Spring 2010

Leadership Styles, Ethics Institutionalization, Ethical Work, Climate, and Employee Attitudes toward Information Technology Misuse in Higher Education: A Correlational Study

Kevin Scott Floyd
Georgia Southern University

Follow this and additional works at: https://digitalcommons.georgiasouthern.edu/etd

Recommended Citation
https://digitalcommons.georgiasouthern.edu/etd/339

This dissertation (open access) is brought to you for free and open access by the Graduate Studies, Jack N. Averitt College of at Digital Commons@Georgia Southern. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.
LEADERSHIP STYLES, ETHICS INSTITUTIONALIZATION, ETHICAL WORK CLIMATE, AND EMPLOYEE ATTITUDES TOWARD INFORMATION TECHNOLOGY MISUSE IN HIGHER EDUCATION: A CORRELATIONAL STUDY

by

KEVIN SCOTT FLOYD

(Under the Direction of Teri Denlea Melton)

ABSTRACT

Information technology (IT) misuse is a complex problem facing institutions of higher education in the United States. As institutions of higher education become more dependent on technology to increase access to programs and services, organizational leaders must rely on employees to utilize a variety of technology resources. Yet, the misuse of these resources often results in serious financial losses and increasing security and ethical incidents for institutions. In an effort to ensure more ethical work environments and reduce the incidents of IT misuse, a key component is the consideration of leadership styles of top management. The purpose of this research was to determine whether a relationship exists between certain leadership styles in higher education and the institutionalization of ethics, whether there is a relationship between institutionalization of ethics and the development of an ethical work climate, and whether there is a relationship between the ethical work climate and employee attitudes toward information technology misuse. This study used questions from existing surveys to measure leadership styles, the institutionalization of ethics, and ethical work climate, and a researcher developed instrument to measure employee attitudes toward IT misuse. The sample included currently employed faculty at institutions of higher education in the
University System of Georgia. The results of this study found that significant relationships exist between leadership styles and both implicit and explicit forms of ethics institutionalization. In addition, significant relationships were found between both implicit and explicit forms of ethics institutionalization and the ethical work climate. The relationship between ethical work climate and employee attitudes toward IT misuse was found to be only marginally significant.

INDEX WORDS: Leadership styles, ethical work climate, Information Technology Misuse, Institutionalization of Ethics, Dissertation.
LEADERSHIP STYLES, ETHICS INSTITUTIONALIZATION, ETHICAL WORK CLIMATE, AND EMPLOYEE ATTITUDES TOWARD INFORMATION TECHNOLOGY MISUSE IN HIGHER EDUCATION: A CORRELATIONAL STUDY

by

KEVIN SCOTT FLOYD

Major Professor: Teri Denlea Melton Committee: James E. Green Susan J. Harrington

Electronic Version Approved: May 2010
LEADERSHIP STYLES, ETHICS INSTITUTIONALIZATION, ETHICAL WORK CLIMATE, AND EMPLOYEE ATTITUDES TOWARD INFORMATION TECHNOLOGY MISUSE IN HIGHER EDUCATION: A CORRELATIONAL STUDY

by

KEVIN SCOTT FLOYD
B.S., Macon State College, 2000
M.S., Columbus State University, 2003

A Dissertation Submitted to the Graduate Faculty of Georgia Southern University in Partial Fulfillment for the Requirements for the Degree

DOCTOR OF EDUCATION

STATESBORO, GEORGIA

2010
DEDICATION

In recognition of his guidance, support, and encouragement, I hereby posthumously dedicate this dissertation to my mentor and teacher, Dr. David R. Adams.

Thank you for showing me the path to becoming a true academician and scholar.
ACKNOWLEDGEMENTS

I would like to acknowledge and thank the following for their contributions, support, and encouragement:

to Dr. Teri Denlea Melton, who served as my dissertation committee chair, advisor, and professor, for her wisdom and steadfastness in leading me through the dissertation process. She was supportive of this study from its inception through the final defense. I could not have asked for a better mentor or advocate;

to Dr. James Green, for serving on my dissertation committee, and for his invaluable guidance and suggestions that helped to strengthen my study;

to Dr. Sue Harrington, for serving as the methodologist on my dissertation committee. Thank you for your initial assistance in helping me to refine my topic and for guiding me through the data collection and analysis. Thank you for instilling in me the qualities of being a good researcher and the continuous guidance and support that you provided during this process. My research would not have been possible without your help;

to Del S. Floyd, my mother. Thank you for all of your support and encouragement over the years. You will never know how much I love and appreciate you;

to Gloria Adams, my other mom. You and Dr. Adams are like parents to me. I consider myself fortunate and blessed to have you in my life. Thank you for all of your guidance, support, and encouragement through this process and all of my other educational endeavors. I love you both.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGMENTS</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>12</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>13</td>
</tr>
</tbody>
</table>

## CHAPTER

### I INTRODUCTION

- Statement of the Problem | 19
- Purpose Statement | 20
- Research Questions | 21
- Conceptual Framework | 22
- Significance of the Study | 22
- Procedures | 23
- Definitions of Key Terms | 24
- Limitations and Delimitations | 27
- Chapter Summary | 28

### II REVIEW OF LITERATURE

- Introduction | 30
- Leadership | 30
  - Transformational Leadership | 32
  - Transactional Leadership | 36
  - Laissez-Faire Leadership | 39
Leadership Styles and Ethics ................................................................. 40
Institutionalization of Ethics .............................................................. 46
  Implicit Ethics Institutionalization.................................................. 47
  Explicit Ethics Institutionalization................................................ 47
  Ethics Institutionalization Effectiveness......................................... 48
Ethical Work Climate ..................................................................... 53
Employee Attitudes toward Information Technology Misuse............. 58
Chapter Summary ......................................................................... 61

III METHODOLOGY

Introduction .................................................................................. 62
Research Questions .................................................................... 62
Sample and Sampling ................................................................ 63
Instrumentation .......................................................................... 63
  Multifactor Leadership Questionnaire...................................... 64
  Institutionalization of Ethics Questionnaire.............................. 65
  Ethical Work Climate Questionnaire....................................... 66
  Employee Attitudes Questionnaire.......................................... 67
Pilot Study .................................................................................. 68
Data Collection ........................................................................... 69
Data Analysis ............................................................................. 69
Chapter Summary ...................................................................... 70

IV REPORT OF DATA AND DATA ANALYSIS

Research Questions.................................................................... 71
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Cronbach’s α for Factors Derived from Survey Scales using Exploratory Factor Analysis with Varimax Rotation</td>
<td>74</td>
</tr>
<tr>
<td>Table 2</td>
<td>Spearman Correlations and Descriptive Statistics for Leadership Styles and Ethics Institutionalization</td>
<td>78</td>
</tr>
<tr>
<td>Table 3</td>
<td>Spearman Correlations and Descriptive Statistics for Ethics Institutionalization and Ethical Work Climate</td>
<td>79</td>
</tr>
<tr>
<td>Table 4</td>
<td>Spearman Correlations and Descriptive Statistics for Ethical Work Climate and Employee Attitudes toward IT Misuse</td>
<td>80</td>
</tr>
<tr>
<td>Table 5</td>
<td>Results of Mann-Whitney U Test for Ethical Work Climate and IT Misuse</td>
<td>84</td>
</tr>
<tr>
<td>Table 6</td>
<td>Appropriate Sample Size Required to Avoid Type 2 Error</td>
<td>85</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1: Non-Normal Distribution of IT Misuse Data........................................83
CHAPTER I
INTRODUCTION

“Leadership is essentially a moral act.” A. Bartlett Giamatti

Van Dusen (1998) explained that technology is higher education’s “magic bullet,” strengthening academia by making it more accessible, more affordable, and more effective. A recent EDUCAUSE conference promoted technology as an integral part of higher education, a catalyst for change in academia that stretches across disciplines, combining academic and social life (EDUCAUSE Conference, 2009). According to the National Education Association website, “technology is changing the way faculty teach and students learn. As technological advances are introduced into the academy, campuses are more and more attracted by the promise and potential of technology for enhancing access and learning” (NEA Higher Education, 2009).

As institutions of higher education become more dependent on information technology to remain competitive in a technological-driven society, administrators are looking to faculty and staff to utilize a growing number of technology resources, such as electronic mail, the World Wide Web, the Internet, and various types of computer software, to enhance the teaching and learning process. In the same way that the use and importance of technology has increased, so too have the incidents of employee misuse of university-owned technology resources (Carlson 2003a, Carlson, 2003b, Olsen, 2007). Technology misuse refers to the use of technology resources in ways that are counter to the standards of policymakers, computer “experts,” or a well-informed society (i.e., those who understand the ramifications of the computer use in question). Since technology misuse involves judgments and behaviors that do not conform to accepted standards of
social or professional behavior, technology misuse is considered unethical (Harrington, 1992; Moor, 1985).

In an effort to address the potential unethical use of information technology resources by faculty and staff in academia, administrators should consider the employees’ perception of their work climate and its influence on employee attitudes in the organization. As work climate is a factor that can have a significant impact on the productivity and satisfaction of its employees (Malloy & Agarwal, 2003), numerous studies have suggested that work climate can play a major role in influencing ethical conduct among groups and individuals (e.g., Ambrose, Arnaud, & Schminke, 2008; Andreoli & Lefkowitz, 2009; Cohen, 1995; Malloy & Agarwal, 2003; Scheider, 1975; Victor & Cullen, 1988).

The development of a work climate that fosters ethical conduct and positively affects employee job attitudes is significantly influenced by the leadership style of the organization. According to Bennis and Nanus (1985), “the leader is responsible for the set of ethics or norms that govern the behavior of people in the organization. Leaders set the moral tone” (p. 186). Hernadez (2008) noted that leaders generate morally courageous behavior by fostering relational, contextual, and motivational support in followers. According to Ibrahim, Angelidis, and Parsa (2008), it is the responsibility of top managers to establish a high degree of commitment to ethical practices with the organization. Perceptions of poor leadership often promote unethical behavior in employees as they attempt to model the behaviors that they perceive to be appropriate and acceptable by their leader.
While much has been written about corporate leadership styles and their impact on the development of an ethical work climate in the business organization, the search for comparable research in the higher education literature has been unsuccessful. As a result, the application of research findings from business to the higher education environment is necessary in order to understand whether or not higher education leadership styles are related to ethical IT practices within the institution. In *Education and the Cult of Efficiency*, Raymond Callahan (1962) described the influence exerted upon public education by the business community. Callahan’s general thesis was that many of the fundamental values of business leadership are present in the American education system. Today, institutions of higher education continue to be viewed as bureaucratic business-like organizations (Schalin, 2009). Given the similarities between corporate organizations and colleges and universities, it seems likely that research findings from business that correlate leadership styles to the corporate ethical climate would produce similar results in academia; however, little if any research currently exists.

Incidents of unethical technology use and the associated security risks will likely continue to rise in higher education as higher education institutions become more dependent on information technology resources. Therefore, it is essential that college and university leaders develop an ethical work environment that positively influences employee attitudes toward the use of information technology resources. The work climate is a factor that can have a significant impact on the productivity and satisfaction of its employees (Malloy & Agarwal, 2003). In addition, numerous studies have suggested that work climate can play a major role in influencing ethical conduct among groups and individuals (Ambrose, Arnaud, & Schminke, 2008; Andreoli & Lefkowitz, 2009; Cohen,
A challenge for higher education leaders is to create what Jose and Thibodeaux (1999) referred to as an “ethical fit,” a fit between the institutions ethical strategy and its systems, structures, and culture in an effort to create an environment that identifies the expectations of workers and offers guidance on handling some of the more common ethical problems that might rise in the course of doing business, such as the misuse of IT resources.

The development of an ethical work climate is a widely debated topic in corporate America. Newspapers, magazines, and prime-time television have devoted much time and space to the various ethical scandals that have occurred in public, private, and third sector organizations (Jose & Thibodeaux, 1999). The importance of the topic is suggested by the number of research articles that have been written on the effects of ethics in organizations (e.g., Elçi & Alpkan, 2009; Mulki, Jaramillo, & Locander, 2008; Valentine & Barnett, 2007; Verbos, Gerard, Forshey, Harding, & Miller, 2007). All types of organizations face common ethical temptations and dilemmas. The fostering of a culture of organizational ethics can be effective at addressing these moral challenges (Johnson, 2007).

Unlike corporate organizations, institutions of higher learning have been slow to implement major ethics initiatives that address IT misuse. Only recently have higher education systems, like the University System of Georgia, acted to approve a system-wide ethics policy to address ethical issues such as information technology resource misuse (Board of Regents, 2008). Weber (2006) suggested that the lack of serious external regulatory incentives and the lack of major ethics scandals are factors that have attributed to higher learning’s limited attention to ethics institutionalization. Nonetheless,
the development of an institutionalization of ethics plan is important for all types of organizations—educational, government, religious, and business that must deal with ethical issues.

Organizational leadership has a significant role to play in establishing and implementing an ethical climate (Delaney, 2004; Minkes, Small, & Chatterjee, 1999; Popejoy, 2004). According to Bennis and Nanus (1985), “The leader is responsible for the set of ethics or norms that govern the behavior of people in the organization. Leaders set the moral tone” (p. 186). Hitt (1990) explained that leadership directly impacts organizational climate for ethical conduct which leads to trust and the overall long term success of an organization. “Ethics and leadership go hand-in-hand. An ethical environment is conducive to effective leadership, and effective leadership is conducive to ethics. Ethics and leadership function as both cause and effect” (Hitt, 1990, p. 1).

A study conducted by Verschoor (2000) established a link between organizational performance and a commitment by leadership to follow a code of ethics that is established to help guide behavior and reinforce organizational values. The task for organizational leaders is to ensure a high degree of congruence between an organization’s guiding beliefs and the employee’s daily beliefs. Managers should be able to empower their employees and persuade them to change and adopt an ethical work climate within the workplace. Employee and organizational conformity to ethical requirements is a responsibility of, and depends on, the leadership within the organization. Numerous scholarly articles have been written that analyze the relationship between corporate leadership styles and ethical practices within the organization (e.g., Hood, 2003; Minkes et al., 1999). Understanding how the values of the CEO impact ethical policies and
actions within the workplace has become increasingly important given the number of recent business scandals (Carlson & Perrewe, 1995; Matzek, 2002; Schmitt, 2002; Sims, 1991; Singhapakdi & Vitell, 2007; Tolson, 2002; Vitell & Singhapakdi, 2008).

The results of a study conducted by Hood (2003) revealed that the ethical orientation of the CEO in private sector organizations is an important issue to consider in understanding the ethical practices in an organization. Clear links between CEO leadership styles and ethical practices within the organization were established. As organizations strive to ensure more ethical work climates, a key component of this process will involve consideration of organizational leadership styles. Consequently, it is important to determine whether there is a relationship between leadership styles and ethical practices in institutions of higher education.

**Statement of the Problem**

A major issue facing institutions of higher education in the United States is the significant amount of misuse use of information technology resources, such as electronic mail and computer software. As institutions of higher education strive to ensure more ethical work environments, a key component of this process will involve consideration of leadership styles of top management. While much has been written about corporate leadership styles and their impact on ethical behavior in the business organization, the search for comparable literature in higher education has been unsuccessful. Since institutions of higher education are generally viewed as bureaucratic business-like organizations, there are often many similarities between corporate organizations and colleges and universities (Callahan, 1962). Since little, if any, research currently exists, it is important to conduct similar studies in higher educational environments.
Purpose Statement

The purpose of this correlational study was to examine whether a relationship exists between certain leadership styles in higher education and the institutionalization of ethics, and whether there is a relationship between the institutionalization of ethics and the development of an ethical work climate, and whether a relationship exists between the ethical work climate and employee attitudes toward information technology misuse.

Leadership style is generally defined as a type of influence that an individual (leader) uses to motivate followers to accomplish what is expected of them for the benefit of the organization (Bass, 1985; Burns, 1978; Howell & Avolio, 1993; Northouse, 2007).

Sims (1991) explained that the institutionalization of ethics is a process whereby ethics are formally introduced into daily business life. The institutionalization of ethics is essential for today’s organizations if they are going to effectively counteract increasingly frequent occurrences of unethical or illegal behavior. Explicit ethics institutionalization includes the explicit development of programs to promote an ethical work environment. Specific forms of explicit ethics institutionalization can include the use of employees who serve as ethics officers, the formation of ethics committees, and the distribution of ethics newsletters (Jose & Thibodeaux, 1999). Implicit ethics institutionalization relies on existing programs within the organization such as incentive systems, leadership, promotion policies, and performance evaluations that can be implicitly inherited to help increase ethical awareness. Implicit forms are vague because ethical behavior is understood to be crucial, but the processes used to encourage ethical behavior are implied or not directly expressed (Vitell & Singhapakdi, 2008).
In their seminal work on ethical climates, Victor and Cullen (1987) defined the organization’s ethical climate as “the shared perceptions of what is ethically correct behavior and how ethical issues should be handled” (pp. 51-52). While most employees recognize the inappropriate use of information technology resources, there is a large and important minority who believe such behavior is acceptable. Magklaras, Furnell, and Brooke (2006) highlighted the fact that the three most common types of information technology misuse for respondents were surfing the web, abuse of email resources, and the theft or malicious alteration of data.

**Research Questions**

This study surveyed currently employed faculty at public institutions of higher education within the University System of Georgia (USG) (Colleges and Universities Map, 2008). The participants were asked to observe the leadership style of their department supervisors, to identify both implicit and explicit forms of ethics institutionalization within their departments, to observe the ethical work climate of their department, and to indicate their attitudes toward information technology misuse. From this information, this research compiled to answer the following questions:

R₁: Is there a relationship between leadership styles and implicit forms of ethics institutionalization?

R₂: Is there a relationship between leadership styles and explicit forms of ethics institutionalization?

R₃: Is there a relationship between implicit forms of ethics institutionalization and the ethical work climate?
R₄: Is there a relationship between explicit forms of ethics institutionalization and the ethical work climate?

R₅: Is there a relationship between the ethical work climate and employee attitudes toward IT misuse?

**Conceptual Framework**

As illustrated in the conceptual framework above, this study will determine whether a relationship exists between leadership style and both implicit and explicit forms of ethics institutionalization, whether a relationship exists between ethics institutionalization and ethical work climate, and whether a relationship exists between the ethical work climate and employee attitudes toward IT misuse.

