FACTORS INFLUENCING THE UNETHICAL BEHAVIORAL INTENTION OF COLLEGE BUSINESS STUDENTS: THEORY OF PLANNED BEHAVIOR

Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Lynn University

By

Cathileen E. Montesarchio

2009

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

ProQuest LLC
789 E. Eisenhower Parkway
PO Box 1346
Ann Arbor, MI 48106-1346

Order Number: _____

FACTORS INFLUENCING THE UNETHICAL BEHAVIORAL INTENTION OF COLLEGE BUSINESS STUDENTS: THEORY OF PLANNED BEHAVIOR

Montesarchio, Cathileen E., Ph.D.

Lynn University, 2009

U.M.I.
300 N. Zeeb Road
Ann Arbor, MI 48106

APPROVAL OF DISSERTATION

FACTORS INFLUENCING THE UNETHICAL BEHAVIORAL INTENTION OF COLLEGE BUSINESS STUDENTS: THEORY OF PLANNED BEHAVIOR

By Cathileen E. Montesarchio

Ralph Norcio, Ph.D. Dissertation Committee Chair	Date
Jim Miller, Ph.D. Dissertation Committee Member	Date
Karen Casey-Acevedo, Ph.D. Dissertation Committee Member	Date

ACKNOWLEDGMENTS

The past six years have been comparable to a rollercoaster ride. I would like to thank God for providing me with the strength to complete this dissertation. I would like to thank Dr. Ralph Norcio for his patience, support, and expertise. Without his advice and his "hurry-up" philosophy I might still be typing. I would also like to thank my committee members, Dr. Jim Miller and Dr. Karen Casey-Acevedo for their knowledge and contributions. I am thankful to Dr. Joan Scialli for her continuous feedback and guidance, which helped bring this project to fruition. I would also to thank Dr. Nathalie Lynch-Walsh, my editor and friend, who provided her shoulder to lean on. Nathalie, your encouragement, assistance, and patience have been an integral part of this dissertation process.

I am grateful to the business faculty at Broward Community College for allowing me to enter their classrooms, and to the students who took the time to complete the survey. I would like to thank Beth Tattershall for taking time out of her busy schedule to help me finish my proposal. To Dr. Peggy Turcotte, the Queen, words cannot express the gratitude and admiration I have for you. You cannot imagine how much your periodic question, "What is the status of your paper?" motivated me to keep jumping those hurdles. Dr. T., you truly are an angel.

To my parents and family, your patience and words of encouragement have been priceless. Thanks to my little angel Zima, for her perfectly timed distractions. Finally, I dedicate this dissertation to my husband Ronnie, who has suffered through several degrees, a CPA exam, and this doctoral dissertation. Ronnie, your love and support has made this process achievable and I am truly blessed to have you in my life.

ABSTRACT

The growth of inappropriate accounting transactions, corporate scandals, and fraudulent financial reporting has created an environment of mistrust of corporations and the people who manage them. There is a need to understand the underlying factors associated with these trends, and to apply that knowledge to the education of the future generation of managers--students in pursuit of a business degree. Academic cheating has been found to correlate with fraudulent financial activity (Chen & Teng, 2006; Rod & Richardson, 1994). Understanding the attitudes and intentions of college students, when faced with a difficult decision, is vital (Peppas & Diskin, 2001).

From an accessible population of approximately 805 community college business students enrolled in core business classes, 485 students participated in this exploratory (comparative) and explanatory (correlational) study. Multiple regression analyses tested hypothesized relationships between student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and intention to fraudulently report financial information using the *Ten-Item Personality Inventory (TIPI)* developed by Gosling, Rentfrow, and Swan (2003), and a scenario based on the constructs related to the *theory of planned behavior (TPB)* developed by Ajzen and Fishbein (1980).

Results of psychometric analyses indicated estimates of TIPI reliability were lower among this sample compared to previous samples, while TPB estimates were consistent with previous studies. Results of factor analyses found that although the attitude and intent items formed one, rather than two, factors, the factor structure of the subjective norm and perceived behavioral control constructs were supported. The TIPI analyses produced four, rather than five dimensions.

Female students were more conscientious, while male students were more open to experiences. Results of hypotheses testing indicated two of the five personality dimensions, conscientiousness and agreeableness, followed the hypothesized order of importance in explaining the intention to fraudulently report financial information. TPB constructs, attitude and subjective norm, were positive explanatory variables of intent. A more extensive personality inventory instrument may offer a better understanding of the relationship between personality dimension and intention. The use of a national sample may provide insight into trends occurring in the college classroom, and improve the generalizability of future results.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION TO THE STUDY

Introduction and Background

The growth in the number of recent U.S. corporate accounting scandals suggests the need to evaluate the environment. Although the media has made celebrities out of the accused swindlers, embezzlers, and insider traders of many Fortune 500 companies, the news stories have also painted an unflattering picture of corporate America. A report by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (1999) identified nearly 300 companies that engaged in some degree of fraudulent financial reporting in the 11 years examined. The COSO report revealed five categories of fraudulent reporting for the 200 randomly selected companies examined: (1) net losses were reported and most companies were not listed on the major stock exchanges; (2) top senior executives (CEO and/or CFO) were named as the perpetrators, audit committees rarely met, and the board of directors was dominated by insiders or related parties; (3) fraud was present for several reporting periods, and most occurrences involved overstating revenues and assets, with the average fraud being approximately $25 million; (4) more than half of the fraud cases were audited by a Big Eight/Six audit firm, and over half contained an unqualified opinion in the last year of the fraud; and (5) the consequences for the company included bankruptcy and/or penalties and delisting by national exchanges, and senior executives were personally liable and required to pay restitution.

The next generation of corporate America may be influenced by the current trends in the business world. "Unethical behavior doesn't suddenly arise after one has reached

the level of corporate vice president or CEO" (Hume and Smith, 2006, p. 49). Fisher, Fullerton, and Woodbine (1999) recommend fostering ethical conduct to offset the impact of these images and related issues on our future decision makers. College students in the process of earning a business degree are aware of the current problems, as they are involved in research and discussions in their classes. The dilemma found in academia is on teaching ethics in the classroom. "In response to increasing concerns for business ethics, researchers have investigated the role education plays in the development of future business executives" (Coleman & Mahaffey, 2000, p. 122). Much of the research focuses on cheating and academic dishonesty (Coleman & Mahaffey, 2000; Chang, 1998; Duizend & McCann, 1998).

