such as regression and path analysis, the following assumptions had to be tested: (a) normality, (b) linearity, (c) homoscedasticity, (d) independence of residuals, (e) multicollinearity (Fields, 2005).

The first four assumptions were tested with regression diagnostics tools in SPSS Statistics Base 19. The assumption that the distribution of the variables is normal was not violated after examining probability plots that showed that observed cumulative distributions of residuals plotted against the expected cumulative distribution of residuals. These plots were essentially linear for each factor and lay approximately on normal lines. The assumptions that the relationship among the variables is linear and that the error terms are constant (homoscedasticity) were not violated after examining the distributions of the residual plots. The residual plots indicated homoscedasticity and that there was no evidence of non-linear relationships between a dependent variable and independent variable from each equation. Fields (2005) suggested that a Durbin-Watson coefficient should be close to 2 in order to assume independence of residuals. All Durbin-Watson coefficients were calculated, and the coefficients for this study ranged between 1.667 and 2.147, thus indicating that the independence of residuals assumption was also satisfied.

The assumption of multicollinearity was tested by examining the bivariate correlation matrix for independent variables (see Table IV-4). If multicollinearity exists between independent variables, it inflates the standard errors of the parameter estimates and decreases the unique effects of those independent variables (Neter, Kutner, Nachtsheim, & Wasserman, 1996). Fields (1996) suggested that if a correlation coefficient above .90 existed between independent variables, multicollinearity could be suspected. The highest correlation among variables in Table IV-4 was .813, between the variables of age (Age) and total work experience (TotalWork); thus all correlations were acceptable in terms of multicollinearity. Mason and Perreault (1991) suggested that multicollinearity is tested by calculating the R^2 s produced by regressing each variable on

all of the other variables to detect linear relationships among them. If R^2 exceeds .90 there is reason for concern. The largest calculated R^2 in this study was .728, thus also acceptable in terms of multicollinearity.

Demographic Characteristics

Table IV-5 summarizes respondent demographics.

Regression Analyses

Ordinary least squares (OLS) regression analysis was utilized to test the effects of the independent and demographic variables on the intervening and dependent variables: interpersonal-level trust, system-level trust, organizational commitment, OCBI, and OCBO. All of these variables were regressed on the demographic variables. The results of the relationships showing significance are depicted in Table IV-6. Fifteen of these relationships were statistically significant at the alpha level of .05.

The job types of Administrator, Full Time Faculty, and Staff were significantly related to the attitudinal variable of OCBI ($p = 0.032, 0.02, \text{ and } 0.014$). Because OCBI describes OCB that immediately benefited particular individuals, the job types of Administrator, Full Time Faculty, and Staff could affect these behaviors differently as these are the full-time positions that typically work with others with similar job types on a day to day basis.

Managerial Responsibilities was significantly related to the attitudinal variable of OCBI ($p = 0.018$). Managers who had these responsibilities in the past may be more likely to act in a way (OCBI) that benefits their department or their individual employees.

Table IV-4

Correlation Coefficients Matrix among OCBI, OCBO, ILT, SLT, OC, JobType, Manager, Gender, Minority, Degree, TotalWork, CurrentWork, SameSuper, Compat, Catholic, Age, and Income

	OCBI	OCBO	ILT	SLT	OC	Same Super	Income	Manager	Gender	Minority	Degree	TotalWork	CurrentWork	Compat	Catholic	Age	Administrator	Full_Time_Fac	Staff	Part_Time_Fac	Part_Time_Staff	
Scale_OCBI																						
Scale_OCBO	.146 [*]																					
Scale_ILT	.418 ^{**}	.260 ^{**}																				
Scale_SLT	.327 ^{**}	.260 ^{**}	.803 ^{**}																			
Scale_OC	.337 ^{**}	.237 ^{**}	.718 ^{**}	.728 ^{**}																		
SameSuper	.124 [*]	-.002	.150 [*]	.111	.044																	
Income	.174 ^{**}	.051	.029	.009	-.016	.103																
Manager	.085	.069	.000	-.057	.080	-.118	-.126 [*]															
Gender	-.104	-.130 [*]	.073	.011	-.024	-.079	-.192 ^{**}	.102														
Minority	.016	-.086	-.016	-.002	.005	.041	-.097	.004	-.013													
Degree	.103	.056	.031	.117	.099	-.034	.452 ^{**}	-.145 [*]	-.163 ^{**}	.001												
TotalWork	.005	-.259 ^{**}	.022	.022	-.095	.210 ^{**}	.393 ^{**}	-.279 ^{**}	-.007	-.100	.153 [*]											
CurrentWork	-.018	-.022	.149 [*]	.141 [*]	.003	.423 ^{**}	.237 ^{**}	-.157 [*]	-.047	-.031	.116	.511 ^{**}										
Compat	-.212 ^{**}	-.085	-.443 ^{**}	-.435 ^{**}	-.504 ^{**}	-.041	.023	-.079	.043	-.044	-.052	.151 [*]	.020									
Catholic	-.009	-.027	.125 [*]	.178 ^{**}	.193 ^{**}	-.096	.090	-.078	.077	-.069	.104	.074	-.050	-.134 [*]								
Age	.009	-.190 ^{**}	-.010	.003	-.102	.192 ^{**}	.393 ^{**}	-.256 ^{**}	-.048	-.132 [*]	.235 ^{**}	.813 ^{**}	.490 ^{**}	.180 ^{**}	.073							
Administrator	-.015	-.035	-.028	.011	-.068	.032	.128 [*]	-.168 ^{**}	-.005	.005	.003	.125 [*]	.128 [*]	.114	.029	.088						
Full_Time_Fac	.023	.065	.131 [*]	.126 [*]	.127 [*]	-.111	.309 ^{**}	.037	-.057	-.085	.536 ^{**}	.033	.087	-.209 ^{**}	.087	.073	-.210 ^{**}					
Staff	-.111	.097	.027	-.020	.001	.081	-.318 ^{**}	.136 [*]	.110	-.018	-.588 ^{**}	-.196 ^{**}	-.111	-.035	-.102	-.213 ^{**}	-.202 ^{**}	-.516 ^{**}				
Part_Time_Fac	.085	-.156 [*]	-.115	-.110	-.085	.098	.129 [*]	-.092	-.053	.062	.160 ^{**}	.276 ^{**}	.043	.202 ^{**}	.047	.289 ^{**}	-.142 [*]	-.364 ^{**}	-.349 ^{**}			
Part_Time_Staff	.055	-.027	-.105	-.045	-.045	-.157 [*]	-.370 ^{**}	-.001	-.012	.110	-.209 ^{**}	-.321 ^{**}	-.194 ^{**}	.023	-.095	-.347 ^{**}	-.063	-.160 ^{**}	-.154 [*]	-.109		

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Table IV-5

Demographics

Variables	Survey Respondents	Frequencies (%)
JobType		
Administrator	20	7.55
Faculty	92	34.72
Staff	87	32.83
Adjunct (Part-time)Faculty	52	19.62
Part-time Staff	12	4.53
Missing	2	0.75
Manager		
Yes	196	73.96
No	66	24.91
Missing	3	1.13
Gender		
Male	102	38.49
Female	160	60.38
Missing	3	1.13
Minority		
Caucasian	236	89.06
Other	27	10.19
Missing	2	0.75
Degree		
No degree	3	1.13
Associates degree	4	1.51
Bachelor's degree	50	18.87
Master's degree	101	38.11
PhD or other professional degree	106	40.00
Missing	1	0.38
TotalWork		
Less than 1 year	1	0.38
1-5 years	25	9.43
6-10 years	33	12.45
11-15 years	34	12.83
16-20 years	25	9.43
21+ years	145	54.72
Missing	2	0.75

Table IV-5 (continued)

CurrentWork		
Less than 1 year	29	10.94
1-5 years	84	31.70
6-10 years	54	20.38
11-15 years	41	15.47
16-20 years	35	13.21
21+ years	22	8.30
Missing		
SameSuper		
Less than 1 year	51	19.25
1-5 years	150	56.60
6-10 years	47	17.74
11-15 years	7	2.64
16-20 years	7	2.64
21+ years	2	0.75
Missing	1	0.38
Compat		
Highly compatible	189	71.32
Somewhat compatible	66	24.91
Not compatible	7	2.64
Missing	3	1.13
Catholic		
Yes	119	44.91
No	145	54.72
Missing	1	0.38
Age		
Less than 25 years	14	5.28
25-34	45	16.98
35-44	49	18.49
45-54	60	22.64
55 years of more	91	34.34
Missing	6	2.26
Income		
Under \$15,000 annually	12	4.53
\$15,000 - \$24,999 annually	21	7.92
\$25,000 - \$49,999 annually	83	31.32
\$50,000 - \$74,999 annually	72	27.17
\$75,000 - \$99,999 annually	39	14.72
Over \$100,000 annually	24	9.06
Missing	14	5.28

Table IV-6

Statistically Significant Relationships between Demographics and Attitudinal Variables

Attitudinal Variable	Demographic Variable	Beta (β)	p-value
OCBI	SameSuper	0.153	0.036
OCBI	Manager	0.161	0.018
OCBI	Compat	-0.191	0.005
OCBI	Income	0.184	0.022
OCBI	Administrator	-0.23	0.032
OCBI	Full_Time_Fac	-0.418	0.020
OCBI	Staff	-0.382	0.014
OCBO	Gender	-0.139	0.033
OCBO	Minority	-0.134	0.033
OCBO	TotalWork	-0.381	0.001
ILT	Compat	0.396	0
SLT	Compat	0.382	0
SLT	Catholic	0.122	0.050
OC	Compat	-0.449	0
OC	Catholic	0.130	0.032

Working with the same supervisor (SameSuper) was significantly related to the attitudinal variable of OCBI ($p = 0.036$). Respondents could select from one of five choices for Time Working with the Same Supervisor (less than 1 year, 1-5 years, 6-10 years, 11-15 years, 16-20 years, and 21+ years). Employees who have had the same supervisor for extended periods of time may be more likely to act in a way (OCBI) that benefits themselves, their manager, or other individuals within their department as they are aware of their manager's or their units expectations, needs, and preferences.