**Significance of the Study**

As institutions of higher education become more dependent on technology to increase access to programs and services, organizational leaders must rely on employees to utilize a variety of technology resources. Along with the increased use of technology resources has come a growing number of incidents of technology misuse by employees. Olsen’s (2007) article highlighted incidents of personal use of campus-provided
computers and e-mail accounts by academicians. The misuse of information technology resources often results in financial and productivity losses as well as increasing security and ethical incidents for institutions. Leonard and Cronan (2001) reported that losses as a result of computer crime and misuse in the private/business sector can reach billions of dollars a year. As a result, organizations of all types must take action to stop the inappropriate, illegal, and/or unethical use of computers.

While much has been written about leadership and its impact on IT misuse and ethical behavior within the corporate environment, the search for comparable research in higher education had been unsuccessful. This and future studies will strengthen the literature on the effects of leadership in higher education. The results of this research will help college and university administrators better understand the relationship between leadership style, the development of a more ethical work environment in academia, and employee attitudes toward information technology misuse. Ultimately, this framework may help institutions of higher education significantly address IT security related concerns and, in turn, reduce the costs associated with these incidents.

**Procedures**

The purpose of this study was to examine whether there is a relationship between certain leadership styles in higher education and the institutionalization of ethics, whether there is a relationship between the institutionalization of ethics and the development of an ethical work climate, and whether there is a positive relationship between the ethical work climate and employee attitudes toward information technology misuse. This study included a stratified random sample of 400 from over 11,000 currently employed faculty at institutions of higher education within the University System of Georgia (USG)
(Colleges and Universities Map, 2008). Faculty names and e-mail addresses were gleaned from the USG’s Colleges and University Personnel Directories (College and University Personnel Directories, 2009).

The instrumentation for this study consisted of questions from previous instruments, including the Multifactor Leadership Questionnaire (MLQ) to measure leadership styles developed by Bass and Avolio (1992), the Ethical Climate Questionnaire (ECQ) to measure ethical work climate developed by Victor and Cullen (1988), and scales for indentifying both the implicit and explicit dimensions of the institutionalization of ethics by Singhapakdi and Vitell (2007). Scales to measure employee attitudes toward information technology misuse were previously developed and pilot tested by the researcher. Items from each instrument were compiled into a single instrument for the purposes of this study. The instrument was administered electronically using SurveyMonkey©. Faculty were e-mailed the hyperlink to the instrument. The participants were guaranteed anonymity of responses and were assured that responses will not be shared with their supervisors.

The results of the surveys were coded and entered into the Statistical Package for Social Sciences (SPSS) to obtain descriptive statistics and determine if correlations exist between leadership style, ethics institutionalization, ethical work climate and employee attitudes toward information technology misuse. Correlations were computed using the Spearman r since the distribution of scores is in ordinal form (Salkind, 2008; Sprinthall, 2003).

**Definitions of Key Terms**

*Ethics institutionalization* – ethics institutionalization refers to the process to get ethics

Goodman and Dean (1981) explained that the act of institutionalization is a behavior that is performed by two or more people, persists over time, and exists as part of the daily routine of the organization. For the purpose of this study, ethics institutionalization will be defined as a score on the institutionalization of ethics instrument developed by Singhapakdi and Vitell (2007).

*Ethical work climate* – ethical work climate is a work environment that helps employees identify the normative systems that guide their decision making, their actions, and how they respond to ethical dilemmas that occur. For purposes of this study, ethical work climate will be defined as a score on the ethical work climate questionnaire developed by Victor and Cullen (1987).

*Explicit ethics institutionalization* – explicit ethics institutionalization includes the explicit development of programs to promote an ethical work environment. Specific forms of explicit ethics institutionalization can include the use of employees that serve as ethics officers, the formation of ethics committees, and the distribution of ethics newsletters (Jose & Thibodeaux, 1999). For the purpose of this study, explicit ethics institutionalization will be defined as a score on the institutionalization of ethics instrument developed by Singhapakdi and Vitell (2007).

*Implicit ethics institutionalization* – implicit ethics institutionalization relies on existing programs within the organization such as incentive systems, leadership, promotion policies, and performance evaluations that can be implicitly inherited to help increase ethical awareness. Implicit forms are vague because ethical
behavior is understood to be crucial, but the processes used to encourage ethical behavior are implied or not directly expressed (Vitell & Singapakdi, 2008). For the purpose of this study, implicit ethics institutionalization will be defined as a score on the institutionalization of ethics instrument developed by Singapakdi and Vitell (2007).

*Information Technology misuse* – information technology misuse is the unauthorized use, access, abuse, or disruption of university-provided information and information systems, such as the Internet, World Wide Web, electronic mail, software, printers, and computer hardware, for personal gain. Since information technology misuse includes judgments and behaviors that are counter to the standards of policymakers, computer “experts,” or a well-informed society (i.e., those who understand the ramifications of the computer use in question), it is considered unethical (Harrington, 1992; Moor, 1985). For the purpose of this study, employee attitudes toward IT misuse will be defined as a score on the Employee Attitudes toward IT Misuse instrument developed and pilot tested by the researcher.

*Laissez-Faire leadership* – laissez-faire leadership is a leadership style characterized whereby the leader takes an “hands-off” approach, delays making decisions, and makes little effort to help followers satisfy their needs. This style can also be viewed as the absence of leadership (Northouse, 2007). For the purpose of this study, laissez-faire leadership style will be defined as a score on the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1992).
**Leadership style** – leadership style is the manner and approach used by an individual to influence a group of individuals to achieve a common goal (Northouse, 2007). For the purpose of this study, leadership style will be identified as a score on the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1992).

**Transactional leadership** – transactional leadership is a leadership style or model that focuses on transactions or exchanges that occur between leaders and their followers to advance the agenda of the leader and their subordinates (Kuhnert, 1994; Northouse, 2007). For the purpose of this study, transactional leadership style will be identified as a score on the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1992).

**Transformational leadership** – transformational leadership is a leadership style or process whereby a person engages with others to create a connection that raises the level of motivation and morality in both the leader and the follower. It is a process that changes and transforms people (Burns, 1978; Northouse, 2007). For the purpose of this study, transformational leadership style will be identified as score on the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1992).

**Limitations and Delimitations**

This study was restricted by the following limitations. First, this study attempted to measure unethical behavior by faculty in higher education. Trevino (1992) explained that observing and measuring ethical-unethical behavior can be difficult since it occurs infrequently. As a result, a single attempt to measure unethical behavior may have been
insufficient. Also, subjects who engage in unethical activities are likely to try and conceal such activities and not allow them to be observed. In addition, the sample for this study was limited to faculty at institutions of higher education within the University System of Georgia. Finally, causality cannot be confirmed since the study was cross-sectional. A delimitation of this study is that this study confined itself to currently employed faculty at institutions of higher education within the University System of Georgia.

Chapter Summary

Information technology (IT) misuse is a complex problem facing institutions of higher education in the United States. As institutions of higher education become more dependent on technology to increase access to programs and services, organizational leaders must rely on employees to utilize a variety of technology resources. Yet, the misuse of these resources often results in serious financial losses and increasing security and ethical incidents for institutions. In an effort to ensure more ethical work environments and reduce the incidents of IT misuse, a key component is the consideration of leadership styles of top management.

The purpose of this correlational study was to determine whether a relationship exists between certain leadership styles in higher education and the institutionalization of ethics, whether there is a relationship between institutionalization of ethics and the development of an ethical work climate, and whether there is a relationship between the ethical work climate and employee attitudes toward information technology misuse. The study used questions from existing surveys to measure leadership styles, the institutionalization of ethics, and ethical work climate, and a researcher developed instrument to measure employee attitudes toward IT misuse. The sample included
institutions of higher education in the University System of Georgia. The results of this study will provide valuable insight for administrators involved in the implementation of information technology resources at institutions of higher education in the United States.
CHAPTER II
REVIEW OF THE LITERATURE

Organizational leadership has a significant role to play in the institutionalization of ethics which leads to the development of an ethical work climate (Delaney, 2004; Popejoy, 2004). The development of a work climate that fosters ethical decision making and positively affects employee job attitudes is essential if institutions of higher education seek to address the unethical use of information technology resources by faculty in academia. This chapter explores the characteristics of leadership, identifies the major leadership styles, the relationship between leadership and ethics, the role of ethics institutionalization in addressing unethical behavior, and the development of an ethical work climate that positively affects employee attitudes toward IT misuse.

Leadership

Leadership is a complex topic that includes many dimensions and has universal appeal. According to Stogdill (1974), “there are almost as many different definitions of leadership as there are people who have tried to define it” (p. 17). It has been described in a variety of ways by the popular press and by scholars in academic literature through the years: Northouse (2007) explained that leadership involves influence and is concerned with how the leader affects followers. “Influence is the sine qua non of leadership. Without influence, leadership does not exist” (p. 3). In the book, Leadership, James MacGregor Burns (1978) explained that “some define leadership as leaders making followers do what followers would not otherwise do; I define leadership as leaders including followers to act for certain goals that represent the values and motivations – the wants and needs, the aspirations and expectations – of both leaders and
followers” (p. 19). Leadership is a process. Process implies that a leader affects and is affected by followers. Rather than being a linear, one-way event, it is interactive and available to everyone within an organization (Northouse, 2007). Hernandez (2008) explained that leaders have a lasting influence and, thus, great responsibility to act not only as caretakers, but also to act as role models.

In order for leadership to be effective, it must create an environment of collective purpose. Northouse (2007) elucidated that “leadership involves influencing a group of individuals who have a common purpose” (p. 3). As Burns (1978) stated, “one of the most serious failures in the study of leadership has been the bifurcation between the literature on leadership and the literature on followers…the process of leadership must be seen as part of the dynamics of conflict and power. Leadership is nothing if not linked to collective purpose” (p. 3).

Leadership also involves goal attainment. This means that leaders direct the energies toward their followers to help them accomplish some task or end. Leadership occurs in contexts where individuals are working together to move toward a goal (Northouse, 2007). The role of the leader is to mobilize persons with different motives, and values, and in an environment of competition and conflict, to realize goals independently or mutually held by both leaders and followers (Burns, 1978).

Over the years, numerous theoretical leadership style approaches have been developed to explain the complexities of the leadership process, leadership styles and leadership approaches (e.g., Bass, 1990; Bryman, 1992; Gardner, 1990; Kouzes & Posner, 2007; Mumford, 2006; Northouse, 2007; Rost, 1991). While there are many types of leadership styles, this study investigates the constructs that make up the Full Range
Leadership Theory (FRLT) proposed by Bass and Avolio (1992). The FRLT includes three typologies of leadership: transformational, transactional, and non-transactional laissez-faire, which are represented by nine distinct factors.

**Transformational Leadership**

Burns (1978) made clear a distinction between two types of leadership—transactional and transformational. While transactional is the more common type of leadership, the best performance is achieved through transformational leadership. Burns further explained transformational leadership as follows:

Transforming leadership, while more complex than transactional leadership, is more potent. The transforming leader recognizes an existing need or demand of a potential follower. But, beyond that, the transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower. (p. 4)

According to Bass (1990), transformational leadership has the following characteristics or leadership factors: (a) Attributed idealized influence or the socialized charisma of the leader, where the leader is perceived as being confident, powerful, and focuses on higher-order ideals and ethics; (b) behavior idealized influence or charismatic actions that are centered on values, beliefs, and a sense of mission; (c) inspirational motivation or the way a leader energizes followers by viewing the future with optimism and ambition and communicating a vision that is achievable; (d) intellectual stimulation or leader actions that challenge followers to think creatively and find solutions to difficult problems; and (e) individualized consideration or leader behavior that helps advise, support, and pay attention to the individual needs of followers.
The roots of charismatic (individualized influence) leadership date back to leadership studies conducted by Weber (1905); however, the theory of charismatic leadership was first published by R. J. House (1976). It has since become a topic of much research (Bryman, 1992; Conger, 1999; Howell & Avolio, 1993; Hunt & Conger, 1999). Charismatic leadership is often described in ways that make it similar, if not synonymous, with transformational leadership. Idealized influence is described when a leader acts as a role model for his/her followers and encourages them to share a common vision and goals for the organization (Muenjohn & Armstrong, 2008). According to Bass (1990), charismatic or individualized influence leaders have great power and influence. They provide vision, a sense of mission, instill pride, and gain respect and trust. Employees want to identify with charismatic leaders and they have a high degree of trust and confidence in them. Charismatic leaders inspire followers to accomplish great things with extra effort. Charismatic leaders act in ways that have been described as being dominant, having a strong desire to influence others, being self-confident, and have a strong sense of one’s own moral values. Charismatic leaders are also strong role models for the beliefs and values they want to instill in their followers (Northouse, 2007).

Transformational leadership was characterized by Bryman (1992) as being a charismatic and affective type of leadership and a part of the “New Leadership” paradigm.

While transformational leadership is often used interchangeably with charismatic leadership, Carlson and Perrewe (1995) argued that a distinction should be made. Charismatic leaders appeal to the hopes and ideals of those followers who idolize the leader. Transformational leadership differs because it appeals to the needs and values of
all followers and it often attempts to change entire organizations. Transformational leaders may have charismatic qualities but also much more.

The ability to inspire followers (inspirational motivation) is another characteristic of transformational leadership. Inspirational leadership involves the arousal and heightening of motivation among followers (Bass, 1990). Northouse (2007) stated that, “inspirational motivation is descriptive of leaders who communicate high expectations to followers, inspiring them through motivation to become committed to and a part of the shared vision in the organization” (p. 183). In addition, transformational leadership raises the morality of others and is concerned with collective good, whereby leaders transcend their own self-interests for the sake of others (Burns, 1978; Howell & Avolio, 1993). Additionally, Bass (1985) explained:

Transformational leadership as a process that motivates followers to do more than the expected by (a) raising followers’ levels of consciousness about the importance and value of specified and idealized goals, (b) getting followers to transcend their own self-interest for the sake of the team or organization, and (c) moving followers to address higher level needs. (p. 20)

Transformational leadership is also concerned with improving the performance of followers and developing followers to their fullest potential (Avolio, 1999; Bass & Avolio, 1990).

A fourth factor of transformational leadership is intellectual stimulation. Intellectual stimulation involves a leader who stimulates followers to be creative and innovative and to challenge their beliefs and values as well as those of the leader and the organization (Northouse, 2007). Leaders who engage in intellectual stimulation
encourage employees to approach old and familiar problems using new and more creative ways (Bass, 1985; Deluga, 1988). According to Bass and Steidlmeier (1999), intellectual stimulation fosters an environment of openness that empowers followers to evaluate situations and to formulate ideas that can be implemented to solve organizational problems.

A final component of transformational leadership is individualized consideration. A leader who provides individualized consideration is one who treats followers as distinct individuals and provides coaching, mentoring, and growth opportunities (Bass, 1985). This factor is representative of leaders who provide a supportive work climate in which they listen to the individual needs of followers. Leaders take on the role of advisors and coaches in an attempt to assist followers in becoming fully actualized (Northouse, 2007).

Transformational leadership can also be viewed as an influence theory in which the leader acts in mutual ways with followers, appeals to their higher needs, and inspires and motivates followers to move toward a shared purpose (Bensimon, Neumann, & Birnbaum, 1989; Rost, 1991). In addition, transformational leaders can be characterized as people who exhibit a strong set of internal values and ideals. Such leaders are effective at motivating the people around them to act in ways that support the greater good of the organization rather than their own self-interests (Kuhnert, 1994).

A key component that defines transformational leadership is the role of ethics and morals. Transformational leaders are guided by ethics and morals to determine socially desirable ends and to act in ways that show caring (Burns, 1978). Bass and Steidlmeier (1999) explained that leaders are authentically transformational when they increase awareness of what is right, good, and important as they evaluate followers’ needs for self-
actualization, foster in followers’ higher moral maturity, and move followers to go beyond self-interests for the good of their organization, group, and society.

In short, the transformational leadership approach is a broad-based perspective that encompasses many dimensions of the leadership process. It describes how leaders can initiate, develop, and carry out dynamic changes in the organization (Northouse, 2007). It goes beyond other leadership models to develop a dynamic organizational commitment among the leadership and the followers to accept and accomplish difficult goals that followers would normally not have pursued. It is leadership values, such as integrity, justice, and honor that can potentially transform followers. The commitment of the followers to their leaders’ values causes leadership influence to cascade throughout the organization (Bass, Waldman, Avolio, & Bebb, 1987).

Transactional Leadership

While transformational leadership focuses on individualizing the needs of followers to focus on their personal development, Kuhnert (1994) explained that transactional leadership involves the leader exchanging things of value with subordinates to advance their own and employees’ agendas. According to Antonakis, Avolio, and Sivasubramaniam (2003), the transactional leadership exchange process is based on the fulfillment of contractual obligations and involves the leader setting objectives and monitoring and controlling outcomes. Bradford and Lippitt (1945) described transactional leadership as a leader’s disregard of supervisory duties and lack of guidance to subordinates. Followers are expected to complete tasks assigned to them by their leaders in exchange for rewards. The focus of transactional approaches is the exchanges that occur between leaders and their followers. Transactional leadership includes three major
characteristics or factors: contingent reward, management by exception (active), and management by exception (passive) (Antonakis, Avolio, & Sivasubramaniam, 2003; Bass, 1990; Northouse, 2007).

The first factor of transactional leadership is contingent reward. According to Judge and Piccolo (2004), contingent reward is the degree to which a leader establishes constructive transactions or exchanges with followers. This type of transactional leadership is an exchange process that involves the leader clarifying task and role requirements and provides specified rewards when subordinates fulfill their obligations (Antonakis et al., 2003; Bass, 1990; Bass & Avolio, 1990; Northouse, 2007). Contingent reward transactional leadership is a process whereby the leader exchanges rewards for effort that is put forth by followers. In this type of exchange the leader obtains an agreement with followers on what actions must be performed and what the rewards the follower will receive in return for completing the actions (Northouse, 2007). A meta-analytic study conducted by Judge and Piccolo (2004) found that both transformational leadership and contingent reward transactional leadership had a positive, nonzero relationship with leadership criteria, such as follower job satisfaction, follower leader satisfaction, follower motivation, leader job performance, organizational performance, and rated leader effectiveness. This suggests that this type of transactional leadership may work as well as transformational leadership in certain contexts if the leader provides appropriate feedback and clarification of what corrective action is needed (Bass, 1985).

A second transactional leadership factor is active management-by-exception. Active management-by-exception includes leader behaviors such as focusing on mistakes, failures and complaints (Harland, Harrison, Jones, & Reiter-Palmon, 2005).
This type of leadership involves corrective criticism, negative feedback, and negative reinforcement. An active management-by-exception leader will observe subordinates carefully for mistakes or rule violations and take corrective actions before the behavior causes serious difficulties (Howell & Avolio, 1993; Judge & Piccolo, 2004; Northouse, 2007).