Another aspect of the ethics concern was the method used to teach business ethics. "Most researchers and educators appear to agree that ethics education exerts a positive influence on students, but we do not yet know enough about the appropriate pedagogies to use when teaching ethics" (Cagle & Baucus, 2006, p. 216). Instruction methods include lecture, written cases and vignettes, and video vignettes. Fisher et al. (1999) characterized ethics as rules of conduct of human behavior and principles of the right or wrong of one's actions.

One problem stems from the use of hypothetical situations to which a student may not relate. A traditional student in an undergraduate program with varying amounts of work experience has not been exposed to real world scenarios and may have difficulty linking the two. While Harvard University includes ethics as a core course within its curriculum, some schools treat ethics as an elective business course, while others leave ethics training in the philosophy department. "Ten years ago, ethics was typically

offered as an elective course, if it was included in course offerings at all" (Hume & Smith, 2006, p. 49). Farnsworth and Kleiner (2003) reported more ethics training was found at the graduate level versus the undergraduate level.

"It can be argued that school is to students what employment is to workers" (Coleman & Mahaffey, 2000, p. 127). In studies conducted on academic cheating and declared majors, research has noted that business majors tend to be more lenient or lax on the definition of cheating and/or more likely to engage in cheating (Rod & Richardson, 1994; Hosmer, 1999; Roig & Ballew, 1994). This should be a concern for employers, as our graduates in the field of business are our future corporate executives. "If business school students do indeed cheat more while in school, and if that behavior indicates a predisposition to engage in dishonest workplace behavior, then these are issues that should be of concern to both business schools and business organizations" (Klein, Levenburg, McKendall, and Mothersell, 2007, p. 198).

Karassavidou and Glaveli (2006) found business students who participated in their study of ethical versus unethical attitudes tended to lean towards the unethical area when it related to using company resources and information for personal use. Ultimately, the end result may be costly to future employers and an already cynical society. Businesses lose billions of dollars each year stemming from employee theft (Mustaine & Tewksbury, 2002). They suggest the cost to the average business from employee theft is ten times greater than the usual street crime, and that employee theft is an underdeveloped area of examination. Mustaine and Tewksbury (2002) maintain that opportunity and simple access are the critical components for employee theft.

Coleman and Mahaffey (2000) suggest ethics literature does not provide a significant amount of theory related to personality, unethical decision making, and the related constructs. In the studies conducted on unethical behavior, cheating, and white-collar crime, personality type has been one of the variables used to try to explain the relationships. From Type A (rushed, aggressive, and ambitious) and Type B (accommodating, supportive, and relaxed) personality types to the positive extrovert, disagreeable businessman, and neurotic, there is a persistent association with unethical behavior (Feeley, 2006; Sankaran & Bui, 2003; Coleman & Mahaffey, 2000).

Conflicting results have been reported relating to the role gender plays in influencing ethical or unethical behavior. Some research has found females are less likely to accept unethical or questionable behavior compared to males (Fisher et al., 1999; Okleshen & Hoyt, 1996; Cagle & Baucus, 2006; Coleman & Mahaffey, 2000; Karassavidou & Glaveli, 2006). Other researchers suggest insignificant differences in the gender effect when presented with ethical dilemmas (Dellaportas, 2006; Chan & Leung, 2006; Whitley, Nelson, & Jones, 1999).

Smyth and Davis (2003) include plagiarizing, using unauthorized sources to write papers and cases, and collaboration for completing take-home exams as references for academic cheating. Klein et al. (2007) reported copying or collaborating on assignments and disclosing information about exams as the most widespread cheating behaviors by business students. "Cheating is a disregard of legitimate rules of conduct and ethical standards and its effects can be detrimental to a student's future" (Coleman & Mahaffey, 2000, p. 127). The explanations for student cheating are as varied as the actual cheating methods. The literature has cited numerous motives, including competition for grades

and grade point averages, stress from fear of failure, peer pressure, procrastination, and sheer laziness.

Chen and Tang (2006) researched the attitudes of business and psychology students toward unethical behavior and found there was a greater tendency among the business students to concentrate on making money, focus on the bottom line, and face questionable ethical behavior. Business classes teach students how to create wealth and maximize profits for the shareholders of the company. Duizend and McCann (1998) referenced Beggs and Lane's (1989) survey of 222 business students, reporting students felt chief executive officers (CEOs) were less concerned with people, ethics, and social responsibility, and more concerned with the financial goals of the organization. Students are taught that shareholder value and bottom lines are the most important concern. Chen & Tang (2006) suggested corporations employ profit-sharing benefits for high ranking executives, geared toward aligning both the interests of those executives and maximizing shareholder wealth.

Purpose

The general purpose of this exploratory (comparative) and explanatory (correlational) study was to examine the relationship among student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intentions to fraudulently report financial information among community college business students. The specific purposes of this study were as follows:

1. To describe the student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intentions to

fraudulently report financial information among community college business students.

2. To determine whether there are differences in personality dimensions according to community college business student characteristics.
3. To determine whether there are differences in attitude, subjective norm, perceived behavioral control, and behavioral intentions to fraudulently report financial information among community college business students.
4. To test the order of importance among the five personality dimensions in explaining intention to fraudulently report financial information among community college business students.
5. To test the relationship among attitude, subjective norm, and perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college business students.
6. To test the relationship among business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control and behavioral intention of fraudulent reporting of financial information by community college business students.

Definitions of Terms

Student Characteristics

Theoretical Definition

The collection of demographic data provides information about the group of people being surveyed (Bureau of Labor Statistics, 2007). The Bureau of Labor Statistics uses the demographic categories of gender, age, race, and ethnic origin to report

statistical data, with ethnic origin referring to persons of Hispanic or non-Hispanic origin (Bureau of Labor Statistics, 2007).

Operational Definition

Student Characteristics (attribute variables) were measured using nine dichotomous, multiple-choice, and fill-in-the-blank items comprising Part I of the *Student Characteristics Survey*. The nine items are as follows: 1) age in years (fill in the blank) 2) gender (dichotomous); 3) marital status (multiple choice); 4) race (multiple choice); 5) ethnicity (dichotomous); 6) declared major (multiple choice); 7) highest education level (multiple choice); 8) employment status (multiple choice); and 9) occupational level (multiple choice). (See Appendix A, Part I: Student Characteristics.)

Personality Dimensions

Theoretical Definition

Digman and Inouye (1986) state a normal human personality can be described using five general dimensions (*Five Factor Model of Personality):* 1) openness to experiences (imagination, curiosity, and intellectualism); 2) conscientiousness (impulse control, planning, and organization); 3) extraversion (sociable and outgoing); 4) agreeableness (altruism and empathy); and 5) neuroticism (emotional instability). The *Ten-Item Personality Inventory (TIPI)* is a brief measure of the *Big-Five* framework, and was developed by Gosling, Rentfrow, and Swann (2003) as a practical alternative to the lengthy *Big-Five* instrument.