Shared Values (Value Congruence, noted as Compat) was significantly related to four of the five attitudinal variables (OCBI, ILT, SLT, and OC). Respondents could select from one of three levels of value congruence for Shared Values (Highly Compatible, Somewhat Compatible, and Not Compatible). Faculty and staff with higher levels of shared values to the institution may be more likely to inherently accept influence of the institution, managers, and other individuals within the institution.

Gender and Race (Minority) were significantly related to the attitudinal variable of OCBO ($p = 0.033$ and $p = 0.033$). Women may tend to exhibit OCB that is more beneficial to the organization as whole, as opposed to immediately benefiting individuals. Given that the number of minorities who completed the survey comprised only a small portion of the population, analyses that included this demographic should be interpreted with caution.

Income was significantly related to the attitudinal variable of OCBI ($p = 0.022$). Respondents could select from one of five choices for Income (under \$15,000 annually, \$15,000 - \$24,999 annually, \$25,000 - \$49,999 annually, \$50,000 - \$74,999 annually, \$75,000 - \$99,999 annually, over \$100,000 annually). Those individuals who are paid more likely have greater opportunities to impact individuals within the organization with their OCB.

Total Work Experience was significantly related to the attitudinal variable of OCBO ($p = 0.001$). Respondents could select from one of five choices for Total Work Experience (less than 1 year, 1-5 years, 6-10 years, 11-15 years, 16-20 years, and 21+ years). When faculty and staff members have significant work experience, they may place more value on OCBs that benefit the organization as whole rather than individuals because they have a greater understanding and appreciation for the inner workings of IHEs.

Religious Affiliation was significantly related to the attitudinal variables of OC and SLT ($p = 0.032$ and $p = 0.05$). Respondents could select whether or not they considered themselves to be Catholic. Catholics may be more likely to be committed to a Catholic IHE than non-Catholics as they associate their personal beliefs and religious values with the mission and values of the institution. Catholics may also be more likely to inherently accept the influence of the institution (SLT) as they identify with the Catholic mission and values.

Hypothesis Testing

Hypothesis 1

Hypothesis 1: Perceptions of faculty and staff organizational citizenship behavior will be characterized by two dimensions: benefits for the organization as a whole with a focus on the organization, and immediate benefits for a particular individual with indirect benefits for the organization.

Hypothesis 1 was tested by performing an exploratory principal components analysis shown in Table IV-2. The analysis indicated that two components of OCB (OCBI and OCBO) could be identified. All seven items for OCBI loaded on Factor 3 and three of the six items intended to load on OCBO loaded on Factor 5. Thus, the results of the principal components analysis supported Hypothesis 1.

Results of the Multiple Regression Analyses

The modified survey consisted of 25 items because of the items omitted due to low factor loadings. Respondents rated each item in an effort to describe their OCBI, OCBO, interpersonal-level trust, system-level trust, and organizational commitment on a 1 to 5 Likert scale (1 = *Strongly Agree* to 5 = *Strongly Disagree*). Each factor was computed by summing the responses for each of the items for the particular factor and dividing through by the number items for the specific factor.

Hypotheses 2 through 10 were tested using OLS regression models. All main and interaction effects were simultaneously entered as predictors for each of the three dependent variables (Interpersonal-level Trust, System-level Trust, and Organizational Commitment).

Hypothesis 2

Hypothesis 2: Higher levels of interpersonal-level trust will be associated with higher levels of organizational citizenship behavior.

To examine the relationship between interpersonal-level trust and organizational citizenship behavior, an OLS regression equation was estimated. Given that

interpersonal-level trust was hypothesized to be associated with OCB, interpersonal-level trust was regressed on OCB. A single regression equation was used for testing the overall model fit, and Table IV-7 shows the model and results of the regression equation. The model indicated that interpersonal-level trust was a significant predictor of OCB ($p < .000$) and accounted for 21% of the variance in OCB. This supports Hypothesis 2 in that higher levels of interpersonal-level trust are positively associated with higher levels of OCB.

Table IV-7

Regression Model for Hypothesis 2 and Contribution of ILT to OCB

OCB = β_1 (ILT)			
Dependent Variable	Independent Variable	β	P
OCB	ILT	0.459	.000*
R ² = .210			
Adjusted R ² = .207			
P = .000*			

Note. * is significant at $\leq .05$.

Hypothesis 3

Hypothesis 3: Higher levels of system-level trust will be associated with higher levels of organizational citizenship behavior.

To examine the relationship between system-level trust and organizational citizenship behavior, an OLS regression equation was estimated. Given that system-level trust was hypothesized to be associated with OCB, system-level trust was regressed on OCB. A single regression equation was used for testing the overall model fit, and Table IV-8 shows the model and results of the regression equation. The model indicated that system-level trust was a significant predictor of OCB ($p < .000$) and accounted for 14%

of the variance in OCB. This supports Hypothesis 3 in that higher levels of system-level trust are positively associated with higher levels of OCB.

Table IV-8

Regression Model for Hypothesis 3 and Contribution of SLT to OCB

OCB = β_1 (SLT)			
Dependent Variable	Independent Variable	β	P
OCB	SLT	0.375	.000*
R ² = .141			
Adjusted R ² = .137			
P = .000*			

Note. * is significant at $\leq .05$.

Hypothesis 4

Hypothesis 4: Higher levels of organizational commitment will be associated with higher levels of organizational citizenship behavior.

To examine the relationship between organizational commitment and organizational citizenship behavior, an OLS regression equation was estimated. Given that organizational commitment was hypothesized to be associated with OCB, system-level trust was regressed on OCB. A single regression equation was used for testing the overall model fit, and Table IV-9 shows the model and results of the regression equation. The model indicated that organizational commitment was a significant predictor of OCB ($p < .000$) and accounted for 14% of the variance in OCB. This supports Hypothesis 4 in that higher levels of organizational commitment are positively associated with higher levels of OCB.

Table IV-9

Regression Model for Hypothesis 4 and Contribution of OC to OCB

OCB = β_1 (OC)			
Dependent Variable	Independent Variable	β	P
OCB	OC	0.376	.000*
R ² = .141			
Adjusted R ² = .138			
P = .000*			

Note. * is significant at $\leq .05$.

Hypothesis 5

Hypothesis 5: Higher levels of system-level trust will be associated with higher levels of interpersonal-level trust.

To examine the relationship between system-level trust and interpersonal-level trust, an OLS regression equation was estimated. Given that system-level trust was hypothesized to be associated with interpersonal-level trust, system-level trust was regressed on interpersonal-level trust. A single regression equation was used for testing the overall model fit, and Table IV-10 shows the model and results of the regression equation. The model indicated that system-level trust was a significant predictor of interpersonal-level trust ($p < .000$) and accounted for 65% of the variance in interpersonal-level trust. This supports Hypothesis 5 in that higher levels of system-level trust are positively associated with higher levels of interpersonal-level trust.

Hypothesis 6

Hypothesis 6: Higher levels of system-level trust will be associated with higher levels of organizational commitment.

To examine the relationship between system-level trust and organizational commitment, an OLS regression equation was estimated. Given that system-level trust was hypothesized to be associated with organizational commitment, system-level trust

was regressed on organizational commitment. A single regression equation was used for testing the overall model fit, and Table IV-11 shows the model and results of the regression equation. The model indicated that system-level trust was a significant predictor of organizational commitment ($p < .000$) and accounted for 53% of the variance in organizational commitment. This supports Hypothesis 6 in that higher levels of system-level trust are positively associated with higher levels of organizational commitment.

Table IV-10
Regression Model for Hypothesis 5 and Contribution of SLT to ILT

ILT = β_1 (SLT)			
Dependent Variable	Independent Variable	β	P
ILT	SLT	0.803	.000*
R ² = .645			
Adjusted R ² = .644			
P = .000*			

Note. * is significant at $\leq .05$.

Table IV-11
Regression Model for Hypothesis 6 and Contribution of SLT to OC

OC = β_1 (SLT)			
Dependent Variable	Independent Variable	β	P
OC	SLT	0.728	.000*
R ² = .529			
Adjusted R ² = .528			
P = .000*			

Note. * is significant at $\leq .05$.

Hypothesis 7

Hypothesis 7: Higher levels of interpersonal-level trust will be associated with higher levels of organizational commitment.

To examine the relationship between interpersonal-level trust and organizational commitment, an OLS regression equation was estimated. Given that interpersonal-level trust was hypothesized to be associated with organizational commitment, interpersonal-level trust was regressed on organizational commitment. A single regression equation was used for testing the overall model fit, and Table IV-12 shows the model and results of the regression equation. The model indicated that interpersonal-level trust was a significant predictor of organizational commitment ($p < .000$) and accounted for 52% of the variance in organizational commitment. This supports Hypothesis 7 in that higher levels of interpersonal-level trust are positively associated with higher levels of organizational commitment.