The third type of transactional leadership dimension is passive management-by-exception. This dimension focuses on leader behaviors such as failing to intervene until problems become serious or when failures, breakdowns, and deviations occur (Bass, 1985; Harland et al., 2005; Judge & Piccolo, 2004; Northouse, 2007). Bass (1985) explained that the rationale of passive management-by-exception leaders is “if it ain’t broke, don’t fix it!” This type of transactional leadership can be counterproductive. In a study of 150 part time graduate level students conducted by Harland et al. (2005), a negative relationship between passive management-by-exception leadership and subordinate resilience was reported. Research conducted by Deluga (1990) found an association between the management-by-exception dimension of transactional leadership and subordinates that engage in a process of ingratiation when interacting with leadership.

According to Bensimon, Nuemann, and Birnbaum (1989), transactional leadership may play a larger role in higher education than transformational leadership given the ambiguity of goals and decentralized structure. A study conducted by Gmelch and Wolverton (2002) on the leadership of university deans suggested that hierarchical structure, reward systems, and tenure and promotion processes favor a transactional approach to leadership. The study also showed that effective deans engage in both
transactional and transformational leadership. Deans set direction and empower others, but given the size of the institution and the number of subordinates, this process can be stressful and less appealing.

**Laissez-Faire Leadership**

The third type of leadership style explored in this study is laissez-faire leadership. According to the Merriam-Webster online dictionary, laissez-faire is a French word meaning “to let people do as they choose” (2009). Northouse (2007) explained that laissez-faire leadership falls at the far right side of the transactional-transformational leadership continuum. In effect, it can essentially be described as the absence of leadership. Leaders that take a laissez-faire approach take a “hands-off, let things ride approach”. “The leader abdicates responsibility, delays decisions, gives no feedback, and makes little effort to help followers satisfy their needs. There is no exchange with followers or attempt to help them grow” (Northouse, 2007, p. 186). Laissez-faire leaders are passive and indifferent to values and performance. They fail to assist followers with developing goals or standards (Kelloway, Sivanathan, Francis, Barling, 2005; Skogstad, Einarsen, Torsheim, Aasland, Hetland, 2007). Laissez-faire leaders are unlikely to display any motivation. They lack both prosocial and egotistical values (Barling, Christie, & Turner, 2008). Antonakis, Avolio, and Sivasubramaniam (2003) explained that laissez-faire leadership is a type of non-transactional leadership since it represents the absence of a transaction of sorts with respect to the leadership in which the leader avoids making decisions, abdicates responsibility, and does not use his/her authority. Laissez-faire is generally considered the most passive and ineffective form of leadership.
Leadership Styles and Ethics

In an attempt to understand the evolution and consequences of ethical performance, numerous scholarly articles have been written that analyze the relationship between leadership styles and ethical practices within the organization (e.g., Hood, 2003; Minkes et. al, 1999). Understanding how the values of the leader impact ethical policies and actions within the workplace has become increasingly important given the number of recent business scandals (Carlson & Perrewe, 1995; Matzek, 2002; Schmitt, 2002; Singhapakdi & Vitell, 2007; Sims, 1991; Tolson, 2002; Vitell & Singhapakdi, 2008). According to Carlson and Perrewe (1995), the ethical orientation of the leader is considered a key factor in promoting ethical behavior among employees. Leaders who exhibit high levels of ethical behavior and standards become role models for employees and raise the overall level of behavior within the organization. The transformational leadership style lends itself to the development of an ethical work climate because it appeals to the moral values of the individual.

The relationship between leadership and ethics is a major topic of scholarly research (e.g., Bass & Steidlmeier, 1999; Hitt, 1990; Zhu, May, & Avolio 2004). In regard to leadership, Northouse (2007) explained:

Ethics has to do with what leaders do and who leaders are. It is concerned with the nature of leaders’ behavior and their virtuousness. In any decision-making situation, ethical issues are either implicitly or explicitly involved. The choices leaders make and how they respond in a given circumstance are informed and directed by their ethics. (p. 342)
Hitt (1990) proclaimed that leadership and ethics go hand-in-hand. An ethical environment is a direct result of effective leadership, and effective leadership is conducive to ethics. Hitt (1990) also explained that with regard to ethics, leadership has two key responsibilities: to ensure that ethical decisions are made, and to develop an organizational climate in which ethical conduct by staff was fostered. According to Bennis and Nanus (1985), “the leader is responsible for the set of ethics or norms that govern the behavior of people in the organization. Leaders set the moral tone” (p. 186). Hernandez (2008) noted that leaders generate morally courageous behavior by fostering relational, contextual, and motivational support in followers.

Ethics is central to leadership, and it is the role of the leader to help establish and reinforce the values within an organization (Northouse, 2007). Gini (1998) explained, “all leaders have an agenda, a series of beliefs, proposals, values, ideas, and issues that they wish to ‘put on the table’” (p. 36). The ethical orientation of the leader is considered to have a significant impact in promoting ethical behavior among employees and the values exhibited by the organization (Carlson & Perrewe, 1995; Schminke, Ambrose, & Noel, 1997; Trevino, 1986). Burns (1978) also argued that it is important for leaders to engage themselves with followers to assist them with their personal struggles regarding conflicting values. This engagement raises the level of morality in both the leader and the follower. Burns’ focus on the responsibility of the leader to help followers achieve personal motivations and moral development is rooted in the works of writers such as Abraham Maslow, Milton Rokeach, and Lawrence Kohlberg (Burns, 1978; Ciulla, 1998; Northouse, 2007).
According to Minkes et al. (1999), organizational leadership has a significant role to play in establishing and implementing an ethical culture. The challenge for leaders is to ensure a high degree of congruence between an organization’s guiding beliefs and the employee’s daily beliefs. Managers should be able to empower their employees and persuade them to change and adopt an ethical culture within the workplace. Employee and organizational conformity to ethical requirements is a responsibility of, and depends on, the leadership within the organization. Sims (2003) noted that leadership is a critical component of the organization’s culture because leadership can create, maintain, and change culture. As a result, leadership is important to establishing an ethically oriented work culture.

Malloy and Agarwal (2003) argued that a leadership style that encourages member participation in key decision making and individual empowerment are effective in influencing employee perceptions of ethical work climates. According to Ibrahim, Angelidis, and Parsa (2008), it is the responsibility of top managers to establish a high degree of commitment to ethical practices with the organization. Perceptions of poor leadership often promote unethical behavior in employees as they attempt to model the behaviors exhibited by their leader.

The results of a study conducted by Hood (2003) revealed that the ethical orientation of the CEO is an important issue to consider in understanding the ethical practices in an organization. Clear links between CEO transformational and transactional leadership styles and ethical practices within the organization were established. Transactional leaders tend to follow ethical practices that are legal mandates, while transformational leaders would go beyond legal prescription and voluntarily implement
ethical initiatives within the organizations. As organizations strive to ensure more ethical work environments, a key component of this process will involve consideration of the leadership styles of top management. Sims (2003) explained that the leader communicates a strong message to his employees about his values through his actions. Through a process of role modeling and coaching, the leader reinforces the values that support the organizational culture. Employees emulate leader behavior and look to the leader for cues to behaviors that are appropriate.

Many studies have linked the effectiveness of transformational leadership to the development of an ethical work environment (Carlson & Perrewe, 1995; Hood, 2003; Kuhnert & Lewis, 1987; Parry & Proctor-Thomson, 2002). Burns (1978) perceived the close relationship between the transformational leadership style and ethics. He explained:

Transforming leadership occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality…Such leadership ultimately becomes moral in that it raises the level of human conduct and aspiration of both leader and led, and thus it has a transforming effect on both. (p. 20)

Burns’ (1978) theory of transformational leadership places strong emphasis on the needs, values, and morals of followers. A major role of the transformational leader is to move followers to a higher standard of moral responsibility. This sets transformational leadership apart from most other types of leadership models because there is a well defined moral dimension. Bass and Steidlmeier (1999) explained that transformational leadership is characterized by high moral and ethical standards. It also aims to develop the leader as a moral person and creates a moral environment for the organization. It is a
type of leadership grounded in values, based in trust, and rooted in spirituality. Authentic transformational leadership contrasts sharply with conventional transactional leadership (Fairholm, 1998). Meta-analytical evidence supports the generalizeable findings that transformational leadership is more effective, productive, innovative, and satisfying to followers than is transactional leadership (Lowe, Kroeck, & Sivasubramaniam, 1996). The true transformational is to be, in Confucian terms, a “superior person.” The “superior person” transforms relations between people to the “way” of the “mandate of heaven” (Bass & Stedlmeier, 1999). Transformational leaders can make a positive impact on the ethical performance of an organization (Carlson & Perrewe, 1995).

In a study on the relationship between transformational leadership and perceptions of leader integrity, Parry and Proctor-Thomson (2002) used follower observations and predictions of ethical and unethical leader behaviors to measure leader integrity. The results of the study found a significant and positive correlation. Those leaders who demonstrate strong patterns of transformational leadership in their behavior are also perceived to possess the most integrity.

In research published by Hood (2003) on the relationship of leadership style and CEO values to ethical practices in organizations, results indicated that transformational leaders will exhibit higher levels of social, personal, morality-based, and competency-based values than transactional or laissez-faire leaders. CEOs who view themselves as transformational leaders rated all four categories of values highly. Transformational leadership tends to support the implementation of ethical practices much more so than other types of leadership.
Many studies have linked the effectiveness of transformational leadership to the development of an ethical work climate (Carlson & Perrewe, 1995; Hood, 2003; Kuhnert & Lewis, 1987; Parry & Proctor-Thomson, 2002). A strong set of personal core values are associated with transformational leadership. Transformational leaders operate out of the personally held value systems that include values such as integrity and justice (Bass, 1985; Burns, 1978; Bennis & Nanus, 1985; Carlson & Perrewe, 1995; Kouzes & Posner, 1987). The transformational leadership model results in outcomes that are essential for the development of an ethical work climate.

Northouse (2007) stated that leaders play a major role in establishing the ethical climate within the organization. Research has also examined strategies that leaders can use to enhance the ethical work environment, such as having a well-articulated organizational value statement or code of ethics. Leaders have the role of explicitly stating what the organization intends and expects. Ethical behavior becomes a fundamental component of their organizational culture. The leader must infuse the organization’s climate with values and ethical consciousness (Sims, 2003). Vaughn (1992) identified the establishment of a code of ethics, conducting ethics audits to determine what followers value, and including ethical questions in the hiring or interview process as ways to move toward a culture of more ethical leadership. For purposes of this study, leadership styles will be defined as the manner and approach used by an individual to influence a group of individuals to achieve a common goal. Leaders who subscribe to leadership styles that place emphasis on the ethical and moral development of followers are more likely to implement ethical procedures and processes (institutionalize ethics) that lead to the development of an ethical work climate (Sims, 2003). Therefore, this
study hypothesizes that there is a positive relationship between leadership styles and the institutionalization of ethics.

**Institutionalization of Ethics**

Purcell and Weber (1979) first defined institutionalization of ethics as a process to get ethics formally and explicitly into daily business life. Goodman and Dean (1981) explained that the act of institutionalization is a behavior that is performed by two or more people, persists over time, and exists as part of the daily routine of the organization. Sims (1991) explained that the institutionalization of ethics is essential for today’s organizations if they are to effectively counteract the increasingly frequent occurrences of blatantly unethical and often illegal behavior within large and often highly respected organizations. If an organization is committed to establishing a long term ethical system, it is important to understand institutionalization. The act of institutionalization “may vary in terms of its persistence, the number of people in the organization performing the act, and the degree to which it exists as part of the organization” (p. 494). Singhapakdi and Vitell (2007) indicated that if an organization is committed to controlling ethical problems within the organization, it is important to understand the institutionalization of ethics. Vitell and Singhapakdi (2008) explained that, “because of increasing ethical problems in business, organizations have tried to control these problems by institutionalizing ethics, such as by creating new ethics positions and formulating codes of ethics” (p. 284). The institutionalization of ethics is a problem facing all types of organizations—educational, government, religious, and business. There are a variety of ways that ethical principles can be institutionalized within an organization depending on
both long-term and short-term factors (Dunham, 1984; Sims, 2003). Additionally, the institutionalization of ethics can be implicit or explicit.

**Implicit Ethics Institutionalization**

Implicit forms of ethics institutionalization rely on existing, ongoing programs that can be implicitly inherited to help increase ethical awareness. Implicit forms are vague because ethical behavior is understood to be crucial, but the processes used to encourage ethical behavior are implied or not directly expressed (Singhapakdi & Vitell, 2007). Jose and Thibodeaux (1999) suggested ethical leadership, organizational culture, rewards and promotions, and performance evaluation systems as implicit forms. These implicit forms may include implied but powerful expectations for behavior. Trevino and Nelson (1995) argued that reward systems are the most important formal influence of peoples’ behavior. Jose and Thibodeaux’s (1999) study found that managers perceived implicit forms of institutionalizing ethics to be more effective than the explicit forms of ethics institutionalization because they have more permanency than explicit forms.

**Explicit Ethics Institutionalization**

Explicit forms of ethics institutionalization include the explicit development of programs to promote an ethical work environment. Specific forms of explicit ethics institutionalization can include the use of employees that serve as ethics officers, the formation of ethics committees, and the distribution of ethics newsletters (Jose & Thibodeaux, 1999). Additionally, codes of ethics, policy manuals, employee training and training materials, employee orientation programs, newsletters, ethics hotlines, ombudspeople, ethics officers, and ethics committees are considered common forms of explicit ethics institutionalization (Austin, 1994; Singer, 1995; Vitell & Singhapakdi
A code of ethics that instills values in organizations is one of the most common forms of explicit ethics institutionalization (Gellerman, 1989; Murphy, 1995; Townley, 1992; Vallance, 1993). Since explicit forms of ethics institutionalization are formally expressed, they are less vague, easy to identify, and measure (Singhapakdi & Vitell, 2007). However, their influence is less pervasive than implicit forms.

**Ethics Institutionalization Effectiveness**

The institutionalization of ethics is only effective if it is supported by organizational leadership. Carlson and Perrewe (1995) argued that the leader is an integral part of the organization and the leadership style provides the necessary elements required to have an ethically oriented organization. An organization’s leadership sets the ethical tone. In order for the goal of an ethically oriented organization to be met through the institutionalization of ethics, the leader must have a strong ethical orientation. Minkes et al. (1999) stated that explicit types of ethics institutionalization such as a code of ethics will fall into contempt if the leadership is perceived as behaving unethically. This suggests implicit forms are more strongly associated with actual behaviors of leaders and peers.

In an effort to study the effectiveness of ethics institutionalization in the organization, Vitell and Singhapakdi (2008) investigated the role of institutionalization in influencing organizational commitment, job satisfaction, and esprit de corps. The study sought to answer the following research questions: how useful is the institutionalization of ethics for an organization; and, what is the impact of different forms of ethics institutionalization on marketing managers. The results of a study that consisted of 205
respondents, revealed that overall, both implicit and explicit institutionalization of ethics tended to have a positive impact on organizational commitment, job satisfaction, and esprit de corps. However, implicit ethics institutionalization was a more significant determinant of the organizational climate constructs. For long-term institutionalization of ethics, implicit actions such as leadership commitments and ethical leadership can be considered since they will essentially result in changes to the organizational culture over time. In a study conducted by Jose and Thibodeaux (1999) to identify managerial perceptions regarding the institutionalization of ethics in organizations, the authors found that managers perceived that being ethical is good for business. Specifically, the research reported that 98.8% of top managers surveyed support efforts to institutionalize ethics. Additionally, 96.5% believed that ethical leadership is necessary for the success of any attempt at ethics institutionalization.

Singhapakdi and Vitell (2007) made the case that there is a relationship between institutionalization of ethics and employee job satisfaction because organizations that institutionalize ethics appear to value integrity and trust, and, as a result, are often more likely to treat their employees fairly. Based on the early work of Hunt, Van Wood, and Chonko (1989), a positive relationship between the corporate ethical value (CEV) and organizational commitment was established. According to Singhapakdi and Vitell (2007), because work factors that have the greatest impact on an employee’s organizational commitment involve ethics or ethics-related elements, such as fairness at work, care for and concern about employees, trust in employees, an organizational reputation, the institutionalization of ethics is logically related to organizational commitment as well.
In order to effectively achieve the institutionalization of ethics, Sims (2003) explained that a psychological contract, organizational commitment, and an ethically oriented culture are necessary elements of an organization. Kotter (1973) defined the psychological contract as a set of unwritten, reciprocal expectations between an individual and the organization which specifies what each is expected to give and receive in the relationship. The stronger the relationship between the employee and the organization’s expectation regarding ethical behavior, the greater the likelihood the institutionalization of ethics will occur. The second factor that contributes to the institutionalization of ethics is organizational commitment. Organizational commitment occurs when individuals identify with and work toward organizational goals and values.

A third and final factor driving the institutionalization of ethics is organizational culture (Carlson & Perrewe, 1995; Sims, 1991). Organizational culture is a concept that can be difficult to define. According to Petty, Chapman, Lowery, and Connell (1995), the definition of organizational culture can be viewed from two different perspectives. First, organizational culture can be defined as the mechanism for governing rational behavior. The culture of an organization sets strategy, develops goals, measures progress, and defines products and markets. Second, organizational culture can be viewed as the underlying systems of unconscious assumptions and beliefs which are shared by members of an organization. Hoy and Miskell (2008) defined organizational culture as the set of internal characteristics that distinguish one organization from another and influence the behavior of each member of the organization. Sims (2003) explained that strong ethical culture organizations have creeds or value statements, and leadership regularly stresses the importance of using values and principles as the bases for decision
and actions taken throughout the organization. The organizational culture can be viewed as a component of the overall organizational work climate.

A study conducted by Banerjee, Jones, and Cronan (1998) that proposed and tested an information technology ethics model, found that the ethical work climate among other elements was a significant indicator of ethical behavioral intention. The study suggested that training programs, such as seminars on information technology ethical issues, could be used to influence an individual’s moral development, with the goal being the reduction in computer misuse. Also, management can develop, implement, and enforce codes of conduct related to how individuals are expected to behave in the organizational setting given different situations. In addition, codes of ethics, followed by ethics training, are the most common approaches for implementing ethics initiatives which could influence a person’s actions when faced with an ethical dilemma. The study proposed that codes of ethics act similarly to laws – as a deterrent to undesirable behavior similar to the General Deterrence Theory (Harrington, 1996).