Operational Definition

Personality Dimensions were measured in Part II of the survey instrument using the *Ten-Item Personality Inventory Questionnaire (TIPI).* Each of the ten items contains

a set of two words separated by a comma (extraverted, enthusiastic; critical, quarrelsome; dependable, self-disciplined; anxious, easily upset; openness to new experiences, complex; reserved, quiet; sympathetic, warm; disorganized, careless; calm, emotionally stable; and conventional, uncreative), using the common stem, "I see myself as." The student selected from one of the following seven items: 1 = strongly disagree; 2 = moderately disagree; 3 = disagree a little; 4 = neither agree nor disagree; 5 = agree a little; 6 = moderately agree; and 7 = strongly agree (see Appendix A, Part II: *Ten-Item Personality Inventory*).

Theory of Planned Behavior

Theoretical Definition

Ajzen's (1980) *theory of planned behavior (TPB)* provides a framework for explaining, predicting, and influencing human behaviors based on modifiable factors for attitude (a person's beliefs that the behavior leads to certain outcomes and the personal evaluation of those outcomes), subjective norm (the person's beliefs that specific individuals or groups think they should or should not perform the behavior, and their motivation to comply with specific referents), and perceived behavioral control (the extent to which a person feels able to perform the behavior) (Ajzen and Fishbein, 1980). In this study, the framework for ethical and unethical intention—the immediate determinant of the action, to fraudulently report financial information by community college business students is of interest.

Operational Definition

For this study, the *theory of planned behavior* and its constructs were measured by the students reading a hypothetical scenario and answering a 12-item questionnaire

associated with the scenario. The survey instrument had four series of three questions (twelve in total) related to intention (responses range from extremely probable to extremely improbable), attitude (responses range from good to bad; wise to foolish; and beneficial to harmful), subjective norm (responses range from extremely probable to extremely improbable; unlikely to likely; and disagree to agree), and perceived behavioral control (responses range from strongly agree to strongly disagree) (see Appendix A, Part III: *Theory of Planned Behavior*).

Justification

Scholarly research in the field of student cheating, ethical intentions, and the implications thereof has identified the need for further research into the subject of dishonest behaviors at the college level in attempting to understand the role student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intentions play in fraudulent reporting of financial information. The consequences of these actions have a far-reaching impact in our society because these students are the future executives of small businesses and corporate America. Furthermore, with the growing corporate scandals being uncovered, corrupt business practices reported, and the mismanagement of assets by executives, it is vital for the future business community to understand and take action to help lessen the ethical shortcomings.

Few empirical studies have examined the relationship between student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, behavioral intentions, and reporting fraudulent financial information. This study was justified, considering its significance in expanding the understanding of community

college business students' ethical intentions towards fraudulently reporting financial information. Additionally, this study contributes to the scholarly knowledge of intent to report fraudulent information by community college business students. This study was researchable because the concepts from the theoretical framework and hypotheses were measured and tested. This study was feasible because community college business students were accessible to the researcher, and the business department dean was accessible, allowing the study to be conducted in a reasonable period of time.

Delimitations and Scope

1. This research study was limited to first- and second-year business students currently enrolled in a business-related course (Principles of Accounting, Business Law, Economics-micro and macro, Introduction to Business and Principles of Marketing) at a community college in south Florida.
2. This explanatory and exploratory study investigated the relationships between student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control, and behavioral intentions to fraudulently report financial information among community college business students.
3. Respondents were from the accessible population of approximately 805 first- and second-year community college business students who were enrolled in a business-related course.
4. Data analyzed included student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intentions to fraudulently report financial information.

Chapter I provided an introduction to the need to increase and continue the probe into fraudulent financial reporting by community college business students, and the impact such reporting has on students entering the corporate workplace. In addition, Chapter I described the purpose of the study, the variables and definitions, the justification for the study, and the list of delimitations and scope of the study as applied to fraudulent financial reporting.

Chapter II will provide a review of the literature and theoretical framework leading to the gaps explored in the study, such as the limited number of empirical studies investigating the community college business student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intentions to fraudulently report financial information.

CHAPTER II

REVIEW OF THE LITERATURE, THEORETICAL FRAMEWORK, RESEARCH QUESTIONS, AND HYPOTHESES

Review of the Literature

Defining Corporate Fraud

Vanasco (1998), in part IX of his analysis, presented the common types of white-collar crimes, beginning with employee fraud, embezzlement, kiting, lapping, larceny, and pilferage. Many of the types of fraud occur concurrently and at all levels within the organization. Shapiro (1990) suggests delving into past white-collar perpetrators' appearances and social status and investigate how they initiate and abuse trust. Much of the research explored the types of fraudulent financial statement reporting corporate executives employed to deceive interested parties and the laws enacted to discourage fraudulent financial reporting. "The most prominent moral issues that seem to be universal in every organization [include] 1) taking things that do not belong to you; 2) saying things that you know are not true; 3) false impressions; 4) conflict of interest and influence buying; 5) hiding versus divulging information; 6) unfair advantage; 7) personal decadence; 8) interpersonal abuse; 9) organizational abuse; 10) rule violations; 11) accessory to unethical acts; 12) moral balance" (Cherrington & Cherrington, 1992, p. 256).

Theories and Models to Explain Factors Influencing Corporate Fraud

Passas (2001) analyzed the impact and consequences of fraudulent financial reporting by outlining a theoretical framework. This framework attempts to illustrate the motives and processes of fraudulent financial reporting and offers a qualitative case study

to support the outcomes using summarized case studies of the Gulf Group and the Bank of Credit and Commerce International. These two firms were involved in the largest accounting fraud in European history. "A methodological issue frequently raised about qualitative case studies is that they may not be statistically generalisable, even though they are tremendously valuable for theoretical generalisations" (Passas, 2001, p. 128). The author presented an in-depth analysis of the Gulf Group and Bank of Credit and Commerce International cases based on trial data, internal and external company records, and secondary literature. Reported were overviews of the organization, a review of the fraud executed, as well as the insight into the reason fraud was committed.

Beasley's (as cited in Passas, 2001) review article about the Committee of Sponsoring Organizations Report of the Treadway Commission (COSO), reported that 83% of fraudulent financial statements involved the complicity of either the chief executive officer or the chief financial officer of the company concerned. Strains and pressures, rationalization and normative referents, culture and anomalies were all listed as independent variables in the case study of the organization. It appears to be difficult to generalize the results of this single case study at a global level. The mutual connection of money between the two firms and the threat of bankruptcy are accurate, although most fraud is committed within the firm; even the authors in their analysis presented material related to theories that are characteristic of an individual firm. One of the limitations of this analysis is the generalization of the data; perhaps comparing and contrasting the number of colluding firms versus individual firms would provide a better analysis.