Table IV-12

Regression Model for Hypothesis 7 and Contribution of ILT to OC

OC = β_1 (ILT)			
Dependent Variable	Independent Variable	β	P
OC	ILT	0.718	.000*
R ² = .516			
Adjusted R ² = .514			
P = .000*			

Note. * is significant at $\leq .05$.

Hypothesis 8

Hypothesis 8: The relationship between system-level trust and organizational citizenship behavior will be influenced by the demographic variables of job type,

managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation.

The influence of the demographic variables on the relationship between system-level trust and organizational citizenship behavior was explored by running an OLS regression equation. Given that system-level trust was hypothesized to be associated with OCB, system-level trust along with the demographic variables and the interaction variables were regressed on OCB (see Table IV-13).

When these variables and their interaction terms were entered together, 20% of the variance was accounted for in OCB ($p < .001$). The variance accounted for in this model was slightly more than the variance accounted for in Hypothesis 3 when no demographic variables were included. An interaction effect was found between SLT and JobType on OCB (see Figure IV-1). Based on their job type – administrators, faculty, staff, adjunct faculty, and part-time staff – the relationship of SLT to OCB generally followed the pattern that those with higher system-level trust had a higher degree of OCB. More so than the other job types, administrators and faculty members had a significantly greater increase in OCB as their SLT increased. While part-time staff generally followed the pattern of increasing OCB with increasing SLT, those with the lowest scores on SLT (SLT scale scores < 1.5 of 5) demonstrated the highest OCB of any of the part-time staff. The results above partly support Hypothesis 8 in that the effect of SLT was influenced by Job Type.

Table IV-13

Regression Model for Hypothesis 8 and Contribution of Independent Variables to OCB

$\text{OCB} = \beta_1 (\text{SLT}) + \beta_2 (\text{JobType}) + \beta_3 (\text{Manager}) + \beta_4 (\text{Gender}) + \beta_5 (\text{Minority}) + \beta_6 (\text{Degree}) + \beta_7 (\text{TotalWork}) + \beta_8 (\text{CurrentWork}) + \beta_9 (\text{SameSuper}) + \beta_{10} (\text{Compat}) + \beta_{11} (\text{Catholic}) + \beta_{12} (\text{Age}) + \beta_{13} (\text{Income}) + \beta_{14} (\text{SLT*JobType}) + \beta_{15} (\text{SLT*Manager}) + \beta_{16} (\text{SLT*Gender}) + \beta_{17} (\text{SLT*Minority}) + \beta_{18} (\text{SLT*Degree}) + \beta_{19} (\text{SLT*TotalWork}) + \beta_{20} (\text{SLT*CurrentWork}) + \beta_{21} (\text{SLT*SameSuper}) + \beta_{22} (\text{SLT*Compat}) + \beta_{23} (\text{SLT*Catholic}) + \beta_{24} (\text{SLT*Age}) + \beta_{25} (\text{SLT*Income})$			
Dependent Variable	Independent Variable	β	P
OCB	SLT	-.688	.338
$R^2 = .282$	JobType	-.258	.170
Adjusted $R^2 = .197$	Manager	.082	.654
$P = .000^*$	Gender	-.002	.990
	Minority	-.003	.983
	Degree	-.223	.287
	TotalWork	-.160	.597
	CurrentWork	.092	.675
	SameSuper	.151	.495
	Compat	.305	.128
	Catholic	-.036	.838
	Age	-.106	.708
	Income	-.085	.642
	SLT*JobType	.600	0.026*
	SLT*Manager	.109	.680
	SLT*Gender	-.194	.477
	SLT*Minority	.044	.860
	SLT*Degree	.604	.204
	SLT*TotalWork	.110	.841
	SLT*CurrentWork	-.253	.425
	SLT*SameSuper	-.095	.766
	SLT*Compat	-.416	.194
	SLT*Catholic	-.168	.567
	SLT*Age	.265	.559
	SLT*Income	.494	.081

Note. * is significant at $\leq .05$.

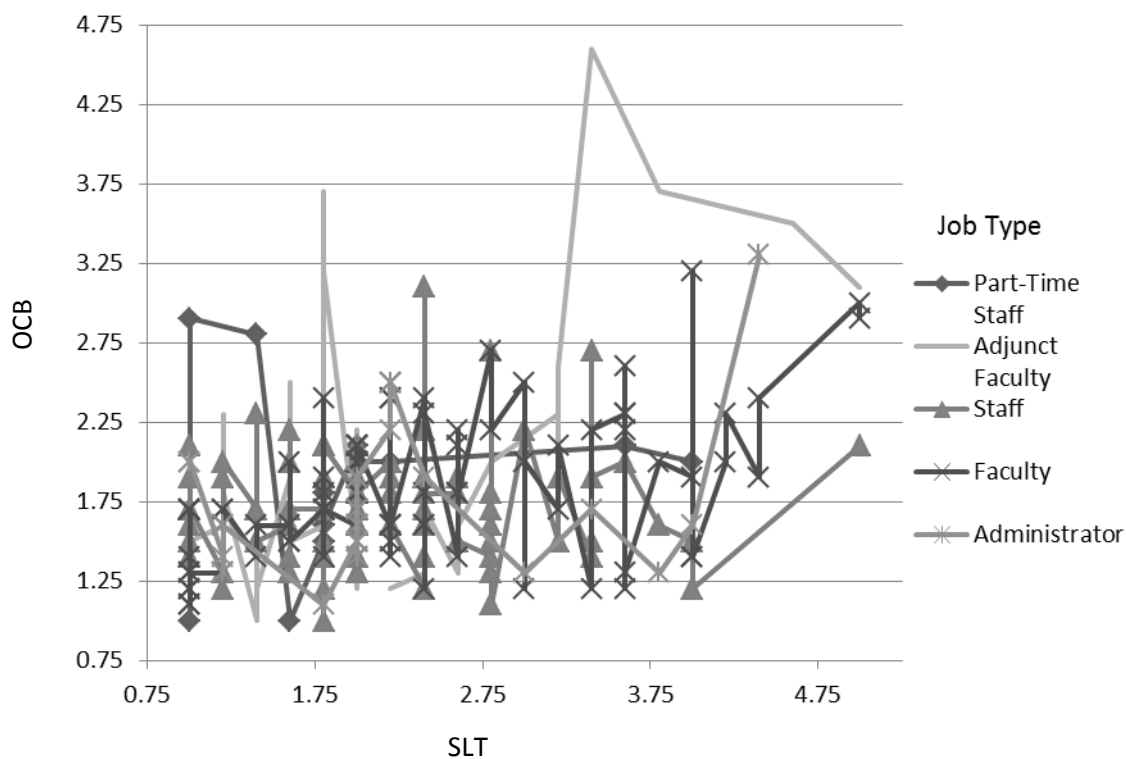


Figure IV-1. OCB as a function of SLT and JobType

Hypothesis 9

Hypothesis 9: The relationship between interpersonal-level trust and organizational citizenship behavior will be influenced by the demographic variables of job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation.

The influence of the demographic variables on the relationship between interpersonal-level trust and organizational citizenship behavior was explored by running an OLS regression equation. Given that interpersonal-level trust was hypothesized to be associated with OCB, interpersonal-level trust along with the demographic variables and the interaction variables were regressed on OCB (see Table IV-14).

Table IV-14

Regression Model for Hypothesis 9 and Contribution of Independent Variables to OCB

$\text{OCB} = \beta_1 (\text{ILT}) + \beta_2 (\text{JobType}) + \beta_3 (\text{Manager}) + \beta_4 (\text{Gender}) + \beta_5 (\text{Minority}) + \beta_6 (\text{Degree}) + \beta_7 (\text{TotalWork}) + \beta_8 (\text{CurrentWork}) + \beta_9 (\text{SameSuper}) + \beta_{10} (\text{Compat}) + \beta_{11} (\text{Catholic}) + \beta_{12} (\text{Age}) + \beta_{13} (\text{Income}) + \beta_{14} (\text{ILT*JobType}) + \beta_{15} (\text{ILT*Manager}) + \beta_{16} (\text{ILT*Gender}) + \beta_{17} (\text{ILT*Minority}) + \beta_{18} (\text{ILT*Degree}) + \beta_{19} (\text{ILT*TotalWork}) + \beta_{20} (\text{ILT*CurrentWork}) + \beta_{21} (\text{ILT*SameSuper}) + \beta_{22} (\text{ILT*Compat}) + \beta_{23} (\text{ILT*Catholic}) + \beta_{24} (\text{ILT*Age}) + \beta_{25} (\text{ILT*Income})$			
Dependent Variable	Independent Variable	β	P
OCB	ILT	-.333	.612
$R^2 = .385$	JobType	-.145	.402
Adjusted $R^2 = .312$	Manager	.115	.504
$P = .000^*$	Gender	-.019	.906
	Minority	.045	.727
	Degree	-.117	.544
	TotalWork	-.090	.753
	CurrentWork	-.098	.664
	SameSuper	.382	0.043*
	Compat	.210	.275
	Catholic	-.104	.534
	Age	-.184	.523
	Income	-.152	.373
	ILT*JobType	.450	.069
	ILT*Manager	.045	.856
	ILT*Gender	-.245	.346
	ILT*Minority	-.065	.779
	ILT*Degree	.449	.262
	ILT*TotalWork	-.014	.978
	ILT*CurrentWork	-.047	.885
	ILT*SameSuper	-.455	.103
	ILT*Compat	-.314	.299
	ILT*Catholic	.010	.972
	ILT*Age	.385	.398
	ILT*Income	.572	0.034*

Note. * is significant at $\leq .05$.