The General Deterrence Theory (GDT) is based on the concept that, if the consequence of committing a crime or engaging in unethical activities outweighs the benefit of the act itself, the individual will be deterred from committing the crime or engaging in the unethical act. GDT is founded in the idea that all individuals are aware of the difference between right and wrong and the consequences associated with wrong or illegal behaviors (Schmalleger, 2008). The known consequences of engaging in an unethical act are likely to have a preventive effect on potential offenders (Buikhuizen, 1974; Paternoster & Bachman, 2001).
While the scope of GDT has been traditionally focused on the threat of legal punishment or sanctions, many scholars (Anderson, Chiricos, & Waldo, 1977; Grasmick & Green, 1980; Nagin & Paternoster, 1991; Paternoster, Saltzman, Waldo, & Chiricos, 1983; Williams and Hawkins, 1986) have taken a broader view of the General Deterrence Theory to include the inhibition produced by informal as well as formal sanctions. Informal sanctions include non-legal types of punishment that would be typical in an organizational setting for violations of ethical standards. It also includes the anticipated self-inflicted punishment or shame caused social censure and disapproval from friends, co-workers, and anyone whose opinion helps to influence an employee’s conduct (Paternoster & Bachman, 2001). Paternoster and Bachman (2001) also noted that when the broadly conceived version of GDT has been empirically tested it has been found that informal sanctions are more effective than the threat of legal sanctions at inhibiting wrong doing. Thus both explicit and implicit institutionalization of ethics may act to deter unethical behavior and enhance the ethical work climate.

For purposes of this study, the institutionalization of ethics is viewed as a process whereby ethics initiatives are implemented within the organization in the form of policies, procedures, standards, and norms and become the foundation for the development of an ethical work climate. This relationship between ethics institutionalization and work climate was also suggested by Schneider (1983) when he explained that work climate included organizational practices and procedures that provide an indication of the institutionalized normative system that guides behavior. Sims (1991) explained that for the long-term, ethics institutionalization should be used to develop an organizational work climate that promotes employee learning of personal values that will
promote ethical behavior. The processes, structures, and systems that are used in the ethics institutionalization process all work together to help establish an ethical work climate. Sims (1991) proposed that an organization develop its culture so that it supports the learning of personal values that promote ethical behavior. Additionally, Sims (2003) suggested organizational commitment, strong ethical climate, and the role of the leader are key variables that must be recognized to successfully institutionalize ethics. Therefore, this study hypothesizes that there is a positive relationship between the institutionalization of ethics (both implicit and explicit) and the ethical work climate.

**Ethical Work Climate**

In his seminal work on organizational climate, Schneider (1975) defined work climate as “psychologically meaningful molar descriptions that people can agree characterize a system’s practices and procedures” (p. 474). According to Schneider and Rentsch (1988), climate is way in which organizations define routine practices that are supported and rewarded by the organization. In most cases, an organization may consist of multiple work climates due to variances in its functions and processes (Schneider, 1975). A work climate may also vary as a result of differences among individual employees, work groups, and employees’ positions (Victor & Cullen, 1988). Schneider (1983) defined the ethical aspects of work climate as the existence of a normative system as perceived by employees that enables them to respond to ethical or moral issues that occur in the work place. As a subset of the general organizational work climate, the ethical work climate construct reflects organizational practices with moral consequences. The ethical work climate develops when employees believe that certain forms of ethical behavior are expected standards and norms for decision making within
the organization or department. Ethical work climates are not simply based on an individual’s ethical standards or level of moral development. They instead represent components of the employees’ work environment as perceived by its members (Cullen, Parboteeah, & Victor, 2003). In addition, Payne (1990) described an ethical work climate as a social system that is composed of individuals who share a formal or informal structure such as a department, organization, or network. Schminke, Arnuad, and Kuenzi (2007) further explained that the ethical work climate includes the prevalent ethical values, norms, attitudes, feelings, and behaviors of the members (employees) that make up the social organization. Verbos et al. (2007) suggested that in organizations with a positive ethical climate, employees hold the view that “the right thing to do is the only thing to do” (p. 17).

In considering definitions of ethical work climate, it is also important to understand individual moral development. Kohlberg (1969) proposed the cognitive moral development (CMD) theory that explained that it is the individual who makes a determination of what is right or wrong. The CMD theory identifies three levels of moral development—the preconventional, conventional, and postconventional levels. Each level is composed of two stages for a total of six stages. Individuals move forward through the stages by a step sequence which follows an invariant path from one stage to the next. Individuals can only progress from a lower stage to the next higher stage and cannot derive moral reasoning from more than two adjacent stages at one time. Blum (1991) argued that differences in a person’s ability to perceive moral components are based on individual differences. Kohlberg (1969) explained that in the first two stages of cognitive development, the locus of concern is the individual; in the third and forth stages the
individual’s referent group becomes a larger social system; and, in the highest stages consideration is given to humanity and other considerations as a whole. According to Kohlberg (1969), those individuals who fall into the first two stages of CMD are more likely to benefit from an ethical work climate based on rules and guidelines. On the other hand, individuals with a higher level of CMD are less likely to be affected by environmental cues and rely on their own moral development to help others deal with ethical issues within the organization (Kohlberg, 1969).

Cullen et al. (2003) defined three basic ethical standards associated with ethical work climates that parallel Kohlberg’s (1969) stages of individual cognitive and moral development: egoistic (self-interest), benevolent (caring), and principled. The egoistic climate is characterized by employee self-interests. An employee makes decisions that promote personal gain, ignoring the needs or interests of others. Employees have less concern for others in the organization and the organization as a whole. Employees may feel that the organization does not conform to the appropriate ethical standards or societal expectations. On the other hand, benevolent climates encourage individuals to be concerned with the well-being of others both inside and outside of the organization. In a benevolent environment, an employee is likely to make decisions that seek to maximize joint interests even when it means lesser satisfaction of individual needs (Weber, 1995). In a principled or rule based climate, ethical decisions are made based on the interpretation of rules, laws, and standards in the normative expectations of the organization or social unit (Victor & Cullen, 1988). Over the years, numerous articles (e.g., Clinard, 1983; Clinard & Yeager, 1980; Cullen, Maakestad, & Cavender, 1987;
Victor & Cullen, 1988; Weiss, 1986) have reported on the role that organizational climate plays on influencing employee ethical or unethical behaviors.

In a study on the relationship between ethical work climate and moral awareness, VanSandt, Shepard, and Zappe (2006) found a significant and positive relationship between organizations with ethical work climates (EWCs) that utilize benevolence or principle ethical criteria and higher levels of moral awareness. The study also showed a positive relationship between organizations with egoistic EWCs and a low degree of moral awareness among its members. Also of significance, the study showed that exposure to formal ethics training did not exhibit a significant moderating effect on the relationship between EWC and moral awareness. This indicates that the ethical work climate is a primary predictor of an employee’s degree of moral awareness. Changes to the ethical organizational climate may have more far reaching effects than will ethics training for individuals.

Research (e.g., Bartels, Harrick, Martell, & Strickland, 1998; Cohen, 1995; Malloy & Agarwal, 2003) has shown a significant correlation between organizational work climate and employee productivity and job satisfaction. The work climate is a factor that can have a significant impact on the productivity and satisfaction of its employees (Malloy & Agarwal, 2003). In addition, numerous studies have suggested that work climate can play a major role in influencing ethical conduct among groups and individuals (Ambrose, Arnaud, & Schminke, 2008; Andreoli & Lefkowitz, 2009; Cohen, 1995; Malloy & Agarwal, 2003; Scheider, 1975; Victor & Cullen, 1988). In a study of 1174 participants, Elci and Alpkan (2009) found a significant relationship between egoistic ethical work climates and low levels of work satisfaction. The study also found a
significant positive relationship between benevolent and principled climates and employee work satisfaction. This suggests that the ethical climate of an organization impacts employee work satisfaction.

The ethical work climate helps employees to identify the normative systems that guide their decision making, their actions, and how they respond to ethical dilemmas that occur; it in effect becomes a stage for continuous social interactions. Peer pressure can play a significant role in the deterrence of an individuals’ intent to engage in unethical activities such as the misuse of IT resources. Oksanen and Valimaki (2007) explained that people tend to be conformist. If an individual can make a credible case that others are not engaging in the misuse of IT resources, this can actually be a type of deterrence even more so than emphasizing the point that the behavior itself is illegal, unethical, or that an infringer may face strong penalties. Bandura’s (1986) social learning theory stated that individuals learn vicariously from others in the organization. Other research (e.g. Trevino, 1986, 1992; Vitell, Nwachukwu, & Barnes, 1993; Zey-Ferrell & Ferrell, 1982) has shown that behavior of one’s peers has a strong influence on his or her own behavior.

For purposes of this study, ethical work climate will be defined as a normative system as perceived by employees that enables them to respond to ethical or moral issues that occur in the work place. The policies, procedures, norms, and standards that define the ethical work climate result when both employees and leadership engage in the process of ethics institutionalization (both implicit and explicit). Therefore, this study hypothesizes that there is a positive relationship between the ethical work climate and employee attitudes toward information technology misuse.
Employee Attitudes toward Information Technology Misuse

Incidents of technology misuse by faculty or staff are a growing problem at institutions of higher education. While there is little empirical research devoted to the topic, reports by the popular press point out the significance of the problem. Olsen (2007) reported on a professor who wanted to use a college’s official e-mail announcement list to announce a non-university sponsored anti-war rally on campus. The story also described a similar case that involved a university department chair at a public university who was reprimanded for using his office computer and university e-mail account to engage in day trading on the stock market.

Carlson (2003a) reported on an incident at California Polytechnic State University where a university department chair used a school owned computer to download thousands of pornographic images. He was convicted on a misdemeanor charge for misuse of a state computer. The story also indicated that another faculty member was being investigated by the FBI for the alleged use of university computers to view child pornography. In another story, Carlson (2003b) reported on incidents of software piracy in higher education. The story included the results of a survey conducted by the Business Software Alliance that found that 30% of professors and administrators downloaded unlicensed or pirated software from peer-to-peer networks, and about 30% of professors and 45% of administrators rarely or never acquire the appropriate license for downloaded software.

Maxwell (2003) explained that many college employees are tempted to use work e-mail to send non-work-related messages because it is perceived as quick, efficient, easy, and best of all, secret. A study conducted by University of Illinois College of Law
Professor Matthew Finkin in 1995 (as cited in Maxwell, 2003) revealed that the inappropriate use of e-mail at work is a long standing problem. According to the study, more that 40% of all e-mail messages sent by employees do not involve work-related topics.

A study by Shim and Taylor (1991) compared the attitudes of information systems faculty members with those of information systems managers toward microcomputer software pirating. The results of the study indicated that 73% of the respondents admitted to copying software that is neither site licensed nor in the public domain. Ironically, the respondents agreed that it was unethical to copy copyrighted software for teaching (76%), research (83%), and consulting purposes (92%), even though they pirated copyrighted software. Additionally, a study conducted by Magklaras, Furnell, and Brooke (2006) highlighted the fact that the three most frequent types of informational technology (IT) misuse for the respondents of the survey were surfing the web for the purpose of downloading of pornographic material, abuse of email resources, and theft or malicious alteration of data. In direct comparison, the DTI/PWC (2004) survey stressed incidents of web browsing misuse, misuse of email, and unauthorized access to systems or data as the major system misuse categories.

While most employees universally recognize the inappropriate use of information technology resources, there is a large and important minority that believe such behavior is acceptable. Research conducted by Seale, Polakowski, and Schneider (1998) supported and extended the results of previous studies concerning the sizable proportion of respondents who reported incidents of piracy. Specifically, their study reported that 44% of the respondents reported they had received, and 31% indicated they had made
unauthorized copies of microcomputer software. These incidents occurred despite the fact that that 60% of the respondents were aware of employment policies against illegal copying.

Many employees who engage in unethical activities related to use of technology actually view such activities as morally permissible. According to Johnson (1994), the strongest arguments claim that the laws protecting computer software are bad, and either making a copy of a piece of software is not intrinsically wrong, or making a copy of a piece of software does no harm, or not making a copy of a piece of software actually does some harm. Johnson (1994) further explained that computer users develop their attitudes toward IT security from observations and interactions with other users, their peers, vendors, the media, and a variety of other sources.

Clearly, incidents of software piracy and illegal or unauthorized use of information technology and software, as evident by the media and the academic literature, are commonplace and thus a major concern for academia. Even more alarming are the attitudes among employees about to engage in illegal or unethical use of information technology resources.

A key component to addressing employee misuse of IT resources is the development of an ethical work climate that defines appropriate behavior. The institutionalization of ethics process supports the structuring of an ethics enforcement system. This system ensures that employees are aware of the consequences or penalties associated with unethical behavior in the organization. In order for the institutionalization of ethics to truly be successful, management must discipline violators of the organization’s accepted ethical standards (Sims, 2003). Ball (1956) used the term
deterrence to refer to the preventative effect which actual or threatened punishment of offenders has upon potential offenders. The concept of deterrence has its foundations in criminology. It is appropriate then to rely on research from the field of sociology that describes how these interactions between leadership and employees can influence employee attitudes toward information technology misuse.

**Chapter Summary**

Clearly, public institutions of higher education, like corporate organizations, must address employee attitudes toward information technology misuse if they are to prevent loss of resources and create a work environment that promotes productivity and trust. Research has shown that the role of leadership is essential if an organization seeks to engage in the institutionalization of ethics process. The implementation of ethical practices and standards is essential for the development of an ethical work climate. The ethical work climate can positively affect employee attitudes at colleges and universities toward the misuse of information technology resources.

It is important that administrators consider the employee’s perception of their work climate and its influence on employee attitudes in the organization. The conceptual model proposed provides the foundation for examining the relationships between leadership, the institutionalization of ethics (implicit and explicit), ethical work climate, and employee misuse of IT resources in higher education.
CHAPTER III

METHODOLOGY

The purpose of this study was to examine whether there is a relationship between certain leadership styles in higher education and the institutionalization of ethics, and whether the institutionalization of ethics is related to a more ethical work climate, and whether the ethical work climate is positively related to employee attitudes toward information technology misuse. This chapter contains the following sections: (a) the research questions, (b) sample and sampling, (c) development of the instrumentation, (d) pilot study, (e) data collection procedures, and (f) method of data analysis.

Research Questions

This study surveyed currently employed faculty at public institutions of higher education within the University System of Georgia (USG) (Colleges and Universities Map, 2008). The participants were asked to measure the leadership style of their department supervisors, to identify both implicit and explicit forms of ethics institutionalization within their departments, to describe the ethical work climate of their department, and to indicate their attitudes toward information technology misuse. From this information, this research answered the following questions:

R₁: Is there a relationship between leadership styles and implicit forms of ethics institutionalization?

R₂: Is there a relationship between leadership styles and explicit forms of ethics institutionalization?

R₃: Is there a relationship between implicit forms of ethics institutionalization and the ethical work climate?
R₄: Is there a relationship between explicit forms of ethics institutionalization and the ethical work climate?

R₅: Is there a relationship between the ethical work climate and employee attitudes toward IT misuse?

**Sample and Sampling**

The population for this study includes all full-time faculty, currently employed at institutions of higher education within the University System of Georgia (USG) which is estimated be 11,654. A total of 1,600 faculty who teach at institutions of higher education within the University System of Georgia (USG) was selected for purposes of this study. The total number of full-time, currently employed faculty was compiled for each of the 35 institutions in the USG. The same proportion of faculty from each institution was randomly selected to complete the questionnaire so that an effective stratified random sample size of approximately 400 was obtained, based on an assumed 25% response rate. Appendix A shows a breakdown of the USG institutions by group and includes the number of faculty from the institution. Faculty names and e-mail addresses were gleaned from the USG’s Colleges and University Personnel Directories (College and University Personnel Directories, 2009).

**Instrumentation**

The instrument for this study consisted of 85 questions (Appendix E) that consisted of the following: the 45 item Multifactor Leadership Questionnaire Rater Form (MLQ 5X-Short) developed by Bass and Avolio (1992) to measure leaders’ laissez-faire, transactional, and transformational behaviors, 16 items from the Ethical Work Climate questionnaire to measure ethical work climate by Victor and Cullen (1987), 14 items
from the institutionalization of ethics scale for identifying both the implicit and explicit
dimensions of the institutionalization of ethics by Singhapakdi and Vitell (2007), and a
researcher developed 10-item scale to measure employee attitudes toward information
technology misuse. The instrumentation was used to conduct a quantitative survey.

“Quantitative research, as we have seen, is based on numerical data, whereas qualitative
research is purely descriptive and therefore not really measurement based” (Sprinthall,
2003, p. 216). The major advantages of surveys are that they facilitate large amounts of
data to be gathered. Also, a high level of control regarding sample subjects makes
reduction of bias possible though increasing validity. However, surveys suffer from
providing only a snapshot of studied phenomena and rely highly on the subjective views
of the respondents (Kjeldshov & Graham, 2003). The researcher also collected
demographic data including faculty age, gender, and institution type (e.g., research
university, regional university, state university).

**Multifactor Leadership Questionnaire**

The most widely used survey instrument to measure the nine factors in the full-
range leadership theory (Avolio & Bass, 1991) has been the Multifactor Leadership
Questionnaire (MLQ) (Hunt, 1999; Lowe, Kroeck, & Sivasubramaniam, 1996;
Northouse, 2007; Yukl, 1999). The constructs measured by the MLQ include three types
of leadership behavior: transformational, transactional, and nontransactional laissez-faire
leadership (Antonakis et al., 2003). While the MLQ “is considered the best validated
measure of transformational and transactional leadership” (Ozaralli, 2003, p. 338), its
conceptual framework has also been criticized in some studies (e.g. Charbonneau, 2004,
psychometric properties of the MLQ using a homogeneous business sample of 3,368 raters (2,279 males and 1,089 females) and found that the MLQ clearly distinguished nine factors in the Full Range Leadership Model.

The current version of the MLQ Rater Form (5X-Short) was developed based on previous research (Avolio, Bass, & Jung, 1999; Hater & Bass, 1988; Koh, Steers, & Terborg, 1985; Tejeda, Scandura, & Pillai, 2001) and expert judgments of leadership scholars who recommended additions or deletions of items based on the results of confirmatory factory analyses (Avolio et al., 1999). In a study consisting of a multi-data source of 138 cases, Muenjohn and Armstrong (2008) tested the MLQ and found strong structural validity. The current MLQ Rater Form (5X-Short) consists of 45 items.