Scholarly articles hypothesize that fraudulent reporting has an underlying foundation in an individual's ethical and moral principles, which inevitably leads to

social, economic and criminal implications. Jennings (2003) found that Enron, Adelphia, WorldCom, and the other corporations reported in the media have all exhibited mismanaging of funds, deficiency related to oversight, and basic poor decision making. But the reality is that the tangible aspects of financial collapse begin with a severe erosion and eventual ruination of corporate and personal ethics" (Jennings, 2003, p. 47). Jennings (2003) theorized that there are common traits in the fraudulent financial reporting of a company: a structure which assisted in the ethical collapse, pressure to maintain number goals and performance, fear and silence, youth and inexperience of senior management teams, and a culture of social responsibility. Jennings (2003) literature posed several questions including: Where were the accountants, external auditors, the board, the analysts, the media, etc.? The discussion presents views from the 'you should have,' or 'I told you so' direction; and proposes eight theoretical prevention possibilities, though all of the proposed prevention suggestions appear to be difficult to implement. Geriesh's (2003) research suggests when a firm has improperly applied generally accepted accounting principles, more often than not there is a culture within the organization where related parties transactions occur, prior violations had been reported, and a Certified Public Accountant is not at member of the management team.

Daboud, Rasheed, Priem, and Gray (1995) conducted a study about the characteristics related to top management characteristics and corporate illegal behavior. Their review of previous empirical research presented six hypotheses and suggested that top management team (TMT) characteristics affect relationships between context and illegal corporate activity. Though Daboud et al.'s study lacked current empirical studies, it did offer consistent information of current studies related to organizational illegal

activity, external and internal antecedent factors, and characteristics of top management. Independent variables and factors externally influencing such illegal corporate behaviors by executives are industry and environment, whereas size, organizational slack and performance, strategies, control systems, and history were reported as internal factors that influence illegal corporate behavior. Both internal and external factors are the foundation for neutralizing TMT characteristics. The authors, Daboud et al. include age, length of service, functional background, MBA education, military service, and homogeneity/heterogeneity as characteristics and influential segments in their TMT model. Daboud et al. (1995) further examined the relationship between TMT characteristics and corporate illegal activity.

The results of their revised TMT model demonstrate that the TMT characteristics alone do not predict illegal activity, but may curtail such misconduct. The authors also try to parallel the development of ethical managers with current Master of Business Administration (MBA) educational levels. There is difficulty in understanding the flow and impact of the TMT characteristics presented, and, in addition, ethics is an internal personality characteristic that would be challenging to measure via MBAs. Perhaps a study measuring the geographic locations, fraudulent activities reported, and school where the masters degree was earned, as well as the subject of the degree (not just limited to MBAs) would provide more insight.

"The Big Six alone between 1990 and 1993 paid out over $1 billion to settle cases related to fraud...because of the auditor's inability to detect fraud and a related material misstatement" (Glover & Aono, 1995, p. 3). Glover and Aono (1995), in *Changing the Model for Prevention and Detection of Fraud,* offer the rationale for a model detecting

fraud. The theoretical article discussed the micro and macro perspectives of fraud, including the social, economic, and global effects. "The status of recent offenders including CEOs and congressional members further erodes the value system since it sends out a conflicting message of social ethics and responsibility" (Glover & Aono, 1995, p. 4). Many firms have cultivated fraud within their organizations; e.g., Sears, hoping for peak performance, established a compensation structure based on sales quotas and later encountered a media crisis when the auto shop was featured on national television for overcharging customers (Glover & Aono, 1995).

Glover and Aono (1995) proposed constructs for fraud detection, including the interaction of corporate culture (variables such as employee turnover, complaints and product quality, etc.) and industry traits (strategies, market trends, operational issues, etc.) representative of management's philosophy. Specialists/professionals should be hired to assist in understanding the fundamental guiding principles of a firm (Glover & Aono, 1995). This alternative approach of the theory utilizing support systems can assist in the prevention and detection of fraud by identifying the early warning signs of fraud (Glover & Aono, 1995). The authors suggested future areas of research focusing on the application of this proposed theory. The corporate culture/climate and industry should be one of the most significant factors when examining a firm for financial statement fraud. The above may be the premise for, and why, a firm may report fraudulent information.

Influence of Environmental Factors on Fraudulent Behavior

Regulatory Factors and Fraudulent Behavior

"Broadly stated, the fundamental problem is the need for a large group of corporate outsiders (shareholders) to be able to control the incentives of a small group of

corporate insiders (management)" (Weinberg, 2003, p. 3). In an analysis of corporate American firms, Forbes.com published in July 2002, a corporate scandal page that listed over twenty companies that were under investigation by the SEC (as cited in Weinberg, 2003). Weinberg (2003) proposed tools for shareholders that would enable them to manage the managers of their firms. Weinberg (2003) suggested that the fundamental problems associated with fraudulent financial reporting related to the governing body of the firm, corporate governance problems, (i.e., performance measurement), and the governmental authoritative boards that have been enacted to protect shareholders and hold management of the firm accountable, to the best of their knowledge, to prevent misleading financial statements.

Weinberg (2003) suggested items that may alleviate fraudulent activities such as board of director independence from top levels of management and altering the compensation agreements between management and the corporation. In a recent study of corporate governance in the aftermath of fraud, Farber (2005) considered the resources spent on restoring trust and restructuring the board and its management. He felt it was important to analyze the economic benefits, if any, after improvements were implemented. The ultimate problem presented within this literature is that shareholders (the owners of the firm) are not always privy to the inner mechanisms of the corporation. Weinberg (2003) questioned the impact of the Sarbanes-Oxley Act (2002) and the Act's attempt to improve corporate behavior, Weinberg (2003) suggested the Act will not be beneficial in reducing the fraudulent financial reporting. "Incentives for deceptive accounting will never be eliminated, and even a firm that follows all of the formal rules

in the Sarbanes-Oxley Act will find a way to be deceptive if the expected payoff is big enough" (Weinberg, 2003, p. 19).