When these variables and their interaction terms were entered together, 31% of the variance was accounted for in OCB ($p < .001$). The variance accounted for in this model was slightly more than the variance accounted for in Hypothesis 2 when no demographic variables were included. An interaction effect was found between ILT and Income on OCB (see Figure IV-2). Based on their income level (Income) – under \$15,000 annually, \$15,000 - \$24,999 annually, \$25,000 - \$49,999 annually, \$50,000 – \$74,999 annually, \$75,000 - \$99,999 annually, over \$100,000 annually – the relationship of ILT to OCB generally followed the pattern that those with higher ILT had a higher degree of OCB. More so than the other income levels, those who made more than \$100,000 and those who made \$75,000 - \$99,999 annually saw the greatest increases in OCB with increases in ILT. Those in the income range of \$50,000 – \$74,999 annually did not follow the pattern of having consistent increases in OCB with an increase in ILT. The results above partly support Hypothesis 9 in that time with the same supervisor (SameSuper) was significant and the effect of ILT was influenced by Income.

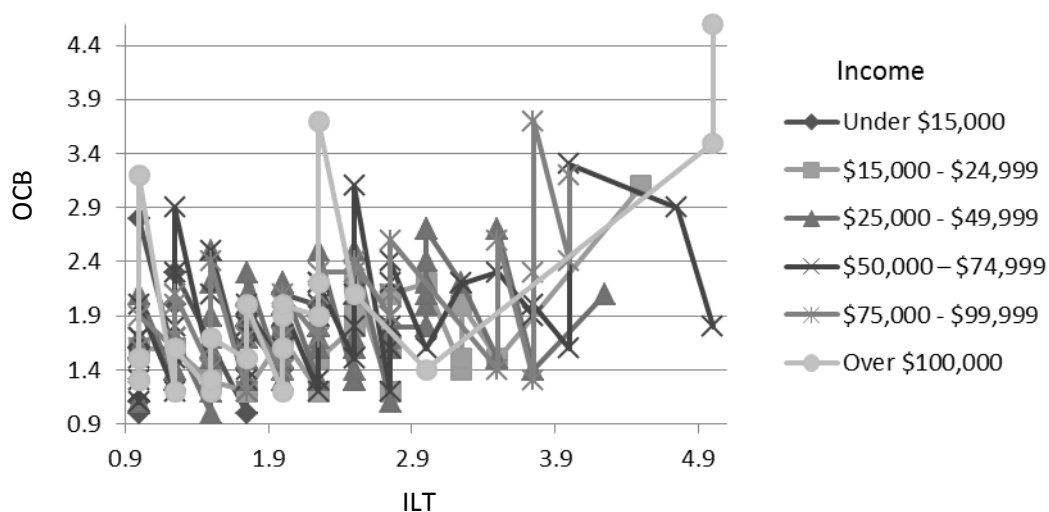


Figure IV-2. OCB as a function of ILT and Income

Hypothesis 10

Hypothesis 10: The relationship between organizational commitment and organizational citizenship behavior will be influenced by the demographic variables of job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation.

The influence of the demographic variables on the relationship between organizational commitment and organizational citizenship behavior was explored by running an OLS regression equation. Given that organizational commitment was hypothesized to be associated with OCB, organizational commitment along with the demographic variables and the interaction variables were regressed on OCB (see Table IV-15).

When these variables and their interaction terms were entered together, 19% of the variance was accounted for in OCB ($p < .001$). The variance accounted for in this model was slightly more than the variance accounted for in Hypothesis 4 when no demographic variables were included. An interaction effect was found between OC and JobType on OCB (see Figure IV-3). Based on their job type – administrators, faculty, staff, adjunct faculty, and part-time staff – the relationship of OC to OCB generally followed the pattern that those with higher OC had a higher degree of OCB. More so than the other job types, adjunct faculty and faculty members had a significantly greater increase in OCB as their SLT increased. The results above partly support Hypothesis 10 in that Job Type was significant and the effect of OC was influenced by Job Type.

Table IV-15

Regression Model for Hypothesis 10 and Contribution of Independent Variables to OCB

$\text{OCB} = \beta_1 (\text{OC}) + \beta_2 (\text{JobType}) + \beta_3 (\text{Manager}) + \beta_4 (\text{Gender}) + \beta_5 (\text{Minority}) + \beta_6 (\text{Degree}) + \beta_7 (\text{TotalWork}) + \beta_8 (\text{CurrentWork}) + \beta_9 (\text{SameSuper}) + \beta_{10} (\text{Compat}) + \beta_{11} (\text{Catholic}) + \beta_{12} (\text{Age}) + \beta_{13} (\text{Income}) + \beta_{14} (\text{OC*JobType}) + \beta_{15} (\text{OC*Manager}) + \beta_{16} (\text{OC*Gender}) + \beta_{17} (\text{OC*Minority}) + \beta_{18} (\text{OC*Degree}) + \beta_{19} (\text{OC*TotalWork}) + \beta_{20} (\text{OC*CurrentWork}) + \beta_{21} (\text{OC*SameSuper}) + \beta_{22} (\text{OC*Compat}) + \beta_{23} (\text{OC*Catholic}) + \beta_{24} (\text{OC*Age}) + \beta_{25} (\text{OC*Income})$			
Dependent Variable	Independent Variable	β	P
OCB	OC	-.417	.554
$R^2 = .275$	JobType	-.455	0.028*
Adjusted $R^2 = .187$	Manager	.043	.833
$P = .000^*$	Gender	.118	.543
	Minority	-.107	.525
	Degree	-.120	.576
	TotalWork	.157	.639
	CurrentWork	.056	.828
	SameSuper	.191	.432
	Compat	.152	.523
	Catholic	-.019	.919
	Age	-.478	.137
	Income	.088	.674
	OC*JobType	.839	0.003*
	OC*Manager	.071	.810
	OC*Gender	-.381	.185
	OC*Minority	.130	.643
	OC*Degree	.360	.409
	OC*TotalWork	-.472	.352
	OC*CurrentWork	-.117	.729
	OC*SameSuper	-.134	.679
	OC*Compat	-.184	.601
	OC*Catholic	-.135	.650
	OC*Age	.777	.090
	OC*Income	.136	.649

Note. * is significant at $\leq .05$.

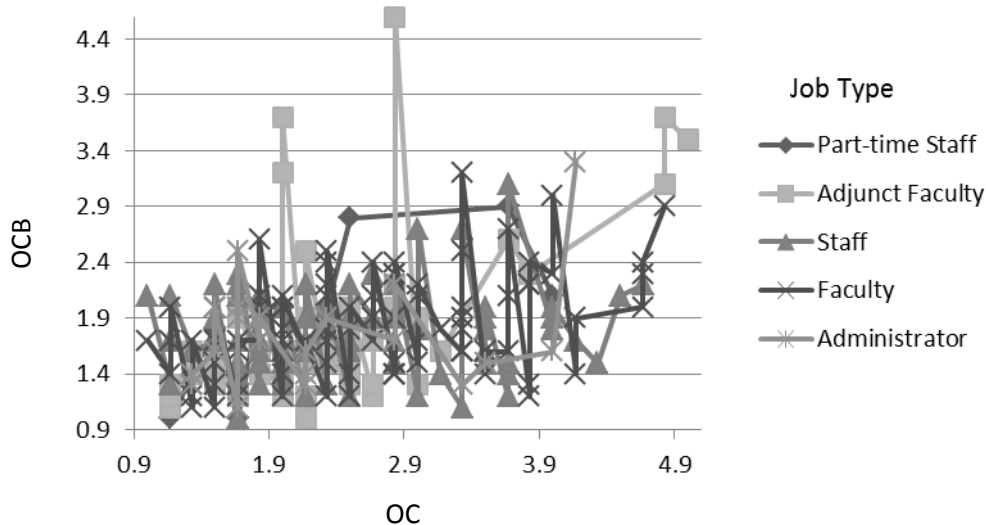


Figure IV-3. OCB as a function of OC and JobType

Path Analysis

By decomposing the linear relationships among a set of variables hypothesized to be causally related through both direct and indirect relationships, path analysis can be used not to discover causes but, as Pedhazur (1997, p. 669) suggested, “to shed light on the tenability of the causal models a researcher formulates based on knowledge and theoretical considerations.” Indirect effects are calculated by multiplying the path coefficients between the dependent variable and each independent variable, and the direct and indirect effect coefficient are additive and their sum is the total effect (Pedhazur, 1997). The effects of interpersonal-level trust, system-level trust, and organizational commitment on OCB were determined by path analysis. Interpersonal-level trust, system-level trust, and organizational commitment functioned as intervening variables, and job type, managerial responsibilities, gender, minority status, age, level of education, tenure with the institution, total work experience, time with supervisor, shared values, income level, and religious affiliation functioned as demographic variables. Because of the understood relationships between the independent variables of interpersonal-level trust, system-level trust, and organizational commitment (Cook & Wall, 1980; Durkheim,

1997; Lewis & Weigert, 1985; Schoorman, Mayer, & Davis, 2007; Tan & Tan, 2000) that were demonstrated in Hypotheses 5, 6, and 7, two-stage least-squares regression was used in the path analysis. The first stage of two-stage least-squares regression is to establish estimated values of each of the independent variables, and then the second stage uses the estimated values to estimate a linear regression model of the dependent variable (SPSS Statistics Base 19, 2010). Because different independent and demographic variables are needed to perform the first stage regression on the intervening variables, those demographic variables that were the most significant for each intervening variable were used in the path analysis, based on the ordinary least squares (OLS) regression analysis done prior (Table IV-15).