Institutionalization of Ethics Questionnaire

The institutionalization of ethics instrument was developed and assessed for reliability and validity by Singhapakdi and Vitell (2007). The original instrument consisted of 44 items. Using a sample of 126 marketing practitioners, an exploratory factor analysis was performed resulting in two separate factors or dimensions of the institutionalization of ethics construct: implicit and explicit. A second study was conducted using a sample of 306 marketing practitioners. A confirmatory factor analysis was performed. The results of the confirmatory factor analysis are shown in Appendix B. For purposes of this study, questions 7 and 9 from factor 2 (implicit institutionalization) were removed since their factor loadings were below .50. Construct validity of the scale could be confirmed through factor analysis since the questions load into meaningful, common, and reference factors. When questions load into these common factors, high intercorrelations exist and the factors answer the question “What does this test measure?”
(Guilford, 1946). Nunnally (1978) explained that “construct validity has [even] been spoken of as…‘factorial validity’…factor analysis is intimately involved with questions of validity…Factor analysis is at the heart of measurement of psychological constructs” (pp. 112-113). A reliability assessment was conducted for each of the two factors. The first factor, explicit institutionalization of ethics had a Cronbach’s alpha of 0.920. The second factor, implicit institutionalization of ethics had a Cronbach’s alpha of 0.870 (Singhapakdi & Vitell, 2007).

**Ethical Work Climate Questionnaire**

The Ethical Climate Questionnaire (ECQ) was developed by Victor and Cullen (1988) to measure respondents’ perceptions of how the employees of their respective organizations typically make decisions regarding “events, practices, and procedures” requiring ethical criteria. The instrument was developed to measure ethical climate types. Victor and Cullen (1988) used a two-dimensional theoretical typology of ethical work climates. The first dimension represented the ethical criteria used for organizational decision making (egoism, benevolence, and principle). The second dimension represented the locus of analysis (individual, local, and cosmopolitan). According to Victor and Cullen (1988), the locus of analysis is a referent group that identifies the source of moral reasoning used for applying ethical criteria to organizational decisions. The loci of analysis were derived from sociological theories of roles and reference groups. These reference groups help shape the behaviors and attitudes of role incumbents (Merton, 1957). Cross-tabulation of the two dimensions resulted in nine theoretical ethical work climates. The ECQ consisted of 26 items that represented each of the nine theoretical ethical climate types. A factor analysis using a principal components solution with
Varimax rotation was performed by Victor and Cullen (1988) and resulted in the emergence of five factors (climate types) as shown in Appendix C.

For purposes of this study, the top five-loading questions from the ethical dimensions [benevolence (B), and egoism (E)] and the top six-loading questions from the dimension [principle (P)] were used to develop the ethical work climate component of the research questionnaire since these dimensions parallel Kohlberg’s (1969) stages of individual cognitive and moral development, and the dimensions are closely aligned with the three classes of ethical theory of interest to this study: egoism, utilitarianism, and deontology (Fritzsche & Becker, 1984; Premeaux & Mondy, 1993; Williams, 1985). This included questions 1-5 (benevolence), questions 8, 10, 11, 14, 15, and 29 (principle), and questions 16-19, and 21 (egoism). This combination of questions included all of the ethical work climate factors defined by Victor and Cullen (1987).

**Employee Attitudes Questionnaire**

Scales to measure employee attitudes toward information technology misuse were previously developed and pilot tested by the researcher. The scale consists of 5 scenarios that present the user with an example of IT misuse in an educational environment. Each scenario consists of two questions. The first question asked the user to rank, on scale from 1–very unlikely to 5–very likely, the likelihood that they would participate in the activity. The second question asked the respondents, on a scale from 1–strongly disagree to 5–strongly agree, if they could see themselves participating in a misuse incident if they were the fictitious employee presented in the scenario. Scenario based questions are commonly used in ethics research because they provide a less intimidating means of responding to sensitive issues such as ethical/unethical behavior. Scenario-based
questions place the respondent in a decision-making role and help avoid the subject’s tendency to try to gain experimenter approval (Alexander & Becker, 1978; Bachman, et al., 1992).

**Pilot Study**

A sample consisting of 60 full-time faculty members from the Schools of Business, Health Sciences, and Information Technology at Macon State College, a medium sized (197 full-time faculty) non-residential state college in the University System of Georgia, was used to conduct the pilot study. After obtaining IRB approval, the instrument was administered electronically using SurveyMonkey©. An e-mail was sent to the entire sample faculty containing a hyperlink to the instrument. Participants were guaranteed anonymity of responses and assured that responses would not be shared with their supervisors. The survey remained available for a period of seven days. Of the 60 faculty members asked to complete the survey, 28 people responded, for a response rate of 47%. The results of the survey were collected and analyzed using SPSS.

To assess the validity of the instrument, an exploratory factor analysis with varimax rotation was performed on the 10 items. Varimax rotation is often used in surveys to show how groupings of questions measure the same concept. The results of the factor analysis are shown in Appendix D. The factor analysis suggested that scenarios four and five were very similar. However, the decision was made to keep both scenarios since they present two different types of IT resource misuse. The results of the factor analysis suggested some degree of construct validity since the questions load in meaningful, common, and reference factors. When questions load into these common factors, high intercorrelations exist and the factors answer the question “What does this
test measure?” (Guilford, 1946). The reliability of the items was tested by calculating the Cronbach’s alpha for each of the factors. The alpha levels are shown in Appendix D.

Data Collection

The instrument for the study was administered electronically using SurveyMonkey©. Faculty were e-mailed the hyperlink to the instrument. The participants were guaranteed anonymity of responses and assured that responses will not be shared with their supervisors. Anonymous responses tend to produce lower levels of respondent impression management or the process by which individuals attempt to control impressions others form of them (Rosenfeld & Booth-Kewley, 1996). Sociologist Erving Goffman (1959) is most often credited with the popularization of the theory of impression management. Respondent impression management can often be problematic because respondents will attempt to answer questions in socially responsible ways that will create certain impressions in others’ eyes (Beard, 1996).

Data Analysis

The results of the surveys were coded and entered into the Statistical Package for Social Sciences (SPSS) to obtain descriptive statistics, determine validity of the measures, and determine if statistically significant correlations exist between the variables under study. Correlations between all variables were computed using the Spearman r since the distribution of scores were in ordinal form (Salkind, 2008; Sprinthall, 2003). Stronger and statistically significant correlations between the leadership style and ethics institutionalization, ethics institutionalization (implicit and explicit) and ethical work climate, and the ethical work climate and employee attitudes toward information technology misuse will provide support for the model proposed and
indirect support for a causative model, but causation cannot be inferred since the survey was administered at one point in time.

**Chapter Summary**

The purpose of this study was to examine whether there exists a relationship between certain leadership styles in higher education and the institutionalization of ethics, and whether the institutionalization of ethics is related to a more ethical work climate, and whether the ethical work climate is related to employee attitudes toward information technology misuse.

The population of this study included currently employed faculty at institutions of higher education in the University System of Georgia. A stratified random sample of 1,600 faculty were selected, in the hopes of obtaining a sample of 400.

The instrument was administered using *SurveyMonkey*. The results of the surveys were collected and analyzed using SPSS. Correlations were computed using the Spearman r to determine whether relationships existed between leadership style and ethics institutionalization, ethics institutionalization and ethical work climate, and the ethical work climate and employee attitudes toward information technology misuse.
CHAPTER IV
REPORT OF DATA AND DATA ANALYSIS

The purpose of this study was to examine whether a relationship exists between certain leadership styles in higher education and the institutionalization of ethics, and whether the institutionalization of ethics is related to a more ethical work climate, and whether the ethical work climate is positively related to employee attitudes toward information technology misuse. Since this study is concerned with educational leadership, a population of interest was the currently employed faculty at public institutions of higher education within the University System of Georgia (USG) (Colleges and Universities Map, 2008). A total of 1,600 faculty were asked to participate in the survey.

Research Questions

The participants were asked to measure the leadership style of their department supervisors, to identify both implicit and explicit forms of ethics institutionalization within their departments, to describe the ethical work climate of their department, and to indicate their attitudes toward information technology misuse. From this information, this research intended to answer the following questions:

R₁: Is there a relationship between leadership styles and implicit forms of ethics institutionalization?

R₂: Is there a relationship between leadership styles and explicit forms of ethics institutionalization?

R₃: Is there a relationship between implicit forms of ethics institutionalization and the ethical work climate?
R₄: Is there a relationship between explicit forms of ethics institutionalization and the ethical work climate?

R₅: Is there a relationship between the ethical work climate and employee attitudes toward IT misuse?

**Research Design**

The instrument for this study consisted of 85 questions (Appendix E) and was composed as follows: the 45 item Multifactor Leadership Questionnaire Rater Form (MLQ 5X-Short) developed by Bass and Avolio (1992) to measure leaders’ laissez-faire, transactional, and transformational behaviors, 16 items from the Ethical Work Climate questionnaire to measure ethical work climate by Victor and Cullen (1987), 14 items from the institutionalization of ethics scale for identifying both the implicit and explicit dimensions of the institutionalization of ethics by Singhapakdi and Vitell (2007), and a researcher developed 10-item scale to measure employee attitudes toward information technology misuse. The instrumentation was used to conduct a quantitative survey.

The survey was administered electronically using SurveyMonkey©. An e-mail containing a hyperlink to the instrument was sent to the list of 1,600 randomly selected faculty. The participants were guaranteed anonymity of responses and assured that responses would not be shared with their supervisors. After one week, a follow-up reminder e-mail was sent to the compiled faculty list.

**Respondents**

The population for this study included all full-time faculty, currently employed at institutions of higher education within the University System of Georgia (USG), which is estimated to be 11,654. A stratified random sample of 326 faculty who teach at
institutions of higher education within the University System of Georgia (USG) was used for purposes of this study. The total number of full-time, currently employed faculty was compiled for each of the 35 institutions in the USG. The same proportion of faculty from each institution was randomly selected to complete the questionnaire. A random number generator was used to select 1,600 faculty based on an assumed response rate of at least 25% to obtain 400 responses. The proportion was $1,600 / 11,654$ or approximately 14% of each institution's faculty were randomly selected. Three hundred twenty six surveys were completed for a response rate of 20%. According to Dillman (2007), the average web-based survey response rate is 13%.

Demographic data including faculty age, gender, and institution type (e.g. research university, regional university, state university) were collected. Respondents reported age in terms of the following categories: 25 – less than 30 (0.8%), 30 – less than 35 (6.0%), 35 – less than 40 (9.6%), 40 – less than 45 (10.8%), 45 – less than 50 (14.5%), 50 – less than 55 (14.1%), 55 – less than 60 (22.5%), and 60 or above (21.7%). Respondents reported gender as follows: female (58%) and male (42%). The responses by gender were not representative of the full population of USG colleges and universities, which is 44% female and 56% male (Faculty Demographic, 2009). This introduces the possibility of bias. According to Randall and Fernandez (1990), surveys rely upon self-reported thoughts and behaviors and are, therefore, particularly vulnerable to response bias. This study utilized a random sample which according to De Vaus (2002) is the best way of limiting the effects of bias because it ensures that all people in the population have an equal or at least know chance of being included. Responses by institution type were reported as follows: research university (34%), regional university (20%), state
university (24%), state college (12%), and two-year college (10%). The responses by
institution type were generally representative of the full population of USG colleges and
universities.

Findings

After data were compiled and imported into SPSS, a factor analysis with varimax
rotation was performed separately on the items from the MLQ, Ethical Work Climate
Questionnaire, Institutionalization of Ethics questionnaire, and the researcher-developed
IT misuse questionnaire. Questions that loaded on each factor were evaluated for
reliability using Cronbach’s alpha. Table 1 shows the factors that resulted from each
questionnaire. The questions that made up the final survey are reported in Appendix F.
Correlations and descriptive statistics for leadership styles and institutionalization of
ethics, institutionalization of ethics and ethical work climate, and ethical work climate
and IT misuse are presented in the sections that follow. Significant correlations between
all items are presented in Appendix J.

Table 1

Cronbach’s α for Factors Derived from Survey Scales using Exploratory Factor Analysis
with Varimax Rotation

<table>
<thead>
<tr>
<th>Multifactor Leadership Questionnaire</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors</td>
<td></td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>α = .963</td>
</tr>
<tr>
<td>Transactional Leadership (Contingent Reward,</td>
<td>α = .897</td>
</tr>
<tr>
<td>Management-by-Exception Passive)</td>
<td></td>
</tr>
<tr>
<td>Transactional Leadership (Management-by-Exception Active)</td>
<td>α = .725</td>
</tr>
</tbody>
</table>


### Laissez-faire Leadership

\[ \alpha = .834 \]

---

### Institutionalization of Ethics Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implicit Institutionalization of Ethics</td>
<td>.910</td>
</tr>
<tr>
<td>Explicit Institutionalization of Ethics</td>
<td>.910</td>
</tr>
</tbody>
</table>

---

### Ethical Work Climate Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethical Work Climate (Benevolence)</td>
<td>.834</td>
</tr>
<tr>
<td>Ethical Work Climate (Principled)</td>
<td>.814</td>
</tr>
<tr>
<td>Ethical Work Climate (Egoism)</td>
<td>.828</td>
</tr>
</tbody>
</table>

---

### Employee Attitudes toward IT Misuse

<table>
<thead>
<tr>
<th>Question</th>
<th>( \alpha )</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Misuse (Email)</td>
<td>.837</td>
</tr>
<tr>
<td>IT Misuse (Software Piracy)</td>
<td>.946</td>
</tr>
<tr>
<td>IT Misuse (Personal Use of School Computer)</td>
<td>.980</td>
</tr>
<tr>
<td>IT Misuse (Personal Use of Web Space)</td>
<td>.952</td>
</tr>
<tr>
<td>IT Misuse (Printing)</td>
<td>.970</td>
</tr>
</tbody>
</table>

---

The exploratory factor analysis of the MLQ responses resulted in the following factors: transformational leadership (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration), transactional leadership (contingent reward, passive management-by-exception), transactional leadership (management-by-exception active), and lassie faire leadership. Bass and Avolio (1992)
distinguished nine factors in the Full Range Leadership Model – transformational leadership (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration), transactional leadership (contingent reward, management-by-exception passive, management-by-exception active), and laissez-faire leadership. Like the Full Range Leadership Model, this study reveals nine leadership factors; however, the management-by-exception active factor appears separate from the contingent reward and management-by-exception passive factors (Appendix E). In previous studies (e.g., Avolio, 1999; Druskat, 1994; Geyer & Steyrer, 1998) that tested the factor structure of the MLQ a single factor that included the management-by-exception active and laissez-faire components was found. Antonakis, Avolio, and Sivasubramaniam (2003) explained that such conflicting results may be attributed to the use of non homogenous samples (e.g., mixing organizational types and environmental conditions, rater gender samples, hierarchical levels, etc.) when testing the multidimensionality of the MLQ’s nine-factor model. For purposes of this study, management-by-exception active will be considered as a component of a separate transactional leadership factor. Scales for leadership transformational leadership, transactional leadership (contingent reward and management-by-exception passive), transactional leadership management-by-exception active, and laissez-faire leadership were formed by averaging responses on the Likert scales for each respondent on the respective items for each construct. All scales exhibit acceptable reliabilities. De Vaus (2002) explained that the alpha level should be at least 0.70 before the scale is considered reliable.
As expected, an exploratory factor analysis revealed two distinct ethics institutionalization factors–explicit and implicit (Appendix B2). These findings are consistent with the findings originally proposed by Singhapakdi and Vitell (2007). Scales for the institutionalization of ethics (explicit and implicit) were formed by averaging responses on the Likert scales for each respondent on the respective items for each construct. The two scales exhibit excellent reliability, as shown by Cronbach alphas of 0.91.

Similar to the results obtained by Victor and Cullen (1988), an exploratory factor analysis of the Ethical Work Climate data resulted in three dimensions of ethical criteria used for organizational decision making (egoism, benevolence, and principle) (Appendix C2). As the numbers in Table 1 show, there is an acceptable degree of internal consistency in the responses to each set of items.

**Research Questions 1 and 2: Leadership Styles and Ethics Institutionalization**

**Results**

The descriptive statistics for, and the Spearman correlations between, transformational leadership, transactional leadership (contingent reward, and management-by-exception passive), transactional leadership (management-by-exception active), laissez-faire leadership, implicit ethics institutionalization, and explicit ethics institutionalization are presented in Table 2. Statistical analysis revealed that there are positive and significant correlations, at the p < .001, between transformational leadership and both implicit and explicit forms of ethics institutionalization. In addition, positive and significant correlations were also found between transactional leadership and both implicit and explicit forms of ethics institutionalization. In contrast, negative and
significant correlations were found between laissez-faire leadership and both implicit and explicit forms of ethics institutionalization. Finally, no relationship exists between transactional leadership (management-by-exception active) and implicit or explicit forms of ethics institutionalization. Thus, in response to research questions 1 and 2, data revealed a relationship between leadership styles and ethics institutionalization.

Table 2

*Spearman Correlations and Descriptive Statistics for Leadership Styles and Ethics Institutionalization*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Transformational</td>
<td>---</td>
<td>.859**</td>
<td>-.071</td>
<td>-.623**</td>
<td>.717**</td>
<td>.419**</td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Transactional Leadership</td>
<td>---</td>
<td>-.061</td>
<td>-.670**</td>
<td>.672**</td>
<td>.422**</td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Transactional Leadership</td>
<td>---</td>
<td>.127*</td>
<td>-.107</td>
<td>.035</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Management-by Exception Active)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Laissez-faire Leadership</td>
<td>---</td>
<td>-.552**</td>
<td>-.367**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Implicit Ethics</td>
<td>---</td>
<td>.420**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutionalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Explicit Ethics</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutionalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

M 2.46 2.40 1.60 .920 3.60 3.41

SD .950 .770 .910 .950 .910 .970

Scale Min/Max 0 to 4 0 to 4 0 to 4 1 to 5 1 to 5

Cronbach’s α .963 .897 .725 .834 .910 .910

Note: **p < .001, *p < .05
Research Questions 3 and 4: Ethics Institutionalization and Ethical Work Climate

Results

The descriptive statistics for, and the correlations between ethics institutionalization (implicit and explicit) and ethical work climate (benevolence, principled, and egoism) are presented in Table 3. Statistical analysis revealed that there are positive and significant correlations, at the p < .001, between implicit ethics institutionalization and the benevolence and principle ethical work climates. In addition, a negative and significant correlation exists between implicit ethics institutionalization and the egoism ethical work climate. Also, positive and significant correlations exist between explicit ethics institutionalization and the benevolence and principle ethical work climate. Finally, a negative and significant relationship exists between explicit ethics institutionalization and the egoism ethical work climate. Thus, in response to research questions 3 and 4, data revealed a relationship between ethics institutionalization and ethical work climate.