Wilson, La See, and Choo (2004) randomly sampled 1,700 Certified Public Accountants (CPAs) licensed in the state of California. Their study considered the effect of the Sarbanes-Oxley Act of 2002. The study investigated questionable accounting practices, such as solicitations to circumvent Generally Accepted Accounting Principles (GAAP) and aggressively push GAAP. Based on the responses, the authors noted that of those respondents who were solicited to circumvent GAAP, the instigators were: 40% by the CEO, 37% CFO, with corporate counsel and the comptroller comprising the remaining 23%. Of those respondents that were asked to aggressively push the limits of GAAP, the instigators were: 58% CEO, 26% CFO, with corporate counsel, comptroller and accounting manager comprising the remaining 16%. The authors concluded that "it is a significant and important discovery that CPAs have been solicited by corporate leaders to either circumvent or aggressively push GAAP standards in both public and private companies" (Wilson, La See, & Choo, 2004, p. 16).

Vanasco's (1998) review of previous empirical and theoretical literature related to fraudulent financial reporting and the measures auditors use to detect the misrepresentation and the role of governing bodies issuing the standards. Vanasco (1998) examined and detailed documented court cases charged by, and within the parameters of, the Securities and Exchange Commission (SEC), Racketeer Influence and Corrupt Organizations Act (RICO), and common law (criminal and civil). Vanasco (1998) defined and postulated the following classifications in a systematic order: types of fraud, the structure of the governing and authoritative bodies enforcing the laws, the

punishment and sentencing and investigative constraints, and the weaknesses and strengths of detecting and deterring fraudulent reporting of financial statements. Vanasco (1998) consistently supported and synthesized the data, citing other scholarly literature to provide empirical validity. The author did not present a visual model depicting the relationships between the conceptual framework and the constructs of the literature.

Vanasco (1998) provided a detailed account of the limitations, failures, and violations of the bodies that are responsible for protecting the public from fraudulent financial reporting. Vanasco (1998) indicated accounts reported in the financial statements that are vulnerable to fraud and provided the weaknesses and methods that may assist in detection and prevention of fraud within these accounts. Vanasco suggested those responsible for auditing corporate financial statements should be preemptive in nature when examining a firm's financial information, and "the accounting profession needs to address the public's unrealistic expectations..." (Vanasco, 1998, p. 61). The auditors are subject to such constraints, such as 'the numbers' alone without analyzing other financial documents, and industry trends. A review of the literature reveals that companies rely too much on auditors to minimize losses.

Corporate Codes of Conduct and Fraud

Brief, Dukerich, Brown, and Brett (1996) found in their three-part study of the Treadway Commission Report recommendations that emphasis placed on personal values of top management and codes of conduct within the corporation may not support the preclusion of fraudulent financial reporting. Brief, Dukerich, Brown, and Brett's (1996) first focus was was on the values proposed by managers in considering fraudulent financial reporting. Studies two and three "addressed three questions, (1) What effects, if

any, might codes of conduct have on fraudulent financial reporting? (2) What effects, if any, might codes specificity have on fraudulent reporting? And (3) What effects, if any, might codes and their specificity have on the relationship between personal values and fraudulent reporting?" (Brief et al., 1996). Interestingly, almost half of the subjects sampled were likely to report fraudulent financial reporting of information and, although the personal values appear in the results of the analysis, they were not consistent with the Treadway report analysis. Brief et al. (1996) also noted that corporate codes of conduct do not necessarily reduce the likelihood of reporting fraudulent financial data. The authors propose that one measure to discourage fraudulent financial reporting may include reviewing the ethical climate in which one is employed, and suggested more empirical research in this area.

Higgs-Kleyn and Kapelianis (1999) conducted a study of South African professionals and evaluated the role of professional codes that are believed to be applied to lawyers, engineers, and accountants and compared corporate and professional codes across occupations (Higgs-Kleyn & Kapelianis, 1999). Their literature review was thorough in comparing and contrasting theories investigating ethical issues and noted conflicts between the corporate codes (those of the firms employed) and those of a professional association.

A stratified random sample of 200 chartered accountants, engineers, and lawyers resulted in a 36.2% response rate from the mailed three-part questionnaire, which included basic demographic data, a personal awareness of colleague violation of a known set of professional codes, and if the respondent had ever experienced a conflict between such codes. Data collection procedures were clearly described. The Kruskal-Wallis One

Way ANOVAs was used to test proposition one (ethical tendencies, need for professional codes, awareness of the contents, peer contravention and the acceptability of such, and choice when faced with a conflict between codes). The Mann-Whitney U test was used to test proposition two (comparisons of professionals working amongst other professionals). A binomial test was used for proposition three (the impact of corporate codes when professional codes conflict). Kendall's Rank Order Correlation (0.032) was used to test proposition four (the effect of penalties associated with unethical behavior). Results reported 61.5% of the participants felt contravention of the code was unacceptable, 82.9% would adhere to a professional code above a corporate code, and there was no relationship between penalty perception and the frequency with which the code of conduct contravened--a conflict in the literature was noted for proposition four. Higgs-Kleyn and Kapelianis' (1999) findings concluded that professional codes are essential (particularly for lawyers), and professionals find it objectionable when colleagues disregard the codes. Based on this study, it appears professionals that adhere to stated professional codes found a need for continued adherence to employee codes. Future studies should include reasons why perceived contravention is so high.

Financial Performance Expectations and Corporate Fraud

The constant pressure on corporate management to meet or exceed analyst expectations increases the risks of reporting misrepresented financial information. Earnings report expectations of analysts and the markets burden management to meet often unrealistic levels. Weirich conducted a research study (as cited in Cox & Weirich, 2002), which revealed that most of the fraudulent reporting in the financial statements did

not involve complicated transactions; most of the misstatements were basic financial transactions—nearly 70% involved an overstatement of revenues.

Cox and Weirich (2002) conducted an exploratory study of the stock market's reaction to fraudulent financial reporting announcements (published in the Wall Street Journal and confirmed by the SEC) of public firms between the years of 1992 to 1999, resulting in a sample of 27 firms. Cox and Weirich's (2002) review of previous research focused on the subsequent impact litigation had on the firm, relationships between the board of directors (proportion of insider and/or outsider members), and the presence of an audit committee, when the firm was faced with fraud. Data collection procedures were clearly described. The authors tested their hypotheses to determine what the stock market's reaction was after fraudulent financial reporting was announced. Tables presented include the market capitalization impact, empirical findings of statistical data related to the announcements of fraudulent findings, and the overreaction hypothesis.

Influence of Personality on Fraudulent Behavior

Researchers have used personality dimensions and personality types as a determinant in measuring a range of activities, such as credit card misuse among college students (Pirog & Roberts, 2007), exercise behavior (Rhodes & Courneya, 2003), career choices, counseling and development (Gregory, 1993; Arbona, 2000), time use efficiency (Kelly & Johnson, 2005), and insider trading (Terpstra, Rozell, & Robinson, 1993). "Ethical attributes in a student may be impacted by personality type" (Sankaran & Bui, 2003, p. 242).