Interpersonal-level Trust, System-level Trust, and Organizational Commitment as Intervening Variables to OCB

Years with the same supervisor, SameSuper, had a positive direct effect on ILT. These research findings are consistent with Bigley (1996) and other researchers' findings that trust is influenced by the time spent with a supervisor. Job Type had a positive direct effect on ILT and a negative indirect effect on OCB. Administrators reported greater levels of ILT than full-time faculty and staff members, who in turn had higher levels of ILT than part-time staff and adjunct faculty. Being a part-time staff member or an adjunct faculty member enhanced ILT, which in turn yielded higher levels of OCB (Table IV-16). Gender had a positive direct effect on ILT and a negative indirect effect on OCB. Female faculty and staff members reported higher levels of ILT than their male faculty and staff counterparts. Gender also enhanced ILT, showing that being male yielded higher levels of OCB (Table IV-16). Value congruence, Compat, had a negative direct effect on OC and a negative indirect effect on OCB. Faculty and staff members whose personal values were less aligned with the mission values of their IHE demonstrated greater levels of OC. Having less value congruence also enhanced OC, which yielded higher levels of OCB (Table IV-1). Level of education, Degree, had a positive direct

effect on SLT and an indirect effect on OCB. Faculty and staff members with higher levels of education attainment demonstrated higher levels of SLT. Level of education also enhanced SLT, which in turn yielded higher levels of OCB (Table IV-16).

Managerial responsibilities, Manager, had a positive direct effect on OC and an indirect effect on OCB. Faculty and staff members who had ever had managerial responsibilities demonstrated higher levels of OC. Level of education also enhanced OC, which in turn yielded higher levels of OCB (Table IV-16).

SLT had a positive direct effect on ILT and a negative direct effect on OCB.

Faculty and staff members with lower levels of SLT demonstrated higher levels of OCB. OC had a positive direct effect on OCB. Faculty and staff members with higher levels of OC demonstrated higher levels of OCB. The variables that demonstrated the greatest significance in positively affecting OCB were OC (0.613) and Manager (0.108). The variables that demonstrated the greatest significance in having a negative effect on OCB were Compat (-0.258) and SLT (-0.273).

Table IV-16

Path Analysis Results for OCB: Standardized Coefficients and P-values

	Direct Effect on ILT	Direct Effect on SLT	Direct Effect on OC	Indirect Effect on OCB	Direct Effect on OCB	Total Effect on OCB
SameSuper	0.089** (0.037)	0.018 (0.770)		-0.018 (0.103)		-0.018 (0.103)
JobType	0.061** (0.032)			-0.010** (0.032)		-0.010** (0.032)
Gender	0.168** (0.017)			-0.027** (0.017)		-0.027** (0.017)
CurrentWork	0.017 (0.609)	0.065 (0.122)		-0.015 (0.252)		-0.015 (0.252)
Compat	-0.379 (0.144)	-0.521 (0.254)	-0.641*** (0.000)	-0.258*** (0.000)		-0.258*** (0.000)
Catholic	-0.029 (0.777)	0.216 (0.153)	0.022 (0.808)	-0.022 (0.530)		-0.022 (0.530)
Degree		0.155** (0.045)	0.110 (0.168)	0.042* (0.099)		0.042* (0.099)
Income		-0.059 (0.228)	0.002 (0.953)	0.013 (0.402)		0.013 (0.402)
Manager			0.165* (0.059)	0.108* (0.059)		0.108* (0.059)
ILT		0.404 (0.268)	-0.085 (0.837)	-0.133 (0.485)	0.069 (0.758)	-0.064 (0.690)
SLT	0.498* (0.070)		0.389 (0.399)	0.175 (0.132)	-0.448* (0.088)	-0.273* (0.095)
OC	-0.043 (0.910)	-0.196 (0.715)		0.044 (0.931)	0.569*** (0.001)	0.613** (0.012)

Note. *, **, and *** indicate p is significant at $\leq .1$, $\leq .05$, $\leq .01$ respectively.

CHAPTER V

DISCUSSION AND ANALYSIS

This chapter provides a summary of results, and includes a discussion and implications of findings for colleges and universities. Recommendations for future research are also provided.

Summary of the Study

The primary purpose of this study was to conduct an exploratory investigation of OCB at two Catholic universities with three objectives. The first objective was to identify the dimensions of OCB and to construct a model of OCB. The second objective was to assess the relationships between ILT, SLT, OC and OCB. It was hypothesized that both faculty and staff members' ILT, SLT, and OC would be positively associated with OCB. The third objective was to investigate the moderating effects of demographic variables on the hypothesized relationships. The model of SLT, ILT, and OC to OCB presented in Chapter II, and Table V-1 shows a summary of hypothesized findings.

Two Dimensions of OCB

The results of the principal components analysis supported the concept that OCB is a multi-dimensional construct. Both OCBI and OCBO emerged as separate and distinct factors in the model. The independent variables in the model accounted for 5.1% of the variance in OCBI and 3.2% of the variance in OCBO. Because faculty and staff viewed these two types of trust differently, they may have reported a high level of OCBI but not OCBO.

ILT and OCB

ILT was a significant predictor of OCB. ILT was defined as the extent to which faculty or staff members have confidence in and are willing to act on the basis of the words, actions, and decisions of their supervisors, as suggested by McAllister (1995). The analysis indicated that ILT had a significant association with OCB ($p < .000$). As ILT increased, OCB also increased. ILT explained 20.7% of the variance for OCB. Thus,

faculty and staff members who reported higher ILT levels also reported higher OCB levels.

Table V-1

Summary of Hypothesized Findings

H1	Perceptions of faculty and staff organizational citizenship behavior be characterized by two dimensions: immediate benefits for a particular individual and indirect benefits for the organization and benefits for the organization as a whole with a focus on the organization.	Supported
H2	Higher levels of system-level trust will be associated with higher levels of organizational citizenship behavior.	Supported
H3	Higher levels of interpersonal-level trust will be associated with higher levels of organizational citizenship behavior.	Supported
H4	Higher levels of organizational commitment will be associated with higher levels of organizational citizenship behavior.	Supported
H5	Higher levels of system-level trust will be associated with higher levels of organizational-level trust.	Supported
H6	Higher levels of system-level trust will be associated with higher levels of organizational commitment.	Supported
H7	Higher levels of interpersonal-level trust will be associated with higher levels of organizational commitment.	Supported
H8	The relationship between system-level trust and organizational citizenship behavior will be influenced by demographic variables: Job type, managerial responsibilities, tenure, gender, minority status, age, level of education, time with the institution, shared values, and religious affiliation.	Partly Supported
H9	The relationship between interpersonal-level trust and organizational citizenship behavior will be influenced by demographic variables: Job type, managerial responsibilities, tenure, gender, minority status, age, level of education, time with the institution, shared values, and religious affiliation.	Partly Supported
H10	The relationship between organizational commitment and organizational citizenship behavior will be influenced by demographic variables: Job type, managerial responsibilities, tenure, gender, minority status, age, level of education, time with the institution, shared values, and religious affiliation.	Partly Supported

The research findings are generally consistent with other studies. Bigley (1996) hypothesized that dimensions of trust would mediate the relationship between leadership behaviors and OCB, and his research indicated that affective bond trust, influenced by the time spent with a supervisor, was found to do so (Bigley, 1996). Research by Appelbaum et al. (2004) supported the negative relationship between low trust and OCB. The analysis of Chen et al. (2008) focused on nurses and their supervisors supported the positive effects of trust and supervisor support on OCB. Chen et al. found strong statistical evidence to support the assertion that leader-member exchange had a significant effect on OCB, and was mediated by interpersonal-level trust. Singh and Srivastava (2009) focused on manufacturing and service executives, and found a positive association between ILT and OCB. As Singh and Srivastava (2009) suggested, the development of interpersonal-level trust could stimulate higher levels of OCB at both individual (OCBI) and organizational (OCBO) levels.

SLT and OCB

SLT was a significant predictor of OCB. SLT was defined as the extent to which faculty or staff members perceive the systems in IHEs as trustworthy, and SLT is sometimes equated with organizational trust. The analysis indicated that SLT had a significant association with OCB ($p < .000$). As SLT increased, OCB also increased. SLT explained 13.7% of the variance for OCB. Thus, faculty and staff members who reported higher SLT levels also reported higher levels of OCB.

These research findings are consistent with other studies. The research of Altuntas and Baykal (2010) with nurses suggested a positive relationship between system-level trust and OCB. Paille et al. (2010) conducted research with business school graduates that showed a positive relationship between SLT and OCB. When relationships are formed with top-level managers, information about the state of the institution is transparent, and staffing and workload are adequate, faculty and staff,

similar to the nurses in the study by Altuntas and Baykal, may show OCBs in order to maintain a positive view of the institution and to remain a part of it.

OC and OCB

OC was a significant predictor of OCB. OC was defined as the degree to which faculty or staff members perceive their involvement and identification with the IHE. It is conceptualized as the having three components: (a) “a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a definite desire to maintain organizational membership” (Porter et al., 1974, p. 604). The analysis indicated that OC had a significant association with OCB ($p < .000$). As OC increased, OCB also increased. OC explained 13.8% of the variance for OCB. Thus, faculty and staff members who reported higher OC levels also reported higher levels of OCB.