Table 3

Spearman Correlations and Descriptive Statistics for Ethics Institutionalization and Ethical Work Climate

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EWC (Benevolence)</td>
<td>---</td>
<td>.642**</td>
<td>-.626**</td>
<td>.660**</td>
<td>.361**</td>
</tr>
<tr>
<td>2. EWC (Principled)</td>
<td>---</td>
<td>-.519**</td>
<td>.614**</td>
<td>.360**</td>
<td></td>
</tr>
<tr>
<td>3. EWC (Egoism)</td>
<td>---</td>
<td>-.681**</td>
<td>-.374**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Implicit Ethics Institutionalization</td>
<td>---</td>
<td>.420**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Explicit Ethics Institutionalization</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

M 3.29  3.67  2.49  3.60  3.41
Research Question 5: Ethical Work Climate and Employee Attitudes toward IT Misuse Results

The descriptive statistics for, and the correlations between ethical work climate (benevolence, principled, and egoism) and employee attitudes toward IT misuse (email, software piracy, personal use of school computer, personal use of web space, and printing) are presented in Table 4. No significant correlations were found between the ethical work climate and employee attitudes toward IT misuse. Thus, in response to research question 5, data revealed no relationship between ethical work climate and employee attitudes toward information technology misuse.

Table 4

Spearman Correlations and Descriptive Statistics for Ethical Work Climate and Employee Attitudes toward IT Misuse

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EWC</td>
<td></td>
<td>.642**</td>
<td>-.626**</td>
<td>-.090</td>
<td>-.075</td>
<td>-.007</td>
<td>-.015</td>
<td>-.036</td>
</tr>
<tr>
<td>(Benevolence)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. EWC</td>
<td></td>
<td></td>
<td>-.519 **</td>
<td>-.066</td>
<td>-.102</td>
<td>-.037</td>
<td>.029</td>
<td>-.032</td>
</tr>
<tr>
<td>(Principled)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. EWC</td>
<td></td>
<td></td>
<td>.083</td>
<td>.101</td>
<td>.038</td>
<td>.089</td>
<td>.082</td>
<td></td>
</tr>
<tr>
<td>(Egoism)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. IT Misuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.332**</td>
<td>.290**</td>
<td>.349**</td>
<td>.210**</td>
</tr>
<tr>
<td>(Email)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. IT Misuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.436**</td>
<td>.509**</td>
<td>.358**</td>
</tr>
<tr>
<td>(Software Piracy)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. IT Misuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.411**</td>
</tr>
<tr>
<td>(Personal Use of School)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.362**</td>
</tr>
</tbody>
</table>

Note: **p < .001, *p < .05
Given the insignificant Spearman correlations between ethical work climate and employee attitudes toward information technology misuse, it is tempting to accept a finding that suggests that there is no relationship between ethical work climate and IT misuse. However, without further analysis, this can lead to a Type 2 error. According to Sprinthall (2008), if the null hypothesis is accepted when it should have been rejected, a Type 2 or beta error is committed. The Type 2 error is especially important since it means that perfectly valid research may have been needlessly thrown away when it is committed. In order to prevent a Type 2 error, it is important to examine the statistical power or the measure of the sensitivity of a statistical test. The more powerful a test is, the less the likelihood of committing a Type 2 or beta error. The higher a test’s power, the higher the probability of a small difference or a small correlation being found to be significant (Sprinthall, 2008). Wilcox (2001) explained that the main data problems threatening the power of statistical analysis are: 1. skewness, 2. heteroscedasticity (unequal variances within the sample groups), and 3. outliers.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Scale Min/Max</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. IT Misuse (Personal Use of Web Space)</td>
<td>2.49</td>
<td>0.75</td>
<td>1 to 5</td>
<td>.759</td>
</tr>
<tr>
<td>8. IT Misuse (Printing)</td>
<td>3.29</td>
<td>0.78</td>
<td>1 to 5</td>
<td>.880</td>
</tr>
<tr>
<td></td>
<td>3.67</td>
<td>0.71</td>
<td>1 to 5</td>
<td>.814</td>
</tr>
<tr>
<td></td>
<td>2.34</td>
<td>1.24</td>
<td>1 to 5</td>
<td>.837</td>
</tr>
<tr>
<td></td>
<td>1.81</td>
<td>1.03</td>
<td>1 to 5</td>
<td>.946</td>
</tr>
<tr>
<td></td>
<td>1.71</td>
<td>0.93</td>
<td>1 to 5</td>
<td>.980</td>
</tr>
<tr>
<td></td>
<td>1.74</td>
<td>0.96</td>
<td>1 to 5</td>
<td>.952</td>
</tr>
<tr>
<td></td>
<td>1.59</td>
<td>0.81</td>
<td>1 to 5</td>
<td>.970</td>
</tr>
</tbody>
</table>

Note: **p < .001, *p < .05
It is important to note that data associated with IT misuse is not normally distributed as shown in Figure 1. Given the data distribution and small numbers of those responding that they would carry out the IT misuse, it is more appropriate to utilize a nonparametric technique such as the Mann-Whitney U test. According to Sheskin (2004), when a comparison of two groups, such as those subjects who are likely to engage in IT misuse and those subjects who are unlikely to engage in IT misuse, is to be made under such conditions, Mann-Whitney U is the appropriate test. The Mann-Whitney U test is the parametric equivalent to the student’s t-test and is very powerful relative to the t-test (Boslaugh & Watters, 2008; Conover, 1980; Daniel, 1990; Gibbons, 1985). Thus, the Mann-Whitney U test was used to detect relationships between the independent variables (ethical work climate) and likely misuse/unlikely misuse. The scales on the IT misuse test variables were converted to categories (1 – those responding that they would be unlikely to engage in misuse, and 2 – those responding that they would be likely to engage in misuse or unsure), in effect collapsing the scale from 5 to 2 points. Collapsing the points retains the semantic meaning of the scale while allowing a Mann-Whitney U test to be used to evaluate relationships. The results are shown in Table 5.
Figure 1: Non-Normal Distribution of IT Misuse Data
Table 5

*Results of Mann-Whitney U Test for Ethical Work Climate and IT Misuse*

<table>
<thead>
<tr>
<th>IT Misuse (Email)</th>
<th>IT Misuse Unlikely Mean Rank</th>
<th>IT Misuse Likely Mean Rank</th>
<th>z-score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWC (Egoism)</td>
<td>144.90</td>
<td>149.45</td>
<td>-0.43</td>
<td>0.34</td>
</tr>
<tr>
<td>EWC (Benevolent)</td>
<td>154.49</td>
<td>144.96</td>
<td>-0.90</td>
<td>0.19</td>
</tr>
<tr>
<td>EWC (Principled)</td>
<td>155.73</td>
<td>144.39</td>
<td>-1.07</td>
<td>0.15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IT Misuse (Software Piracy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWC (Egoism)</td>
</tr>
<tr>
<td>EWC (Benevolent)</td>
</tr>
<tr>
<td>EWC (Principled)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IT Misuse (Computer Usage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWC (Egoism)</td>
</tr>
<tr>
<td>EWC (Benevolent)</td>
</tr>
<tr>
<td>EWC (Principled)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IT Misuse (Web Space Usage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWC (Egoism)</td>
</tr>
<tr>
<td>EWC (Benevolent)</td>
</tr>
<tr>
<td>EWC (Principled)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IT Misuse (Printing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWC (Egoism)</td>
</tr>
<tr>
<td>EWC (Benevolent)</td>
</tr>
<tr>
<td>EWC (Principled)</td>
</tr>
</tbody>
</table>
The results of the Mann-Whitney U test (See Table 5) indicated only a marginally significant relationship between ethical work climate (egoism) and IT misuse (software piracy), ethical work climate (principle) and IT misuse (software piracy), and ethical work climate (egoism) and IT misuse (computer usage). A more significant relationship was found between ethical work climate (egoism) and IT misuse (web space usage). Since a small sample size can also impact the power of a statistical test, there is a possibility that given a larger sample size, the likelihood of rejecting the null increases. A sample size calculator was used to determine the appropriate sample size needed to reject the null with a power of .90. Table 6 shows the results. With a sample ranging from 1,000 to 21,000 subjects, it may be possible to establish relationships between EWC (egoism) and IT Misuse (software piracy, e-mail misuse, web space usage, and printing), EWC (principle) and IT Misuse (software piracy), and EWC (benevolence) and IT Misuse (e-mail misuse, and software piracy) given the low correlations and desired power of .90. Therefore, in response to research question 5, Mann-Whitney U results revealed a relationship between egoism ethical work climate and web space misuse, but other relationships are weak and larger sample sizes are needed.

Table 6

*Appropriate Sample Size Required to Avoid Type 2 Error*

<table>
<thead>
<tr>
<th>EWC (Benevolence)</th>
<th>EWC (Principle)</th>
<th>EWC (Egoism)</th>
</tr>
</thead>
<tbody>
<tr>
<td>r</td>
<td>n</td>
<td>P</td>
</tr>
<tr>
<td>IT Misuse (Email)</td>
<td>-.090</td>
<td>1293</td>
</tr>
<tr>
<td>IT Misuse (Software Piracy)</td>
<td>-.075</td>
<td>1864</td>
</tr>
<tr>
<td>IT Misuse (Computer Usage)</td>
<td>.007</td>
<td>214497</td>
</tr>
</tbody>
</table>
Chapter Summary

The purpose of this study was to examine whether there is a relationship between certain leadership styles in higher education and the institutionalization of ethics, and whether the institutionalization of ethics is related to a more ethical work climate, and whether the ethical work climate is positively related to employee attitudes toward information technology misuse. Analysis of the data indicated that significant relationships exist between leadership styles and both implicit and explicit forms of ethics institutionalization. In addition, significant relationships were found between both implicit and explicit forms of ethics institutionalization and the ethical work climate. The relationship between the egoism ethical work climate and employee attitudes toward IT misuse (web space usage) was found to be significant. The relationship between the egoism ethical work climate and employee attitudes toward IT misuse (software piracy and computer usage) was found to be only marginally significant. The correlation between the principle ethical work climate and IT misuse (software piracy) was marginally significant. All other ethical work climate relationships to IT misuse were not significant.
CHAPTER V
SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The misuse of information technology resources, such as e-mail, the Internet, software piracy, unauthorized printing, or use of other computing resources, is an issue that can have financial, social, and ethical implications for institutions of higher education in the United States. To help address this issue, educational leaders and administrators should consider employees’ perceptions of their work climate and its influence on employee attitudes in the organization. It is essential that educational leaders develop an ethical work climate through the institutionalization of ethics that positively influences employee attitudes toward the use of information technology resources. The development of a work climate that fosters ethical conduct, addresses moral challenges, and positively affects employee job attitudes is significantly influenced by the leadership style of the organization. Therefore, educational administrators should consider the role that leadership styles play as they strive to ensure a more ethical work environment that will positively impact employee attitudes within the organization.

Summary

The purpose of this study was to examine whether there is a relationship between certain leadership styles in higher education and the institutionalization of ethics, and whether the institutionalization of ethics is related to a more ethical work climate, and whether the ethical work climate is positively related to employee attitudes toward information technology misuse. Participants of the research study were asked to measure the leadership style of their department supervisors, to identify both implicit and explicit forms of ethics institutionalization within their departments, to describe the ethical work
climate of their department, and to indicate their attitudes toward information technology misuse. From this information, this research sought to answer the following questions:

R₁: Is there a relationship between leadership styles and implicit forms of ethics institutionalization?
R₂: Is there a relationship between leadership styles and explicit forms of ethics institutionalization?
R₃: Is there a relationship between implicit forms of ethics institutionalization and the ethical work climate?
R₄: Is there a relationship between explicit forms of ethics institutionalization and the ethical work climate?
R₅: Is there a relationship between the ethical work climate and employee attitudes toward IT misuse?

The survey was administered electronically using SurveyMonkey©. An e-mail containing a hyperlink to the instrument was sent to the list of 1,600 randomly selected USG faculty. The participants were guaranteed anonymity of responses and assured that responses would not be shared with their supervisors. After one week, a follow-up reminder e-mail was sent to the compiled faculty list.

**Analysis of Research Findings**

The results of this study indicated that there is a relationship between leadership styles and implicit forms of ethics institutionalization and a relationship between leadership styles and explicit forms of ethics institutionalization. Specifically, a strong relationship existed between transformational leadership and implicit forms of ethics institutionalization. A strong relationship also existed between transactional leadership
and implicit forms of ethics institutionalization. In addition, moderate (r=.4; p<.001) relationships existed between transformational and transactional leadership and explicit forms of ethics institutionalization. A moderate (r=-.55; p<.001), but inverse relationship existed between laissez-faire leadership and implicit forms of ethics institutionalization. Finally, a weak (r=-.37; p<.001), but inverse relationship existed between laissez-faire leadership and explicit ethics institutionalization. Thus, the data for research questions 1 and 2, revealed a relationship between leadership styles and ethics institutionalization.

The results of this study indicated that relationships existed between the institutionalization of ethics (implicit and explicit) and the ethical work climate. Strong relationships were found between implicit ethics institutionalization and the benevolence ethical work climate, and between implicit ethics institutionalization and the principled ethical work climate. In addition, a strong inverse correlation existed between implicit ethics institutionalization and the egoism type of ethical work climate. Thus, the data for research question 3, revealed a relationship between implicit ethics institutionalization and ethical work climate.

A weak (r=-.37; p<.001), but inverse association existed between explicit ethics institutionalization and the egoism type of ethical work climate. Additionally, weak (r=.36; p<.001) correlations were found between explicit ethics institutionalization and the benevolence and principled ethical work climates. Thus, the data for research question 4, data revealed a relationship between explicit ethics institutionalization and ethical work climate.
The correlation analysis of the ethical work climate and employee attitudes toward IT misuse revealed no significant findings. Further investigation of the data using the Mann-Whitney U test found only a marginally significant relationship between ethical work climate and employee attitudes toward information technology misuse, possibly due to the low number of those indicating they would be likely to perform the IT misuse and the relatively small sample size. However, the data for research question 5 revealed a relationship for the egoism ethical work climate and Web space usage IT misuse, and a marginal (p<.10) relationship for the software piracy and computer usage IT misuses. Similarly the principled ethical work climate was marginally (p<.10) related to the software piracy IT misuse. Therefore, the data for research question 5 revealed a relationship between the egoism ethical work climate and Web space usage, and there was some suggestion that other relationships may exist given a larger sample size, particularly for software piracy.

Discussion of Research Findings

The purpose of this study was to gather data from faculty currently employed at institutions of higher education within the University System of Georgia to ascertain their attitudes toward leadership style, ethics, and information technology misuse. This study was able to provide current data that may help college and university administrators better understand the relationship between leadership style, the development of a more ethical work environment in academia, and employee attitudes toward information technology misuse. The following discussion of research findings is presented in response to the five research questions listed in Chapter IV and the major themes in the review of related literature in Chapter II. In the review of related literature, the researcher
presented a synthesis of research from the following themes: leadership styles, both implicit and explicit forms of ethics institutionalization, ethical work climate, and employee attitudes toward information technology misuse.

**Leadership Styles and Ethics Institutionalization**

Northouse (2007) stated that leaders play a major role in establishing the ethical climate within the organization. Research has also examined strategies that leaders can use to enhance the ethical work environment, such as having a well-articulated organizational value statement or code of ethics. Leaders have the role of explicitly stating what the organization intends and expects. Ethical behavior becomes a fundamental component of their organizational culture. The leader must infuse the organization’s climate with values and ethical consciousness (Sims, 2003).

The results of this study indicate that a strong positive relationship exists between transformational and transactional leadership and implicit ethics institutionalization. In addition, a moderate (r=.42; p<.001) relationship exists between transformational and transactional leadership and explicit ethics institutionalization. Implicit forms of ethics institutionalization are also strongly related to the development of benevolence and principled ethical work climates. These findings suggest that as both transformational and transactional leadership increases the ethical work climate increases via the institutionalization of ethics. This is consistent with Burns (1978) definition that a key component of transformational leadership is the role of ethics and morals. Transformational leaders are guided by ethics and morals to determine socially desirable ends and to act in ways that show caring (Burns, 1978). Bass and Steidlmeier (1999) explained that transformational leaders work to increase awareness of what is right, good,
and important as they evaluate followers’ needs for self-actualization, foster in followers higher moral maturity, and move followers to go beyond self-interests for the good of their organization, group, and society. The results of this study suggest that one way in which transformational and transactional leaders work to increase what is right, good, and important is by relying on existing programs within the organization such as incentive systems, promotion policies, and performance evaluations that can be implicitly inherited to help increase ethical awareness.

Many studies have linked the effectiveness of transformational leadership to the development of an ethical work climate (e.g., Carlson & Perrewe, 1995; Hood, 2003; Kuhnert & Lewis, 1987; Parry & Proctor-Thomson, 2002). A strong set of personal core values are associated with transformational leadership. Transformational leaders operate out of a personally held value system that includes values such as integrity and justice (Bass, 1985; Burns, 1978; Bennis & Nanus, 1985; Carlson & Perrewe, 1995; Kouzes & Posner, 1987). Hood (2003) revealed that the ethical orientation of the CEO is an important issue to consider in understanding the ethical practices in an organization. Clear links between CEO transformational and transactional leadership styles and ethical practices within the organization were established. While not explicitly testing the relationship between transformational leadership and ethical work climate, this study establishes another link between transformational leadership and ethical work climates via implicit institutionalization of ethics.

While this study did not focus directly on the relationship between transformational and transactional leaders, it is worth noting the significant and positive correlation between the two constructs. Like the research conducted by Hood (2003), this
study established a strong relationship between transformational and transactional leadership (contingent reward and active management-by-exception). This is consistent with the findings of Bensimon, Nuemann, and Birnbaum (1989) who explained that transactional leadership may play as significant a role in higher education as transformational leadership given the ambiguity of goals and decentralized structure. This finding also parallels findings by Gmelch and Wolverton (2002) that showed that effective deans engage in both transformational and transactional leadership. In addition, both transformational and transactional were found to be strongly correlated with implicit forms of ethics institutionalization. Thus, this study supports research by Judge and Piccolo (2004) that found both transformational and contingent reward transactional relationship had a positive relationship with employee job satisfaction, motivation, and organizational performance. In addition, Bass (1985) suggested that transactional leadership may work as well as transformational leadership in certain contexts if the leader provides appropriate feedback and clarification of what corrective action is needed. This relationship is important because it suggests that certain types of transactional leadership can be as effective as transformational leadership in supporting implicit forms of ethics institutionalization initiatives that can lead to the development of an ethical work climate.