White-collar criminals and the counterpart of white-collar employees were the basis for the exploratory methodological field study to establish construct validity of

personality and integrity measurement instruments (Collins & Schmidt, 1993). Performance, socialization, responsibility, and tolerance were measured by a voluntary sample of 329 incarcerated white-collar criminals and 320 white-collar workers (non-offenders) living in the Midwest, in a wide range of jobs, including accountants, attorneys, computer programmers and library associates. The authors did not state how the non-offender sample was selected. "The results of this research suggest that a broad factor of 'social conscientiousness' may underlie the propensity for white-collar criminality" (Collins & Schmidt, 1993, p. 310). The authors present the results for the cross-validation samples in tables, and the authors reported a common theme of conscientiousness, and interpreted that low test scores were indicative of undependable, distrustful, and irresponsible behaviors. High scores reported on the test predicted a more ethical mindset. The field studies' usefulness on this topic, according to the authors, is well documented, although two of the main limitations are the field conditions and that random sampling of the (incarcerated) was not possible. Future research should include incorporating the control conditions of job types in question and gender in the incarcerated sample. The authors were not specific in their sampling techniques, detailing years of experience and the level of management the respondent held, the dollar amount and degree of the crime committed.

Personality Type

Researchers have theorized that there are two types of personality: Type A and Type B. Sankaran and Bui (2003) suggest Type A personality behaviors have characteristics that include always being in a rush, easily angered, and overly ambitious. They suggest Type B personality behaviors are more modest, cooperative, and tend to

have more patience. Sankaran and Bui (2003) suggest from their research involving student characteristics and ethics care should be taken when career counseling students by encouraging a Type A personality to enter a field that is a more suitable match for their personality type, such as business or marketing; whereas a more suitable match for Type B personalities, who tend to be more compassionate, would be in the medical or religious disciplines (Sankaran & Bui, 2003). Coleman and Mahaffey (2000) established in their research related to business student ethics that Type A personality types cheated more than Type B students.

"These studies and others suggest that personality type and the tendency to engage in unethical academic behavior are related" (Coleman & Mahaffey, 2000, p. 126). The results of the study conducted by Coleman and Mahaffey (2000) rejected the null hypothesis that personality Type A/B will not influence attitudes toward academic dishonesty. The authors suggested an explanation for this outcome may be the perceived difficulty of the task of cheating. The authors translated this outcome into the business world by proposing if employees are provided adequate resources to complete a job, they would be less likely to practice unethical acts. Alternatively, employees may resort to unethical shortcuts to achieve desired results if resources are not adequate (Coleman & Mahaffey, 2000).

Feeley (2006) conducted a review of the literature examining the various theories of white-collar crime in an attempt to identify the reasons people commit corporate crime. Feeley (2006) presented the role of personality and behavioral traits, and the environmental factors play in cultivating white-collar crime. Feeley (2006) proposed that the competitive personality, has three dominant traits: 1) a positive extravert—one who

uses excellent social skills to manipulate and achieve desired goals; 2) the disagreeable businessman—who is rule oriented but easily irritated when outcomes are not as planned; and 3) the neurotic—one who has self-esteem issues, in need of acceptance, and easily influenced toward unethical acts. The author described the competitive personality as an individual who, at any cost, cannot bear anything less than victory, and once placed in a corporate setting, is a formula for concern. Sociologist David Simon (as cited in Feeley, 2006) links American society values and the pursuit of money to tempting overly competitive, deviant-prone personalities to enter corporate life and seek success (Feeley, 2006). The neurotic and the positive extravert were the two dominant personality traits associated with white-collar crime, according to Feeley (2006). "Although there exists a much smaller collection of research surrounding personality traits, arguments persist linking both personality, and the environment, to the causes of corporate malfeasance" (Feeley, 2006, p. 213).

Feeley's (2006) research examined the environmental influences associated with white-collar crime, including competition within an organizational structure, and morality and feelings of wrongness. Executives have a fear of failure, fueled by money and a survival strategy when charting the course of their organization (Feeley, 2006). Opportunity in a corporation with a centralized atmosphere may create a malfeasance culture of intimidation. Feeley maintained, until recently, white-collar criminals and society do not have a firm comprehension of the differences between aggressive business tactics and crossing the line to illegal activity. Society does not associate the white-collar criminal with violent crime. In 2001, Rosenmerkel (as cited in Feeley, 2006) commented that white-collar crimes such as embezzlement or price gouging were amid the lowest of

serious offenses, suggesting people appear to place more emphasis on harmfulness as opposed to wrongfulness.

"The recent spurt of corporate crime prompted academics and elected officials to revise and strengthen their ideas on punishment for white-collar criminals" (Feeley, 2006, p. 208). As a result of the Sarbanes-Oxley Act, there are improved sentencing guidelines, such as the White Collar Crime Penalty Enhancement Act that set revised maximum sentencing rules for offenders, as well as penalties imposed on CEOs and CFOs who are charged with falsifying company records. The penalties help reduce or cover the costs associated with the litigation process. "Criminal shaming offers encouraging, but untested solutions" (Feeley, 2006, p. 213). The criminal justice system has opted for less costly and more embarrassing ways (such as damaging one's reputation) to disgrace convicted white-collar criminals, with the hope of deterring potential offenders.

Terpstra, Rozell, and Robinson (1993) conducted a non-experimental exploratory and explanatory study about insider trading and the influence personality and demographic variables had on ethical decision making using 132 male and 69 female upper division undergraduate business students. The literature review was thorough in the background of each of the variables (personality--locus of control, interpersonal competitiveness, self-esteem, and need for achievement; religious beliefs and church attendance; socioeconomic status--social class and parents' income; education--college major, grade point average and if they completed and ethics course; and demographic variables--age and gender) and provided the existing bodies of theoretical literature related to unethical decision making, including the interaction of individual and situational variables (Trevino, 1986; Bommer, Gratto, Gravander, & Tuttle, 1987; Stead,

Worrell, & Stead, 1990); and cognitive moral development and situational variables of acting on right and wrong (Kohlberg, 1969). The current study draws upon the first two, examining the influence of several individual variables on individuals' decisions to engage in insider trading (Terpstra et al., 1993).