These research findings are consistent with other studies. Organ (1990) identified organizational commitment as a well-researched determinant of OCB. Morrison’s (1994) research on clerical workers revealed that the higher the level of organizational commitment, the more broadly motivated employees tended to think of their job responsibilities, and more broadly defined job responsibilities led to increased OCB. Morrison’s (1994) work supported O’Reilly and Chatman (1986) by suggesting that job definitions mediated the relationship between organizational commitment and OCB. Shore et al. (1995) assessed how OCB predicted manager-rated organizational commitment, and concluded that a significant association suggested that “managers view citizenship as providing greater information about a person's underlying motivation for remaining with an organization than behavior that is required by a job role” (p. 1608). Recently, Watrous-Rodriguez (2010) studied personality and organizational commitment as predictors of OCB. Her study confirmed a relationship between affective organizational commitment and OCB, and supported Podsakoff and MacKenzie’s (1997)

argument that engaging in OCB makes work more attractive for employees, and strengthens their organizational commitment.

Relationship between ILT and OCB with Indirect Effects of
Demographic Variables

The results of analysis showed the influence of the demographic variables (job type, managerial responsibilities, tenure, gender, minority status, age, level of education, time with the institution, shared values, and religious affiliation) on the relationship between ILT and OCB; partly supporting Hypothesis 8. Results indicated a main effect of time with the same supervisor (SameSuper); the longer a faculty or staff member had the same supervisor, the higher the level of OCB. This finding is, again, consistent with Bigley's (1996) study of the antecedent of time worked for supervisor. He found that the time worked factor moderated the relationship between disposition-based trust and OCB. There was also a significant interaction between ILT and income on OCB. While all faculty and staff members with higher levels of ILT had higher levels of OCB, the higher the salary that faculty and staff members earned on an annual basis, the higher the levels of ILT and OCB.

Relationship between SLT and OCB with Indirect Effects of
Demographic Variables

The results of the influence of the demographic variables on the relationship between SLT and OCB appear less important. Findings partly supported Hypothesis 9; there was a significant interaction between SLT and job type on OCB. While all faculty and staff members with higher levels of SLT had higher levels of OCB, full-time faculty and staff displayed higher levels of SLT and then higher levels of OCB when compared with their part-time peers. Administrators showed higher levels of SLT and OCB to an even greater degree.

Relationship between OC and OCB with Indirect Effects of
Demographic Variables

Findings related to the influence of the demographic variables (job type, managerial responsibilities, tenure, gender, minority status, age, level of education, time with the institution, shared values, and religious affiliation) on the relationship between OC and OCB partly supported Hypothesis 10. Results showed a main effect of job type, and also a significant interaction between OC and job type on OCB. The main effect of job type indicated that part-time staff and adjunct faculty demonstrated higher levels of OCB relative to their full-time peers and administrators. The significant interaction between OC and job type on OCB suggests that when full-time faculty and staff display higher levels of OC, they display higher levels of OCB than their part time peers, and administrators display even higher levels of OC and OCB.

Interpersonal-level Trust, System-level Trust, and
Organizational Commitment as Intervening Variables to OCB

Path analysis was used to determine the effects of ILT, SLT, and OC on OCB. Job type, managerial responsibilities, tenure, gender, minority status, age, level of education, time with the institution, shared values, and religious affiliation functioned as the demographic variables, and ILT, SLT, and OC measures were the intervening variables in the model. OCB was the dependent variable for the path analysis.

Years with the same supervisor, SameSuper, had a positive direct effect on ILT. These research findings are consistent with Bigley (1996) results showing that trust is influenced by the time spent with a supervisor. Job type had a positive direct effect on ILT and a negative indirect effect on OCB. Administrators reported higher levels of ILT than full-time faculty and staff members who ,in turn, had higher levels of ILT than did part-time staff and adjunct faculty. Being a part-time staff member or an adjunct faculty member enhanced ILT which ,in turn, yielded higher levels of OCB (see Table IV-15). Gender had a positive direct effect on ILT and a negative indirect effect on OCB. Female

faculty and staff members reported higher levels of ILT than their male faculty and staff counterparts. Gender also enhanced ILT; male respondents showed higher levels of OCB (Table IV-15). Value congruence, Compat, had a negative direct effect on OC, and a negative indirect effect on OCB. Faculty and staff members whose personal values were less aligned with the mission values of their IHE demonstrated higher levels of OC. Having less value congruence also enhanced OC, which yielded higher levels of OCB (Table IV-15). Level of education, Degree, had a positive direct effect on SLT and an indirect effect on OCB. Faculty and staff members with higher levels of education attainment demonstrated higher levels of SLT. Level of education also enhanced SLT, which, in turn, yielded higher levels of OCB (Table IV-15). Managerial responsibilities, Manager, had a positive direct effect on OC and an indirect effect on OCB. Faculty and staff members who had ever had managerial responsibilities demonstrated higher levels of OC. The correlation between managerial experience and OC is consistent with the evaluation of federal service managers completed by Stevens et al. (1978). Level of education also enhanced SLT which, in turn, yielded higher levels of OCB (Table IV-15). The correlation between level of education and SLT is consistent with the evaluation of faculty at HBCUs conducted by Vineburgh (2010). SLT had a positive direct effect on ILT. Faculty and staff members with lower levels of SLT demonstrated higher levels of OCB. OC had a positive direct effect on OCB. Faculty and staff members with higher levels of OC demonstrated higher levels of OCB.

Organizational and Management Implications

OCB promotes the effective functioning of organizations; in this study, the organizations are Catholic colleges and universities. Organizational effectiveness is becoming increasingly important, given mounting competition from new entrants into a crowded marketplace and greater competition for the students on whom they depend. For Catholic IHEs charged by Pope Benedict XVI (2008) with the support of any students' right to an education in the Catholic faith, OCB is particularly important, especially

where it is linked with achievement of effectiveness-related objectives that enable continuity and sustainability in tuition-dependent organizations. OCB may enhance organizational effectiveness to the extent that it improves performance, productivity, frees up resources available for deployment to achieve broader organizational purposes, reduces the need to expend excessive resources on maintenance functions, and serves as an effective means for coordinating activities between interdependent members and facilitating work across groups (MacKenzie et al., 1991, 1993; Organ et al., 2006).

The antecedents of OCB (ILT, SLT, and OC) may be viewed as baseline elements in an effort to reinforce and facilitate OCB in faculty and staff members at Catholic IHEs. Research by Singh and Srivastava (2009) suggested that the development of interpersonal-level trust was an integral part of any strategy to strengthen OCB at both individual (OCBI) and organizational (OCBO) levels. The work of Altuntas and Baykal (2010) confirmed, additionally, that reinforcement of system-level trust was effective in generating OCB. The research indicated that interpersonal- and system-level trust are both important in influencing the likelihood that OCB will occur in an organizational setting. The assertions appear to apply, in this instance, to Catholic IHEs. We noted, here, that when both referents of trust were combined, the relationship with OCB remained significant.

Leaders at Catholic IHEs may approach efforts to strengthen OCB through a lens considerate of interpersonal relationships and/or general perceptions of trust in the university system. In his analysis of the motivational basis of OCB, Organ (1990) identified organizational commitment as a well-researched determinant of OCB, with organizational commitment viewed as both an attitude and a set of intentions. It is again worth noting that when all three referents of OC, SLT, and ILT were combined, the relationship with OCB remained significant. Leaders at Catholic IHEs can approach OCB through OC, SLT, ILT, or any combination thereof.

As OCB is facilitated and increases through ILT, SLT, and OC, new resources may become available and/or existing resources may become less constrained. These resources may be re-deployed or aggregated to support the achievement of other ends at Catholic IHEs (Organ et al., 2006). Since Catholic IHEs are typically tuition driven and have minimal access to alternative resources, the outcomes of OCB become particularly important when viewed as means to inject a level of discretion and flexibility into the operating and decision-making systems, and provide some buffer when enrollment and enrollment income inevitably fluctuate. Bok (2003) stressed the need for flexible resources as a component of strategy and competitive advantage. Competition in higher education drives greater efforts to secure resources, since most things that a university does to raise its reputation requires resources (p. 14). IHEs are under growing pressure to become more efficient and expand resources beyond normal rates provided via increments in tuition revenues (Bess and Dee, 2008). High levels of OCB should provide substantial benefits to Catholic IHEs; especially in a sector of the higher education market subjected to increasing competition from the private sector with access to public markets and state IHEs (Bollag, 2004).

Catholic IHEs rely heavily on human resources and, more specifically, on belief-driven voluntary participation and consensus in many areas, and may benefit disproportionately from increased OCB. Furthermore, OCB can be a significant factor in efforts to attract and retain the best people, in enabling the stability of organizational performance, in extending organizational capacity to adapt to environmental changes, and in the creation of social capital (Organ et al., 2006).

OCBs that are supported by trust relationships may lower transaction costs, a high level utility in times of crisis (Mishra, 1996). Transaction costs refer to the search and information costs, bargaining and decision costs, and policing and enforcement costs that may not add net value to the product or service being produced (Beccera & Gupta, 1999; Coase, 1937, Williamson, 1981). OCB has been shown to lower the costs of transactions,

including those that do not add value to the product. In fact, it may play a role in eliminating them all together in a variety of exchanges (Beccera & Gupta, 1999; Mishra, 1996; Organ et al., 2006; Tyler & Kremer, 1996). When OCB and trust serve as means to lower transaction costs and enhance performance at Catholic IHEs, related slack resources may be generated; resources that may be strategically reallocated.