A significant finding of this study is the stronger relationships between transformational leadership, transactional leadership, and implicit ethics institutionalization versus the relationships between transformational leadership, transactional leadership, and explicit forms of ethics institutionalization. Trevino and Nelson (1995) noted that reward systems that make up implicit ethics institutionalization
are the most important formal influence of peoples’ behavior. In addition, Jose and Thibodeaux (1999) found that managers perceived implicit forms of ethics institutionalization to be more effective because they have more permanency than explicit forms. Given the strong relationships between transformational leadership, transactional leadership, and implicit forms of ethics institutionalization it is likely that institutions of higher education with transformational and transactional leadership in place will be more effective at developing more ethical work climates by promoting implicit forms of ethics institutionalization.

Northouse (2007) explained that laissez-faire leadership falls at the far right side of the transactional-transformational leadership continuum. Leaders that take a laissez-faire approach take a “hands-off, let things ride approach” approach. This can be described as a type of non-leadership or the absence of leadership. “The leader abdicates responsibility, delays decisions, gives no feedback, and makes little effort to help followers satisfy their needs. There is no exchange with followers or attempt to help them grow” (Northouse, 2007, p. 186). Laissez-faire leaders are passive and indifferent to values and performance. They fail to assist followers with developing goals or standards (Kelloway et al., 2005; Skogstad et al., 2007). This research is consistent with the findings of this study which suggested a significant and negative relationship between laissez-faire leadership and implicit ethics institutionalization. This research also found a significant and negative correlation between laissez-faire leadership and explicit forms of ethics institutionalization.

The institutionalization of ethics is only effective if it is supported by organizational leadership. Carlson and Perrewe (1995) argued that the leader is an
integral part of the organization and the leadership style provides the necessary elements required to have an ethically oriented organization. An organization’s leadership sets the ethical tone. In order for the goal of an ethically oriented organization to be met through the institutionalization of ethics, the leader must have a strong ethical orientation. Minkes et al. (1999) stated that explicit types of ethics institutionalization such as a code of ethics will fall into contempt if the leadership is perceived as behaving unethically. This suggests implicit forms are more strongly associated with actual behaviors of leaders and peers.

While this study was able to establish positive relationships between leadership styles and both implicit and explicit forms of ethics institutionalization, a stronger link between leadership styles and implicit forms of ethics institutionalization was found. Singhapakdi and Vitell (2007) explained that while explicit forms of ethics institutionalization are more formally expressed, less vague, and easy to identify, their influence is less effective than implicit forms. As a result, the combination of transformational or transactional leadership and implicit forms are more likely to result in the development of an ethical work climate.

It is also worth noting that significant relationships were found between transformational leadership and the benevolence ethical work climate ($r=0.564; p<0.001$) and between transformational leadership and the principled ethical work climate ($r=0.433; p<0.001$). A significant, but inverse relationship was found between transformational leadership and the egoism ethical work climate. While these findings are significant, the correlation between transformational leadership and implicit forms of ethics institutionalization is much higher ($r=0.717; p<0.001$) and between implicit forms and the
benevolence and principle ethical work climates (r=.6+; p<.001). This supports the idea that the transformational leadership to ethical work climate link occurs through implicit ethics institutionalization.

As with the relationships between transformational leadership and ethical work climate, there were also significant relationships between transactional leadership and the benevolence ethical work climate (r=.525; p<.001) and transactional leadership and the principled ethical work climate (r=.424; p<.001). A significant, but inverse relationship was found between transactional leadership and the egoism ethical work climate. While these findings are significant, the correlation between transactional leadership and implicit forms of ethics institutionalization is higher (r=.672; p<.001). This supports the idea that the transactional leadership to ethical work climate link occurs more strongly when implicit ethics institutionalization occurs.

The relationship between transformational and transactional leadership and implicit forms of ethics institutionalization helps to re-enforce the argument made by Carlson and Perrewe (1995) that leadership is an integral part of the organization and helps to set the ethical tone. The leadership style provides the necessary elements required to have an ethically oriented organization. Vitell and Singhapakdi (2008) explained that implicit ethics institutionalization was a more significant determinant of the organizational climate constructs. For long-term institutionalization of ethics, implicit actions such as leadership commitments and ethical leadership can be considered since they will essentially result in changes to the organizational culture over time.
Ethics Institutionalization and Ethical Work Climate

A significant finding of this study is the relationships between implicit and explicit ethics institutionalization and benevolence and principled ethical work climates and the inverse relationships between implicit and explicit ethics institutionalization and the egoism ethical work climate. Cullen et al. (2003) defined three basic ethical standards associated with ethical work climates that parallel Kohlberg’s (1969) stages of individual cognitive and moral development: egoistic (self-interest), benevolent (caring), and principled. The egoistic climate is characterized by employee self-interests. An employee makes decisions that promote personal gain, ignoring the needs or interests of others. Employees have less concern for others in the organization and the organization as a whole. On the other hand, benevolent climates encourage individuals to be concerned with the well-being of others both inside and outside of the organization. In a principled or rule-based climate, ethical decisions are made based on the interpretation of rules, laws, and standards in the normative expectations of the organization or social unit (Victor & Cullen, 1988).

In this study, the strong correlations between implicit ethics institutionalization and principled and benevolence ethical work climates suggests that when implicit institutionalization of ethics increases, benevolence and principle ethical work climates tend to increase within the academic unit. Explicit forms of ethics institutionalization are also positively related to the benevolence and principled ethical work climates, but the correlations are only moderate ($r=.36; p<.001$). These findings are consistent with those of VanSandt, Shepard, and Zappe (2006) who found a significant and positive relationship between organizations with ethical work climates that utilize benevolent or
principled ethical criteria and higher levels of moral awareness. Little, if any research has tested the institutionalization of ethics construct related to ethical work climates. As a result, the findings of this study are significant in that they validate the conceptual framework proposed in Chapter I which shows a connection between the two variables and can be used as a mechanism for how a manager can implement an ethical work climate.

VanSandt, Shepard, and Zappe (2006) also showed that employee exposure to formal ethics training or explicit forms of ethics institutionalization did not exhibit a significant moderating effect on the relationship between the ethical work climate and moral awareness. Changes to the ethical work climate may have more far reaching effects than will ethics training for individuals. This is consistent with the findings of this study that show implicit ethics institutionalization is more strongly related to the benevolent and principled ethical work climates than explicit forms of ethics institutionalization. In addition, the results of this study suggest that as both implicit and explicit forms of ethics institutionalization are increased, the likelihood that an egoism ethical work climate will develop decreases. The egoistic climate is characterized by employee self-interests. An employee makes decisions that promote personal gain, ignoring the needs or interests of others. Employees have less concern for others in the organization and the organization as a whole (Victor & Cullen, 1998).

**Ethical Work Climate and Employee Attitudes**

This study found only a marginally significant relationship between ethical work climate (egoism) and IT misuse (software piracy), ethical work climate (principle) and IT misuse (software piracy), and ethical work climate (egoism) and IT misuse (computer
usage). A more significant relationship was found between ethical work climate (egoism) and IT misuse (web space usage). Therefore, there is evidence that research question 5 is supported for egoism and web space misuse, but other relationships are weak due to the low number of those indicating they would be likely to perform the IT misuse and the small sample size. These results are important because little, if any, empirical research currently exists on the relationship between ethical work climate and employee attitudes toward information technology misuse. The results suggest that when an egoism ethical work climate exists more types of IT misuse occur. This finding is in line with the definition of an egoism ethical work climate defined by Cullen et al. (2003) which is characterized by employee self-interests. An employee makes decisions to engage in activities such as software piracy or computer misuse to promote their own personal gain, ignoring the needs or interests of others within the organization. In an effort to discourage incidents of IT misuse, leadership should work toward the development of benevolent or principled ethical work climates through a process that includes implicit forms of ethics institutionalization.

**Limitations**

The following are limitations of this study:

1. The responses by gender were not representative of the full population of USG colleges and universities. This introduces the possibility of sample bias.

2. There is lack of variability in the IT misuse construct.

**Conclusions**

The following conclusions can be supported based on the results of this study:
1. There is a strong relationship between both transformational and transactional leaders and implicit forms of ethics institutionalization.

2. Laissez-faire leaders are related to lower levels of implicit ethics institutionalization.

3. Implicit forms of ethics institutionalization are more strongly related to increased benevolence and principled ethical work climates and decreased egoism ethical work climate.

4. Explicit forms of ethics institutionalization are associated with stronger egoism types of ethical work climates and with decreased benevolence and principle ethical work climates.

5. Egoism work climate is associated with increased agreement to web space misusage.

Implications

The purpose of this study was to gather data from faculty currently employed at institutions of higher education within the University System of Georgia to ascertain their attitudes toward leadership styles, ethics, and employee attitudes toward information technology misuse. This study was able to provide current data that may help college and university administrators better understand the relationship between leadership style, the development of a more ethical work environment in academia, and employee attitudes toward information technology misuse. The research findings will add to the literature in the areas of educational leadership and educational ethics. This framework may also help institutions significantly address IT security related concerns and, in turn, reduce the costs associated with these incidents.
According to Burns (1978), transformational leaders are guided by ethics and morals to determine socially desirable ends and to act in ways that show caring. Bass and Steidlmeier (1999) explained that leaders are authentically transformational when they increase awareness of what is right, good, and important as they evaluate followers’ needs for self-actualization, foster in followers’ higher moral maturity, and move followers to go beyond self-interests for the good of their organization, group, and society. While the results of this study confirmed a strong correlation between transformational leadership and the development of an ethical work climate, the research also suggested that certain types of transactional leadership can be as effective at developing an ethical work climate as transformational leaders.

**Recommendations**

1. Since the majority of respondents were female (58%), future studies that compare responses by gender may yield additional and significant findings.
2. Similar studies should be conducted in other states or other regions of the United States.
3. A similar study should be conducted that includes a sample of higher education employees other than faculty.
4. The conceptual model that guided this study should be tested in other environments such as K-12 schools, private institutions of higher education, and corporate organizations.

**Dissemination**

The researcher will attempt to publish the research findings in several journals, including, but not limited to, the *Leadership Quarterly, Journal of Higher Education,*
EDUCAUSE Quarterly, and Educational Leadership. The researcher also plans to present the research findings at professional conferences such as the Informing Science Institute. Copies of the dissertation will be on file at the Georgia Southern University Library and will be available electronically through the doctoral dissertations search engine on Georgia Library Learning Online (GALILEO).

Concluding Thoughts

The purpose of this study was to examine whether there is a relationship between certain leadership styles in higher education and the institutionalization of ethics, and whether the institutionalization of ethics is related to a more ethical work climate, and whether the ethical work climate is positively related to employee attitudes toward information technology misuse. Analysis of the data indicated that significant relationships exist between leadership styles and both implicit and explicit forms of ethics institutionalization. In addition, significant relationships were found between both implicit and explicit forms of ethics institutionalization and the ethical work climate. The relationship between ethical work climate and employee attitudes toward IT misuse was found to be only marginally significant due to the low number of those indicating they would be likely to perform the IT misuse and the small sample size.

The results of this study included several interesting findings. First, a significant contribution of this study is the validation of a conceptual framework that can be used to expand the current literature on leadership styles and the development of ethical work climates. The role of organizational leadership is strongly related to the establishment and implementation of an ethical work climate via the institutionalization of ethics. In order for leadership to develop an ethical work climate that impacts employee attitudes toward
IT misuse, the appropriate type of institutionalization of ethics should be considered since the results of this study show that the correlations between leadership styles, ethics institutionalization, and ethical work climate are stronger than the correlations between leadership styles and ethical work climate. Clearly, the role of ethics institutionalization has a significant impact on the establishment of an ethical work climate and should be considered by institutional leadership as they work to establish an ethical work climate that will impact employee attitudes toward information technology misuse. Little, if any literature currently exists that focuses on the role of ethics institutionalization in the development of an ethical work climate.

Another interesting and encouraging relationship that can be drawn from this study is that despite the fact that IT misuse by faculty has been reported by the popular press, this study found a low number of faculty who indicated that they would likely engage in IT misuse.

A third surprising result of this study was the strong and positive relationship between transformational and transactional leadership. This is interesting because it suggests that higher education leaders may tend to engage in both transformational and transactional acts in order to encourage followers to work together in order to meet collective goals. Both transformational and transactional leadership styles are strongly related to implicit forms of ethics institutionalization which is strongly correlated with benevolence and principle ethical work climates.

A final exciting finding in this study is the strong correlation between transformational and transactional leadership, implicit forms of ethics institutionalization, and the benevolent and principled ethical work climates. Since implicit forms of ethics
institutionalization tend to be vague because the processes used to encourage ethical behavior are implied or not directly expressed, one might initially assume that explicit forms, which are more easily recognized, would be more strongly related to the development of benevolent and principle ethical work climates.
REFERENCES


Law, Criminology, and Police Science, 46, 347-354.


through transformational leadership. *Journal of Business Ethics, 14*, 829-838.


Larson (Eds.), *Leadership: The cutting edge* (pp. 189-207). Carbondale: Southern Illinois Press.


APPENDIX A

USG INSTITUTIONS BY GROUP AND NUMBER OF CURRENTLY EMPLOYED, FULL TIME FACULTY

Table A1

<table>
<thead>
<tr>
<th>Research Universities</th>
<th>Regional Universities</th>
<th>State Universities</th>
<th>State Colleges</th>
<th>Two-Year Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia Institute of Technology (967)</td>
<td>Georgia Southern University (786)</td>
<td>Albany State University (187)</td>
<td>Abraham Baldwin Agricultural College (114)</td>
<td>Atlanta Metropolitan College (63)</td>
</tr>
<tr>
<td>Georgia State University (1,189)</td>
<td>Valdosta State University (537)</td>
<td>Armstrong Atlantic State University (290)</td>
<td>College of Costal Georgia (65)</td>
<td>Bainbridge College (60)</td>
</tr>
<tr>
<td>Medical College of Georgia (656)</td>
<td></td>
<td>Augusta State University (276)</td>
<td>Dalton State College (154)</td>
<td>Darton College (142)</td>
</tr>
<tr>
<td>University of Georgia (1,848)</td>
<td>Clayton State University (219)</td>
<td>Gainesville State College (188)</td>
<td>East Georgia College (51)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Columbus State University (301)</td>
<td>Georgia Gwinnett College (129)</td>
<td>Georgia Highlands College (136)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fort Valley State University (129)</td>
<td>Gordon College (112)</td>
<td>Georgia Perimeter College (515)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Georgia College &amp; State University (269)</td>
<td>Macon State College (197)</td>
<td>South Georgia College (55)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Georgia</td>
<td>Middle Georgia</td>
<td>Waycross College</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Southwestern State University</td>
<td>College</td>
<td>College</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(117)</td>
<td>(128)</td>
<td>(23)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kennesaw State University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(754)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>North Georgia College &amp; State University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(227)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Savannah State University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(154)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Southern Polytechnic State University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(173)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>University of West Georgia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(443)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

SINGHAPAKDI AND VITELL INSTITUTIONALIZATION OF ETHICS SCALE

CONFIRMATORY FACTOR ANALYSIS RESULTS

Table B1

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>Factor 1: Explicit Institutionalization α = .920</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My organization does not conduct ethics audits on a regular basis</td>
<td>.796</td>
<td></td>
</tr>
<tr>
<td>2. Top management evaluates the ethics training programs on a regular</td>
<td>.838</td>
<td></td>
</tr>
<tr>
<td>basis.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. My organization does not have a top-level person(s) responsible for</td>
<td>.769</td>
<td></td>
</tr>
<tr>
<td>ethics compliance programs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Top management is not involved in ethical training programs.</td>
<td>.718</td>
<td></td>
</tr>
<tr>
<td>5. My organization does not have training programs that effectively</td>
<td>.867</td>
<td></td>
</tr>
<tr>
<td>communicate ethical standards and policies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. My organization does not have an ethics committee or team that</td>
<td>.779</td>
<td></td>
</tr>
<tr>
<td>deals with ethical issues in the organization.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. In order to prevent misconduct within my organization, there are</td>
<td>.743</td>
<td></td>
</tr>
<tr>
<td>training programs to create an effective ethical culture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2: Implicit Institutionalization</td>
<td>α = .870</td>
<td></td>
</tr>
<tr>
<td>1. Top management has established a legacy of integrity for the</td>
<td>.846</td>
<td></td>
</tr>
<tr>
<td>organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Top management believes that ethical behavior, not just legal</td>
<td>.798</td>
<td></td>
</tr>
<tr>
<td>compliance, is paramount to the success of the organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. In my organization there is a sense of responsibility among</td>
<td>.774</td>
<td></td>
</tr>
<tr>
<td>employees for maintaining an ethical reputation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Top management in my organization accepts responsibility for</td>
<td>.663</td>
<td></td>
</tr>
<tr>
<td>unethical and illegal decision making on the part of employees.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. There is open communication between superiors and subordinates to</td>
<td>.692</td>
<td></td>
</tr>
<tr>
<td>discuss ethical conflicts and dilemmas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Some employees in my organization are allowed to perform certain</td>
<td>.590</td>
<td></td>
</tr>
<tr>
<td>questionable actions because they are successful in achieving their</td>
<td></td>
<td></td>
</tr>
<tr>
<td>organizational objectives.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. In my organization, there are no rewards for good ethical decisions</td>
<td>.494</td>
<td></td>
</tr>
<tr>
<td>8. There is a shared value system and an understanding of what</td>
<td>.752</td>
<td></td>
</tr>
<tr>
<td>constitutes appropriate behavior in my organization.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. Top management believes that our organization should help to improve the quality of life and the general welfare of society. \[.498\]