The study used the following measures: 1) the *Work and Family Orientation Questionnaire* (Spence & Helmreich, 1983) which measured interpersonal competitiveness; 2) Rotter's (1966) 29-item scale assessing locus of control; 3) need for achievement was measured using the *Manifest Needs Questionnaire* (Steers & Braunstein, 1976); and 4) the *Personal Orientation Inventory* (Gough, 1976) was used to measure self-esteem. Internal consistency reliability coefficients for each of the measures were as follows: 1) competitiveness 0.78; 2) locus of control 0.69; 3) need for achievement 0.65; and 4) self-esteem variables 0.63, all within the minimum acceptable levels for internal consistency coefficients of 0.50 and 0.70 (Bowling, 2002). Data collection and instrument details were clearly described. No formal hypotheses were reported, but the researchers' hypothesized men would be more likely than women to engage in insider trading (Terpstra et al., 1993). Results of multiple regression showed the multiple regression model explained 19% of the variance associated with the dependent variable. Three of the four explanatory ($p < .05$) variables had positive relationships indicating those respondents who were more likely to engage in insider trading: 1) highly competitive individuals; 2) gender—men; and 3) those with an external locus of control. The final explanatory variable, age, had an inverse relationship, indicating older individuals were less likely to engage in insider trading. The researchers noted that the ethical behavior explained by the remaining independent variables was less

than expected, and more of a focus on the situational variables (i.e., type of ethical issue) and competitiveness of the individual should be examined in future studies.

Gable and Dangello's (1994) study related to the moderating effect of locus of control and the connection between Machiavellianism and managerial job performance. Gable and Dangello's literature review was thorough in comparing Machiavellianism as a personality type. Studies of Machiavellianism as it related to business settings, including job performance and locus of control, were reviewed, leading to the gap of Machiavellianism and the impact of self-perception.

The authors contacted a 78-store specialty chain. The requirements for completion of the questionnaire included a minimum of one year management experience, resulting in 48 male managers in their data sample. The Christie and Geis (1970) Mach IV Scale was used to measure Machiavellian orientation of the individuals, locus of control was measured using the Internal-External Locus of Control Scale (Rotter, 1966), and the gross margin return on inventory (GMROI) to measure the efficiency rate of return from the inventory investment to evaluate managerial job performance. The findings did show a relationship between locus of control and managerial job performance (a common measurement tool in retail). The locus of control had a moderating effect in the relationship between Machiavellianism and managerial job performance. This led to the conclusion that managers high in Machiavellianism and having less supervision will more likely take things into their own hands to achieve desired results (Gable & Dangello, 1994). The limitations reported by Gable and Dangello include the following: 1) the data was obtained from a single firm; and 2) only men were included in their research. Future research suggested by the authors should: 1) include a more diverse

environmental setting (merchandiser, manufacturers, and service industries); 2) include females in their sample; and 3) address the interactive effect of situational variables.

Personality Dimension

Digman and Inouye (1986) stated a normal human personality can be described using five general dimensions (*Five Factor Model of Personality)*: 1) openness to experience (imagination, curiosity, and intellectualism); 2) conscientiousness (impulse control, planning, and organization; 3) extraversion (sociable and outgoing); 4) agreeableness (altruism and empathy); and 5) neuroticism (emotional instability).

Conner and Abraham (2001) conducted a two-part study on predicting intentions and intentions and behavior, using the *theory of planned behavior.* They used a non-experimental, exploratory design, and surveyed university students at two United Kingdom universities. Conner and Abraham presented a thorough review of the literature including the studies reporting the strengths and weaknesses of the *theory of planned behavior.* The authors noted that there has not been much research incorporating personality theories into models such as the *theory of planned behavior.* The major gap reported by Conner and Abraham was including other variables (i.e., past behavior) that may influence these cognitions.

A data producing sample of 173 respondents were used in the study on health protection intentions. For study one, the *theory of planned behavior* was used to measure intention, attitude, subjective norm, and perceived behavioral control of intent to look after my health (health protection intent). Two 7-point items were used to measure susceptibility and severity, anticipated affective reactions was measured as the mean of three semantic differential scales, neuroticism and extraversion were measured using the

Eysenck Personality Inventory, conscientiousness was measured using the *Revised NEO Personality Inventory*, and past behavior was measured using the mean of two 10-point items. The authors analyzed the data using the structural equation model LISREL 8, chi-square testing, the Comparative Fit Index reported at 1.00, Root Mean Square Error of Approximation reported at 0.58 and an $R^2 = .49$, and the Tucker-Lewis Index to measure the fit of the models. No hypotheses were reported. "The utility of the *theory of planned behavior* as a model of the cognitive determinants of intention, demonstrating that attitudes, perceived behavioral control, anticipated affective reactions, conscientiousness, and past behavior account for 49% of the variance in intentions to protect one's health" (Conner & Abraham, 2001, p. 1552). Perceived susceptibility and severity, the additional measures were not deemed significant to the predictive power of the model. Extraversion and neuroticism were also not predictors of intention, whereas conscientiousness was positively associated with intentions of health protection. Limitations reported by Conner and Abraham were the generalizability of the results and the authors examined a goal rather than a behavior which may have underestimated the *theory of planned behavior* variables as a mediator. Further research suggested including all of the Big Five personality traits on intention formation and behavior (see study two below).

Study two of Conner and Abraham's research extended the previous research to include the *Big Five Inventory* (*BFI*), in health protection and exercising intentions. The findings were consistent between the two studies. "Of the personality traits considered, only conscientiousness was found to be consistently related to intentions and behavior" (Conner & Abraham, 2001, p. 1559). Further research suggested by Conner and Abraham include extending the *theory of planned behavior* to include conscientiousness

into the model to mediate past behavior effects and a more adequate model (Conner & Abraham, 2001).

Ridgell and Lounsbury (2004) conducted a non-experimental study about predicting academic success using male and female undergraduate students from a large university. Ridgell and Lounsbury's literature review was thorough, and the study was geared more towards comparing the Big Five personality traits and the work drive measurement (Lounsbury & Gibson, 2002) with academic success. The authors used a field study and collected data from 140 college undergraduate students taking an introductory psychology course. A general intelligence scale (Resource Associates, 2002) measured verbal and numerical reasoning (coefficient alpha of .90). Personality had Cronbach's coefficient alphas as follows: extraversion .90, emotional stability .77, agreeableness .69, conscientiousness .78, and openness to experience .78. Personality was measured using the *Personal Style Inventory* (*PSI*), and the *Lounsbury and Gibson's Work Drive* measured work drive (Cronbach's coefficient alpha .82). Grade point average was self-selected, using a scale of seven choices ranging from 1.50 to 4.00. Data collection procedures were not clearly described and hypotheses were not presented in this study. Ridgell and Lounsbury's (2004) interpretations confirmed previous findings related to the cognitive and personality variables validity. The authors reported a predictor of course grade and GPA was general intelligence, and emotional stability correlated with course grade. One of the unusual findings by Ridgell and Lounsbury related to the addition of the Big Five personality traits: they were not significantly related to course grade or GPA, and the authors suggested the reasoning may be related to the student population comprised of new college attendees (73% freshman). Work drive

accounted for greater than 6% of the variance in course grade, and 14% of the variance in GPA after considering general intelligence. The results reported by the authors suggest work drive may be an additional measure when measuring personality constructs. Limitations included the question of generalizability, as the sample contained a 73% freshman population, and the GPA was self-reported data. The following areas were included as future research: 1) expand the geographic area; 2) examine other personality and ability measures; 3) additional use of the work drive measure construct; and 4) whether differential validity patterns can be found using course grade or GPA as criteria.