Organ (1988) identified five specific behaviors within OCB that promote effective functioning within an organization and are helpful in extending resources. The first behavior was altruism, or a behavior associated with helping another specific person with an organizationally relevant task (Organ, 1988). Altruism as a helping behavior within OCB may be manifest, for example, where an experienced employee informally shows a newly hired employee how to perform his or her job more effectively (MacKenzie et al., 1991). By eliminating the cost of formal training and/or the time needed for the employee to learn how to improve his/her work performance, moreover, quality of effort can be enhanced, and the unproductive formality of transaction diminished (MacKenzie et al., 1991). Faculty and staff members can exhibit altruism by going beyond traditional mentoring programs for new faculty and staff in assisting new employees. A faculty or staff member may assist a new colleague by exemplar in the application of specific institutional rules and practices for time reporting or claiming travel expenses, for example, rather than leaving the new employee to translate rules and procedures into actions, necessarily taking time off task.

The second behavior of OCB was conscientiousness. Conscientiousness refers to discretionary behavior that goes beyond the minimum role requirements in areas such as obeying regulations and rules of attendance (Organ, 1988). Research shows that when employees did not abuse their time for breaks and met attendance expectations, for example, additional re-deployable slack tended to become available. Where employees are conscientious, there are higher levels of commitment and retention (Organ, 1988). In a case of where there is lower turnover of employees, costs of recruitment and training

new employees are reduced, and resources may be reallocated to production functions (MacKenzie et al., 1991, Organ, 1988).

The behavior of sportsmanship was described by Organ (1998) as employees tolerating less than ideal circumstances without complaining. Consider sportsmanship in a context where employees do not routinely complain to their managers about unimportant aspects of their job that they dislike. The manager, consequently, can “conserve energy” and direct his/her attention to aspects of productive work that contribute to increments in efficiency and effectiveness (MacKenzie et al., 1991). Here, OCB and feelings of general psychological well-being may combine to yield resources usable in productive enterprise (George & Bettenhausen, 1990; Organ, 1988; Podsakoff & MacKenzie, 1997).

Organ (1998) described the behavior of courtesy as discretionary behavior that contributed to the regulation of work-related problems at an interpersonal level. Courtesy behaviors may have significant implications for resource availability where time-off-task is diminished, for example, thus providing more potentially productive discretionary opportunities for both line and staff employees (MacKenzie et al., 1991). When reconcilable differences among faculty and staff, for example, are settled at lower echelons of the organization via application of courtesy behaviors, organizational benefits accrue at both individual and managerial levels, especially where work-related interdependencies are high.

Organ (1998) described the behavior of civic virtue as behavior that responsibly contributes to the health and life of the organization. Similar to courtesy, but targeted to operations and financial situations, civic virtue frees up resources directly via activities such as reducing shrinkage or preventing sabotage (MacKenzie et al., 1991). The resources that are made available as a function of the behaviors of OCB can be categorized as slack resources.

Slack resources were first described by Barnard (1938) in *Functions of the Executive*. Cyert and March (1963) defined slack resources as the underutilized resources that can be either obtained or redeployed for use by an organization. The level of slack resources available will fluctuate and can provide the organization with the capacity to respond to contingencies or to make programmatic changes. Slack resources were defined by Adkins (2005) as "those spare capabilities and assets of the organization that are variable and reclaimable for re-deployment" (p. 2). He further described slack resources as under-utilized or hidden spare energies that may be recaptured, re-employed, or saved to further meet the goals of the organization. Here, we suggest that the level of organizational slack may be impacted by both external inputs and internal phenomena including OCB, and that slack at Catholic IHEs can positively affect organizational dynamics.

Some research has classified slack resources as a useful tool for management that allows organizations to improve, while others have identified slack resources as a wasteful source of inefficiencies (Nohira & Gulati 1997; Cheng & Kesner 1997; Daniel et al. 2004). While some authors argued that having slack resources is inefficient, Adkins (2005) suggested that slack resources are important in terms of organizational responsiveness in increasingly dynamic environments, and for adaptation in changing organizational ecologies (Hannan and Freeman, 1984). The idea that either too many or too few slack resources decrease productivity versus a suggestion that moderate slack resources benefit organizational efficiency has been studied by Nohira and Gulati (1996) and Tan and Peng (2003). Their studies (Nohira & Gulati, 1996; Tan & Peng, 2003) suggested that when subunits of organizations produce, utilize, and conserve the right amount of slack, the organization can optimize innovation and efficiency, rather than too little slack which limits experimentation, or too much slack, which breeds complacency in terms of efficiency and the implementation of innovative projects. Catholic IHEs can utilize OCBs, at the institution and departmental level, and identify optimal levels of

slack that facilitate needed innovation to remain competitive and effective, without becoming overly cautious or complacent.

IHEs, including Catholic IHEs, have not had been inclined toward arguments of efficiency in the past. New realities suggest, however, a shift in favor of higher levels of dependence on internally generated slack in a crowded and increasingly competitive marketplace (Adkins, 2005; Barney, 1991; Bess & Dee, 2008; Cheng & Kesner 1997; Keller, 1983; Tan, 1996; Tan & Peng, 2003).

Slack resources may be considered essential where tuition-dependent institutions navigate a path through uncertain times of fluctuating enrollments. Bourgeois and Singh (1983) suggested that managers should be inclined in favor of high levels of slack resources because they provide greater management flexibility. Pfeffer and Salancik (1978) considered slack resources as apparent “in the form of extra profits or resources” (p. 274). Bok (2003) suggested that any amount of additional resources, particularly money, can be used to enhance the reputation or mission of a university by recruiting new, outstanding faculty, subsidizing merit scholarships to attract brighter students or to shape classes, or providing the salaries and facilities needed to retain faculty, among other initiatives. Bourgeois’ (1981) definition of slack resources suggests that they allow “an organization to adapt successfully to internal pressures for adjustment or to external pressures for change in policy, as well as to initiate changes in practice with respect to the external environment” (p. 30). Resources can be used, in turn, for contingency relief, strategic innovation, and both internal and external problem solving (Williams, 2011).

By identifying sources of slack, generating new resources, and redeploying slack resources, Catholic IHEs may strengthen organizational distinctiveness and, thereby, gain competitive advantage (Bok, 2003; Keller, 1983; Rowley & Sherman, 2001; Rowley, Lujan, & Dolence, 1997). Slack resources may be used, for example, in efforts to enhance reputation and visibility, improve operational efficiency, invest in sustainability, and address other mandates for Catholic higher education articulated by Pope Benedict

XVI (2008). Redeployment of slack resources would be particularly beneficial for Catholic IHEs, given the strictures imposed by a heavy reliance on tuition revenue, modest endowments, and increasing reliance on public funds (Dee, Henkin, & Holman, 2004). This idea is supported by the work of Stipak and O'Toole (1993) who suggested that redeployment of slack resources is one of the most important elements in strategies to delimit the negative impact of necessary organizational retrenchment and alleviate concurrent parallel negative conditions of internal disruption associated with fiscal stress.

High levels of OCBs within Catholic IHEs may support the development of environments inclined toward organizational renewal. Lippitt (1982) described organizational renewal as a process of creating or confronting changes in order to remain viable and move toward greater organizational maturity. Lippitt's (1982) charge to managers for successful organizational renewal include defining the organization's effectiveness in terms of its capacity to survive, maintain, adapt, and develop towards their own goals, and to fulfill its mission in society. The charges that Lippitt defined are somewhat parallel to those of Pope Benedict XVI (2008) for Catholic IHEs. Engendering OCBs in Catholic IHEs may, in some instances, facilitate movement from Lippitt's youth stage of organizational growth to the maturity stage, assuming effective deployment of available resources that OCBs may create (1982).

Lippitt's youth stage includes two major elements: gaining stability and gaining reputation and pride. These elements are driven by key issues of how to organize and how to review and evaluate (1982). When organizations fail to respond to these key issues, they become reactive and crisis-dominated, opportunistic rather than self-directing, have difficulty in attracting the best personnel and clients, and can become overly aggressive. Engendering OCBs in faculty and staff at Catholic IHEs may contribute, in some measure, to organizational equilibrium and encourage more proactive behaviors that counter inclinations toward reactive, crisis-dominated tendencies to respond to exigencies of the moment.

Lippitt's (1982) maturity stage includes critical concerns of achieving uniqueness and adaptability and contributing to society. These critical concerns mirror Pope Benedict XVI's (2008) charges. Maturity stage concerns are driven by key issues of whether to create or confront change, how to go about the change, and whether to share (Lippitt, 1982). As mature organizations, Catholic IHEs must be prepared to create and confront change in order to maintain effectiveness, meet their own goals, and fulfill their mission. As a mature organization, they risk becoming unnecessarily defensive, suffering the loss of their most creative personnel and possibly losing the respect and appreciation of society, if they fail to create and confront change (Lippitt, 1982). By redeploying slack resources to move toward an environment inclined toward organizational renewal, Catholic IHEs, as mature organizations, can create and confront change as opportunity for innovation.