### INSTITUTIONALIZATION OF ETHICS SCALE EXPLORATORY FACTOR ANALYSIS RESULTS FROM THIS STUDY

Table B2

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Explicit Institutionalization</strong> α = .910</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. My immediate work unit does not conduct ethics audits on a regular basis</td>
<td>.786</td>
<td></td>
</tr>
<tr>
<td>2. My immediate supervisor evaluates the ethics training programs on a regular basis.</td>
<td>.796</td>
<td></td>
</tr>
<tr>
<td>3. My immediate work unit does not have a top-level person(s) responsible for ethics compliance programs.</td>
<td>.786</td>
<td></td>
</tr>
<tr>
<td>4. My immediate supervisor is not involved in ethical training programs.</td>
<td>.763</td>
<td></td>
</tr>
<tr>
<td>5. My immediate work unit does not have training programs that effectively communicate ethical standards and policies.</td>
<td>.833</td>
<td></td>
</tr>
<tr>
<td>6. There is no ethics committee or team that deals with ethical issues in the work unit.</td>
<td>.820</td>
<td></td>
</tr>
<tr>
<td>7. In order to prevent misconduct within my immediate work unit, there are training programs to create an effective ethical culture.</td>
<td>.732</td>
<td></td>
</tr>
<tr>
<td><strong>Factor 2: Implicit Institutionalization</strong> α = .910</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. My immediate supervisor has established a legacy of integrity for the work unit</td>
<td>.826</td>
<td></td>
</tr>
<tr>
<td>9. My immediate supervisor believes that ethical behavior, not just legal compliance, is paramount to the success of the work unit</td>
<td>.839</td>
<td></td>
</tr>
<tr>
<td>10. In my immediate work unit there is a sense of responsibility among employees for maintaining an ethical reputation.</td>
<td>.811</td>
<td></td>
</tr>
<tr>
<td>11. My immediate supervisor accepts responsibility for unethical and illegal decision making on the part of employees.</td>
<td>.644</td>
<td></td>
</tr>
<tr>
<td>12. There is open communication between my immediate supervisor and subordinates to discuss ethical conflicts and dilemmas.</td>
<td>.826</td>
<td></td>
</tr>
<tr>
<td>13. Some employees in my immediate work unit are allowed to perform certain questionable actions because they are successful in achieving work unit or organizational objectives.</td>
<td>.714</td>
<td></td>
</tr>
<tr>
<td>14. There is a shared value system and an understanding of what constitutes appropriate behavior in my immediate work unit.</td>
<td>.837</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

VICTOR AND CULLEN ETHICAL CLIMATE QUESTIONNAIRE FACTOR ANALYSIS RESULTS

Table C1

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Caring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. What is best for everyone in the company is the major consideration here (BL)</td>
<td>65</td>
<td>α = .80</td>
</tr>
<tr>
<td>2. The most important concern is the good of all the people in the company as a whole (BL)</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>3. Our major concern is always what is best for the other person (BI)</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>4. In this company, people look out for each other’s good (BI)</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>5. In this company, it is expected that you will always do what is right for the customers and the public (BC)</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>6. The most efficient way is always the right way in this company (EC)</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>7. In this company, each person is expected above all to work efficiently (EC)</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td><strong>Factor 2: Law and Code</strong></td>
<td></td>
<td>α = .79</td>
</tr>
<tr>
<td>8. People are expected to comply with the law and professional standards over and above other considerations (PC)</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>9. In this company, the law or ethical code of their profession is the major consideration (PC)</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>10. In this company, people are expected to strictly follow legal or professional standards (PC)</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>11. In this company, the first consideration is whether a decision violates any law (PC)</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td><strong>Factor 3: Rules</strong></td>
<td></td>
<td>α = .79</td>
</tr>
<tr>
<td>12. It is very important to follow the company’s rules and procedures here (PL)</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>13. Everyone is expected to stick by company rules and procedures (PL)</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>14. Successful people in this company go by the book (PL)</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>15. People in this company strictly obey the company policies (PL)</td>
<td>83</td>
<td></td>
</tr>
</tbody>
</table>
Factor 4: Instrumental  
\[ \alpha = .71 \]

16. In this company, people protect their own interests above all else (EI)  
17. In this company, people are mostly out for themselves (EI)  
18. There is no room for one’s own personal morals or ethics in this company (EI)  
19. People are expected to do anything to further the company’s interests, regardless of the consequences (EL)  
20. People here are concerned with the company’s interests to the exclusion of all else (EL)  
21. Work is considered substandard only when it hurts the company’s interests (EL)  
22. The major responsibility of people in the company is to control costs (EC)

Factor 5: Independence  
\[ \alpha = .60 \]

23. In this company, people are expected to follow their own personal and moral beliefs (PI)  
24. Each person in this company decides for themselves what is right and wrong (PI)  
25. The most important concern in this company is each person’s own sense of right and wrong (PI)  
26. In this company, people are guided by their own personal ethics (PI)

B=benevolence, P=principle, E=egoism, I=individual, L=local, C=cosmopolitan

ETHICAL CLIMATE QUESTIONNAIRE EXPLORATORY FACTOR ANALYSIS

RESULTS FROM THIS STUDY

Table C2

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: EWC (Benevolence)</strong></td>
<td>[ \alpha = .834 ]</td>
</tr>
<tr>
<td>1. What is considered best for everyone in my immediate work unit is the major consideration here</td>
<td>.757</td>
</tr>
<tr>
<td>2. The most important concern is the good of all the people as a whole in my immediate work unit</td>
<td>.746</td>
</tr>
<tr>
<td>3. Our major concern is always what is best for the other person</td>
<td>.775</td>
</tr>
</tbody>
</table>
4. In my immediate work unit, people look out for each other’s good **.649**

5. In my immediate work unit, it is expected that you will always do what is right for the students and the public **.302**

Factor 2: EWC (Principled) **α = .814**

6. People in my immediate work unit are expected to comply with the law and professional standards over and above other considerations **.699**

7. In my immediate work unit, people are expected to strictly follow legal or professional standards **.679**

8. In my immediate work unit, the first consideration is whether a decision violates any law **.729**

9. Successful people in my immediate work unit go by the book **.681**

10. People in my immediate work unit strictly obey the institutional/school policies **.661**

Factor 3: EWC (Egosim) **α = .828**

11. In my immediate work unit, people protect their own interests above all else **.602**

12. In my immediate work unit, people are mostly out for themselves **.549**

13. There is no room for one’s own personal morals or ethics in my immediate work unit **.675**

14. People in my immediate work unit are expected to do anything to further the work unit’s interests, regardless of the consequences **.734**

15. Work is considered substandard only when it hurts the immediate work unit’s interests **.817**

16. Each person in my immediate work unit decides for themselves what is right and wrong **.472**
APPENDIX D

EMPLOYEE ATTITUDES TOWARDS IT MISUSE SCALE EXPLORATORY

FACTOR ANALYSIS RESULTS

Table D1

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
</tr>
<tr>
<td></td>
<td>α = .891</td>
</tr>
</tbody>
</table>

Scenario 1:
John’s church group is sponsoring a bake sale. John decides to send an e-mail to the university’s faculty list to promote the event.

1. If you were John, what is the likelihood that you would send the e-mail? - .509 .097 .175 .960
2. I could see myself sending the e-mail if I were in John’s position. - .133 -.096 .178 .956

Scenario 2:
Sally’s department recently purchased a single licensed copy of Microsoft Office. Sally decides to make a copy of the software and shares it with a colleague that works in a different department.

1. If you were Sally, what is the likelihood that you would copy and share the software? .044 .989 .109 -.006
2. I could see myself copying and sharing the software if I were in Sally’s position. .063 .984 .074 .011

Scenario 3:
George’s department purchases him a laptop computer to assist with a university related research project. After completing the research, George takes the laptop home, begins installing personal software, and uses the computer for personal, non-university related activities.

1. If you were George, what is the likelihood that you would use the laptop for personal activities? .019 .088 .973 .196
2. I could see myself using the laptop for personal use if I were in George’s position. | -0.047 | 0.100 | 0.976 | 0.155 |

Scenario 4: Pam decided to join a local community organization that sponsors a number of community blood drives. She agrees to develop and maintain a web site for the group and uses her university provided web space to host the site.

1. If you were Pam, what is the likelihood that you would use the university provided web space to host the site. | 0.888 | -0.068 | -0.043 | 0.009 |
2. I could see myself using the university provided web space to host the site. | 0.888 | -0.068 | -0.043 | 0.009 |

Scenario 5: Arlene has volunteered to serve as the events coordinator for a local non-profit children’s museum. To help save the group money, Arlene uses her department’s color printer to print flyers that will highlight and promote the upcoming events sponsored by the museum.

1. If you were Arlene, what is the likelihood that you would use the departmental color printer to help the museum with their printing costs? | 0.850 | 0.151 | 0.033 | -0.145 |
2. I could see myself using the departmental color printer to help the museum with their printing costs. | 0.835 | 0.152 | 0.013 | -0.137 |
# APPENDIX E

**MULTIFACTOR LEADERSHIP QUESTIONNAIRE EXPLORATORY FACTOR ANALYSIS RESULTS**

Table E1

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>Factor 1: Transactional Leadership (Contingent Reward, Management-by-Exception Passive)</th>
<th>( \alpha = .898 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Question 1</td>
<td>.828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Question 3</td>
<td>.603</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Question 11</td>
<td>.785</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Question 12</td>
<td>.786</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Question 16</td>
<td>.838</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Question 17</td>
<td>.885</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Question 20</td>
<td>.687</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Question 35</td>
<td>.823</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor 2: Transactional Leadership (Management-By-Exception Active)</th>
<th>( \alpha = .725 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Question 4</td>
<td>.777</td>
</tr>
<tr>
<td>10. Question 22</td>
<td>.606</td>
</tr>
<tr>
<td>11. Question 24</td>
<td>.806</td>
</tr>
<tr>
<td>12. Question 27</td>
<td>.760</td>
</tr>
</tbody>
</table>
APPENDIX F
SURVEY INSTRUMENT

Multifactor Leadership Questionnaire (Questions 1-5)

1. Provides me with assistance in exchange for my efforts
2. Re-examines critical assumptions to question whether they are appropriate
3. Fails to interfere until problems become serious
4. Focuses attention on irregularities, mistakes, exceptions, and deviations from standards
5. Avoids getting involved when important issues arise

** Questions 6-45 not included due to copyright restrictions (See appendix I)

Institutionalization of Ethics

46. My organization does not conduct ethics audits on a regular basis
47. Top management evaluates the ethics training programs on a regular basis.
48. My organization does not have a top-level person(s) responsible for ethics compliance programs.
49. Top management is not involved in ethical training programs.
50. My organization does not have training programs that effectively communicate ethical standards and policies.
51. My organization does not have an ethics committee or team that deals with ethical issues in the organization.
52. In order to prevent misconduct within my organization, there are training programs to create an effective ethical culture.

53. Top management has established a legacy of integrity for the organization
54. Top management believes that ethical behavior, not just legal compliance, is paramount to the success of the organization
55. In my organization there is a sense of responsibility among employees for maintaining an ethical reputation.
56. Top management in my organization accepts responsibility for unethical and illegal decision making on the part of employees.
57. There is open communication between superiors and subordinates to discuss ethical conflicts and dilemmas.
58. Some employees in my organization are allowed to perform certain questionable actions because they are successful in achieving their organizational objectives.

59. There is a shared value system and an understanding of what constitutes appropriate behavior in my organization.
Ethical Work Climate

60. What is best for everyone in the company is the major consideration here
61. The most important concern is the good of all the people in the company as a whole
62. Our major concern is always what is best for the other person
63. In this company, people look out for each other’s good
64. In this company, it is expected that you will always do what is right for the customers and the public

65. People are expected to comply with the law and professional standards over and above other considerations
66. In this company, people are expected to strictly follow legal or professional standards
67. In this company, the first consideration is whether a decision violates any law

68. Successful people in this company go by the book
69. People in this company strictly obey the company policies

70. In this company, people protect their own interests above all else
71. In this company, people are mostly out for themselves
72. There is no room for one’s own personal morals or ethics in this company
73. People are expected to do anything to further the company’s interests, regardless of the consequences

74. Work is considered substandard only when it hurts the company’s interests
75. Each person in my immediate work unit decides for themselves what is right and wrong

Employee Attitudes

Scenario 1:
John’s church group is sponsoring a bake sale. John decides to send an e-mail to the university’s faculty list to promote the event.

76. If you were John, what is the likelihood that you would send the e-mail?
77. I could see myself sending the e-mail if I were in John’s position.

Scenario 2:
Sally’s department recently purchased a single licensed copy of Microsoft Office. Sally decides to make a copy of the software and shares it with a colleague that works in a different department.

78. If you were Sally, what is the likelihood that you would copy and share the software?
79. I could see myself copying and sharing the software if I were in Sally’s position.
Scenario 3:
George’s department purchases him a laptop computer to assist with a university related research project. After completing the research, George takes the laptop home, begins installing personal software, and uses the computer for personal, non-university related activities.

80. If you were George, what is the likelihood that you would use the laptop for personal activities?
81. I could see myself using the laptop for personal use if I were in George’s position.

Scenario 4:
Pam decided to join a local community organization that sponsors a number of community blood drives. She agrees to develop and maintain a web site for the group and uses her university provided web space to host the site.

82. If you were Pam, what is the likelihood that you would use the university provided web space to host the site?
83. I could see myself using the university provided web space to host the site.

Scenario 5:
Arlene has volunteered to serve as the events coordinator for a local non-profit children’s museum. To help save the group money, Arlene uses her department’s color printer to print flyers that will highlight and promote the upcoming events sponsored by the museum.

84. If you were Arlene, what is the likelihood that you would use the departmental color printer to help the museum with their printing costs?
85. I could see myself using the departmental color printer to help the museum with their printing costs.
Dear USG Faculty member:

I am a doctoral student at Georgia Southern University, pursuing an Ed. D. in Educational Leadership. As a critical part of my doctoral dissertation work, I am conducting a survey on University System of Georgia faculty attitudes toward work and management. You have been randomly selected from all faculty in the University System of Georgia. In order for me to complete my research and degree, it is critical that those selected complete the questionnaire. Your voluntary participation is requested. The questionnaire will take approximately 20 minutes. Your name will not be recorded on the questionnaire and your responses will be anonymous. Again, your participation is voluntary and you may choose to not answer all of the questions on the questionnaire.

The survey is available at http://www.surveymonkey.com/s/MDYGBXQ. The password to access the survey is H10157.

If you have any questions pertaining to this study, please contact Mr. Kevin Floyd at kfloyd13@georgiasouthern.edu, Dr. Teri Melton at tamelton@georgiasouthern.edu, or the Georgia Southern Office of Research Services and Sponsored Programs at IRB@georgiasouthern.edu.

Thank you for your assistance.

Kevin Floyd
APPENDIX H

INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL

| Georgia Southern University |
| Office of Research Services & Sponsored Programs |
| Institutional Review Board (IRB) |

Phone: 912-478-0843
Veazey Hall 2021
P.O. Box 8005

Fax: 912-478-0719
IRB@GeorgiaSouthern.edu
Statesboro, GA 30460

To: Kevin S. Floyd
106 Cresthaven Court
Byron, GA 31008

cc: Charles E. Patterson
Associate Vice President for Research

From: Office of Research Services and Sponsored Programs
Administrative Support Office for Research Oversight Committees (IACUC/IBC/IRB)

Date: January 8, 2010

Subject: Status of Application for Approval to Utilize Human Subjects in Research

After a review of your proposed research project numbered: H10157, and titled “Leadership Styles, Ethics Institutionalization, Ethical Work Climate, and Employee Attitudes Toward Information Technology Misuse in Higher Education: A Correlational Study”, it appears that your research involves activities that do not require full review by the Institutional Review Board according to federal guidelines.

According to the Code of Federal Regulations Title 45 Part 46, your research protocol is determined to be exempt from full IRB review under the following exemption category(s):

Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (I) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (II) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Therefore, as authorized in the Federal Policy for the Protection of Human Subjects, I am pleased to notify you that your research is exempt from IRB approval. You may proceed with the proposed research.

Sincerely,

Eleanor Haynes
Compliance Officer
To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material:

Instrument: *Multifactor Leadership Questionnaire*

Authors: *Bruce Avolio and Bernard Bass*

Copyright: *1995 by Bruce Avolio and Bernard Bass*

for his/her thesis research.

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

MLQ, © 1995 Bruce Avolio and Bernard Bass. All Rights Reserved. Published by Mind Garden, Inc.,
APPENDIX J

CORRELATIONS BETWEEN LEADERSHIP, ETHICS, AND MISUSE VARIABLES

Table J1

<table>
<thead>
<tr>
<th></th>
<th>TFL</th>
<th>TSL</th>
<th>LFL</th>
<th>IET</th>
<th>EET</th>
<th>EWC</th>
<th>BWC</th>
<th>PWC</th>
<th>ITE</th>
<th>ITP</th>
<th>ITW</th>
<th>ITC</th>
<th>ITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFL</td>
<td>---</td>
<td>.859**</td>
<td>-.623**</td>
<td>.717**</td>
<td>.419**</td>
<td>-.420**</td>
<td>-.420**</td>
<td>.457**</td>
<td>.005</td>
<td>-.037</td>
<td>-.075</td>
<td>.006</td>
<td>-.111</td>
</tr>
<tr>
<td>TSL</td>
<td>---</td>
<td>-.670**</td>
<td>.672**</td>
<td>.422**</td>
<td>-.497**</td>
<td>.525**</td>
<td>.424**</td>
<td>.008</td>
<td>.014</td>
<td>-.010</td>
<td>.089</td>
<td>-.040</td>
<td></td>
</tr>
<tr>
<td>LFL</td>
<td>---</td>
<td>-.552**</td>
<td>.367**</td>
<td>.453**</td>
<td>-.489**</td>
<td>-.340**</td>
<td>.020</td>
<td>-.060</td>
<td>.040</td>
<td>-.057</td>
<td>.027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IET</td>
<td>---</td>
<td>.420**</td>
<td>-.681**</td>
<td>.660**</td>
<td>.614**</td>
<td>-.008</td>
<td>-.004</td>
<td>-.073</td>
<td>-.009</td>
<td>-.093</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EET</td>
<td>---</td>
<td>-.374**</td>
<td>.361**</td>
<td>.360**</td>
<td>.044</td>
<td>.049</td>
<td>.015</td>
<td>.082</td>
<td>.040</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EWC</td>
<td>---</td>
<td>.626**</td>
<td>.519**</td>
<td>-.090</td>
<td>-.036</td>
<td>-.015</td>
<td>-.007</td>
<td>-.075</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BWC</td>
<td>---</td>
<td>.642**</td>
<td>.083</td>
<td>.082</td>
<td>.089</td>
<td>.038</td>
<td></td>
<td>.101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PWC</td>
<td>---</td>
<td>.066</td>
<td>-.032</td>
<td>.029</td>
<td>-.037</td>
<td>-.102</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITE</td>
<td>---</td>
<td>.210**</td>
<td>.349**</td>
<td>.290**</td>
<td>.332**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITP</td>
<td>---</td>
<td>.373**</td>
<td>.362**</td>
<td>.358**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITW</td>
<td>---</td>
<td>.411**</td>
<td>.509**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITC</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITS</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. TFL = Transformational Leadership, TSL = Transactional Leadership, LFL = Laissez-Faire Leadership, IET = Implicit Ethics Institutionalization, EET = Explicit Ethics Institutionalization, EWC = Egoism Ethical Work Climate, BWC = Benevolence Ethical Work Climate, PWC = Principle Ethical Work Climate, ITE = IT E-mail Misuse, ITP = IT Printing Misuse, ITW = IT Web Misuse, ITC = IT Computer Misuse, ITS = IT Software Piracy

** p < .001