Bok (2003) suggested that as universities make decisions to quickly acquire new resources through convenient methods such as commercialization, they may either immediately or in the future compromise their values; values that influence both their reputation and their continued confidence not only from faculty, staff, students, and board of trustees members perspectives, but from perspectives of alumni, their local communities, and even society at large (Bok, 2003). Engendering OCBs in Catholic IHEs may provide them with opportunities, when managed correctly, to move from Lippitt's youth stage of organizational growth to the maturity stage, while maintaining traditional values, and to continuously gain distinctiveness and stature in the academic marketplace.

It is apparent that interest in OCBs is driven, significantly, by the belief that they are positively associated with organizational effectiveness and, by extension, productivity as defined by the institution (Chen, Hui, & Sego, 1998; Podsakoff, Blume, Whiting & Podsakoff, 2009). Catholic IHEs cannot anticipate the full range of behaviors needed for the achievement of organizational goals and objectives; hence, they cannot fully specify

them in terms of role expectations and job descriptions (Vanyperen, Van Den Berg, & Willering, 1999). A resource deficit is axiomatic. Consequently, they must continue to depend on faculty and staff willingness to voluntarily extend considerable effort and initiative beyond formal job requirements, in part, via OCBs.

Recommendations for Future Research

The results of this study showed that OCB could be conceptualized as two distinct constructs of OCBO and OCBI. Higher levels of ILT, SLT, and OC were associated with higher levels of OCB for faculty and staff members at two Catholic institutions. Future studies should be extended to other types of institutions in terms of size, geographic location, and sector or denominational affiliation, and employ a wider range of demographic variables and methodologies. At present, implications of OCB research in higher education must be understood and applied with caution in the narrow contexts of available inquiry.

Research on OCB in higher education should include empirical studies that consider additional inferred variables with potential association with OCB. Potential effects of satisfaction and participation in decision making should be investigated.

Summary

The major findings from this study indicated that OCB was viewed as two distinct constructs: OCBO and OCBI. ILT was an important predictor in OCB. Higher levels of SLT were associated with higher levels of OCB. OC was an important variable in understanding OCB. OCB is increasingly acknowledged as a baseline factor in organizational success at IHEs, and deserves the attention of administrators, deans, department chairs, and supervisors at every level. A focus on strengthening ILT, SLT, and OC among all faculty and staff members is commended in this study.

APPENDIX A
COVER LETTER

FOR IRB USE ONLY APPROVED BY: IRB-02 IRB ID #: 201203795 APPROVAL DATE: 05/03/12 EXPIRATION DATE: N/A

I would like to invite you to participate in a survey that focuses on faculty and staff members at large, Catholic universities. The survey focuses on employees trust, commitment, and citizenship behavior and may help better inform policy decisions at Catholic colleges and universities in staying competitive with other schools. The survey is being conducted by researchers at The University of Iowa.

This survey should only take 5-10 minutes of your time. You are being invited to participate in this research study as a part of a random sample of employees at a large, Catholic university. One of the key elements of the survey looks at organizational citizenship behaviors which research confirms is a major contributor to organizational effectiveness and sustainability. Your participation in this survey is voluntary and your responses will be anonymous and no individual responses will be identified.

Please click the link below to complete the on-line survey. We would appreciate your response by [date], 2012. I thank you for your participation!

<http://edu.surveymzmo.com/s3/878780/OCB-Trust-and-Commitment-at-Catholic-IHEs>

If you have any questions regarding this survey, please feel free to contact Justin Ball at justin-ball@uiowa.edu.

APPENDIX B
MEASURES AND DEMOGRAPHICS USED IN SURVEY

Table B1

Faculty and Staff Members' Organizational Citizenship Behavior (OCB)

OCBI
1. Helps others who have been absent.
2. Helps others who have heavy workloads.
3. Assists supervisor with her/her work (when not asked).
4. Takes time to listen to co-workers' problems and worries.
5. Goes out of the way to help new employees.
6. Takes a personal interest in other employees.
7. Passes along information to co-workers.
OCBO
8. Attendance at work is above the norm.
9. Gives advance notice when unable to come to work.
10. Takes undeserved work breaks.
11. Great deal of time spent with personal phone conversations.
12. Complains about insignificant things at work.
13. Adheres to informal rules devised to maintain order.

Source: Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17, 601-617.

Table B2

Faculty and Staff Members' Interpersonal-level Trust

Affect-based Trust
1. I have a positive working relationship with the supervisors/managers in my organization. We can both freely share our ideas and opinions.
2. I can talk openly to the supervisors/managers in my organization about difficulties I am having at work.
3. If I shared my problems with the supervisors/managers in my organization, I know they would respond constructively.
4. The supervisors/managers in my organization and I have made considerable efforts to maintain our working relationship.
Cognition-based Trust
5. The supervisors/managers in my organization approach their jobs with professionalism and education.
6. Given my supervisor's/manager's leadership capabilities, I see no reason to doubt his or her competence and preparation for the job.
7. I can rely on the supervisors/managers in my organization to make my job easier by eliminating careless work.
8. Most people consider the supervisors/managers in my organization to be trustworthy.

Source: McAllister, D. J. (1995). Affect and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38, 24–59.

Table B3

Faculty and Staff Members' Interpersonal-level Trust

1. My level of confidence that this organization will treat me fairly is -----.
2. The level of trust between supervisors/managers and employees in this organization is -----.
3. The level of trust among the people I work with on a regular basis is -----.
4. The degree to which we can depend on each other in this organization is -----.

Scale:

- 1 Nearly Zero
- 2 Low
- 3 50-50
- 4 High
- 5 Near 100%

Source: Nyhan, R. C., & Marlowe, H. A. (1997). Development and psychometric properties of the Organizational Trust Inventory. *Evaluation Review*, 21(5), 614-636.

Table B4

Faculty and Staff Members' System-level Trust

1. I believe my organization is capable of designing programs that meet employee needs.
2. Since I am unable to personally monitor all of my organization's activities, I would be willing to trust the systems of the organization to get the job done right.
3. In general, I do not have confidence in the systems of my organization. (Reverse Score)

Source: Adapted from Bryan's (1995) modification of Moorman, C., Deshpande, R., Zaltman, G. (1993). Factors affecting trust in market research relationships. *Journal of Marketing*, 57, 81-101.

Table B5

Faculty and Staff Members' System-level Trust

1. I believe my organization is a credible organization.
2. I feel that I can rely on the systems in my organization.
3. I have confidence in the systems of my organization.
4. Sometimes I feel like I cannot rely on the systems of my organization. (Reverse Score)

Source: Adapted from Bryan's (1995) modification of Butler's scale for overall trust in Conditions of Trust Inventory: Butler, J. K. (1991). Towards understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management*, 17, 643-663.

Table B6

Faculty and Staff Members' Organizational Commitment

1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.
2. I talk up this organization to my friends and family as a great organization to work for.
3. I feel very little loyalty to this organization. (Reverse Score)
4. I would accept almost any type of job assignment in order to keep working for this organization.
5. I find that my values and the organization's values are very similar.
6. I am proud to tell other that I am part of this organization.
7. I could just as well be working for a different organization as long as the type of work was similar. (Reverse Score)
8. This organization really inspires the very best in me in the way of job performance.
9. It would take very little change in my present circumstances to cause me to leave this organization. (Reverse Score)
10. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.
11. There's not much to be gained by sticking with this organization indefinitely. (Reverse Score)
12. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees. (Reverse Score)
13. I really care about the fate of this organization.
14. For me, this is the best of all possible organization for which to work.
15. Deciding to work for this organization was a definite mistake on my part. (Reverse Score)

Source: Originally developed by Porter, L. W., & Steers, R. M., Mowday, R. T., Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59, 603-609, and modified by Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14, 224-247.

Table B7

Demographic Variables

1. Job type	<ul style="list-style-type: none"> • Administrator • Faculty • Staff • Adjunct (Part-time)Faculty • Part-time Staff
2. Have you ever had managerial responsibilities at this or any other organization?	<ul style="list-style-type: none"> • Yes • No
3. Gender	<ul style="list-style-type: none"> • Male • Female
4. Minority status	<ul style="list-style-type: none"> • Caucasian • Other
5. Level of education	<ul style="list-style-type: none"> • No degree • Associates degree • Bachelor's degree • Master's degree • PhD or other professional degree (JD, DBA, MD, etc.)
6. What is your total work experience at your current institution and any other organization?	<ul style="list-style-type: none"> • Less than 1 year • 1-5 years • 6-10 years • 11-15 years • 16-20 years • 21+ years
7. How long have you been with your current organization? (Tenure)	<ul style="list-style-type: none"> • Less than 1 year • 1-5 years • 6-10 years • 11-15 years • 16-20 years • 21+ years
8. How long have you had the same supervisor?	<ul style="list-style-type: none"> • Less than 1 year • 1-5 years • 6-10 years • 11-15 years • 16-20 years • 21+ years
9. Estimate the extent to which your personal values are compatible with the mission values of your organization. (Shared Values)	<ul style="list-style-type: none"> • Highly compatible • Somewhat compatible • Not compatible
10. Do you consider yourself to be Catholic?	<ul style="list-style-type: none"> • Yes • No
11. Age	<ul style="list-style-type: none"> • Less than 25 years of age • 25-34 • 35-44 • 45-54 • 55 years of more

Table B7 (continued)

12. Income Level	<ul style="list-style-type: none">• Under \$15,000 annually• \$15,000 - \$24,999 annually• \$25,000 - \$49,999 annually• \$50,000 - \$74,999 annually• \$75,000 - \$99,999 annually• Over \$100,000 annually
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