Teng (2008) conducted a study about student personality traits and hospitality employment choice in Taiwan. He used a non-experimental exploratory design sample of senior undergraduates enrolled in a hospitality management program in Taiwan. Teng's literature review provided information related to students' attitudes, personality traits and the role those personality traits have on career choice. Empirical studies of Berings et al. (1998), Kusluvan and Kusluvan (2000), and Silva (2006) were examined, leading to the gap of understanding why students abandon hospitality as a career choice. Teng's study incorporates career choice, attitude and personality traits in an attempt to understand the abandonment of hospitality as a career option.

Teng (2008) surveyed the entire accessible population of post-internship senior hospitality student resulting in the data producing sample of 980, and a response rate of 51.8%. Personality traits were measured using 51 items in a scale by Tsai (2004), an adaptation of Costa and McCrae's (1985) personality inventory. A 30-item scale based on Kusluvan and Kusluvan (2000) measured the student attitudes toward hospitality jobs. A four-item scale was used to measure the hospitality employment aspirations variable.

Additional demographic information was collected. Composite reliability and validity estimates for the personality measure were both above 0.60, respectively, and confirmatory factor analysis (CFA) was used to measure the five constructs of the Big Five personality dimensions. To measure student attitude, exploratory factor analysis (EFA) was used and the resulting alpha values for each factor were greater than 0.65 and deemed acceptable levels of reliability. The maximum likelihood method was used to measure hospitality employment aspirations and reliability was reported at 0.76. Three sets of simultaneous multiple regression equations were used to measure the mediating effect of attitude, personality traits and employment aspirations and reported means of 2.99, 3.37, and 3.05, for each, respectively. Data collection procedures were clearly described and the findings supported previous research in that students have an adverse attitude for selecting hospitality jobs as a career choice, and the Big Five personality traits moderately influence the individual's attitude and job aspirations. One finding did not agree with previous research, however: neuroticism and conscientiousness were not significantly related to career choice behavior. Limitations of this study include the following: 1) the generalizability, as this study was conducted in Taiwan; 2) this was a self-reported measure study; and 3) this study did not consider the actual employment of hospitality students upon graduation. Future research suggested by Teng included additional cross-cultural studies and searching for further factors related to understanding hospitality employment issues.

Theory of Planned Behavior

Many researchers have employed the *theory of reasoned action* and its extension, the *theory of planned of planned behavior*, when examining the intent of a stated

behavior. According to Bass and Tomkiewicz (2002), numerous empirical studies have substantiated the relationship suggested by Fishbein and Ajzen (1975) between attitudes, actions, and intention to perform the action. Ajzen's study supported the *theory of planned behavior*, and its conceptual model of attitude toward the behavior, subjective norm, and perceived behavioral control all assist in correlating the intention of reporting fraudulent financial information.

The *theory of reasoned action* was developed in 1967 by Dr. Martin Fishbein and Dr. Icek Ajzen. The *theory of reasoned action* has been used extensively and has been applied to research frameworks across various disciplines. Their theoretical framework, which has a premise based in social psychology, has been extensively used to predict and understand the social behavior of individuals; it strives to show how the intent of a behavior will transfer to the behavior itself. "Intentions are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior" (Ajzen, 1991, p.181). According to the theory, the intention and behavior are based or shaped on the attitude towards the behavior and subjective/social norm. Basically, the higher a person's intent to engage in a particular behavior, the more likely the behavior will be acted upon. Understanding the influences toward reporting fraudulent financial data and applying the theories may provide an understanding for determining strategies for changing the stated behavior (Ajzen & Fishbein, 1980).

The following statements will expand on the two constructs of the theory: attitude toward the behavior and subjective/social norm. First, the attitude toward the behavior, in its most basic form, is the sense that positive or negative assessment of the behavior

likely leads to the stated outcome. The "behavioral beliefs" are caused by the attitude toward the behavior (Ajzen & Fishbein, 1980). If an individual believes that executing a behavior may lead to a positive result, that individual will have a more favorable attitude regarding executing the actual behavior. Alternatively, if an individual believes that executing a behavior may lead to a negative result, that individual will have a less favorable attitude regarding executing the actual behavior (Ajzen & Fishbein, 1980).

The subjective/social norm is the second construct of the *theory of reasoned action.* Ajzen and Fishbein (1980) describe the subjective norm as the person's perception or influence of others when determining whether or not to execute the behavior. The fundamental beliefs of an individual's subjective/social norms are expressed as normative beliefs. The *theory of reasoned action* principle states that if those people who are important feel that the behavior would be positive, an individual is more likely to execute the behavior. Alternatively, if those people who are important feel that the behavior would be negative, an individual is less likely to execute the behavior. The *theory of reasoned action* has been used extensively and supported by the literature in relation to areas of research to include behaviors associated with effective teaching methodologies (Shaftel & Shaftel, 2005), understanding the college selection process (Pitre, Johnson & Pitre, 2006), and Internet purchase intentions (Njite & Parsa, 2005).

"The *theory of planned behavior* is an extension of the *theory of reasoned action* made necessary by the original model's limitations in dealing with behaviors over which people have incomplete volitional control" (Ajzen, 1991, p. 181). The addition of the construct of perceived behavioral control to the model by Icek Ajzen in 1985 incorporates the level of ease or difficulty an individual may encounter with the

execution of the behavior. "Investigations have shown that people's behavior is strongly influenced by their confidence in their ability to perform it" (Ajzen, 1991, p. 184). The *theory of planned behavior* suggests perceived behavioral control (more control over a behavior) the more likely the intention will be for the person to act on the behavior; and should the person feel less control, it would be unlikely for that person to act on the behavior (Carpenter & Reimers, 2005).

Applying the Theory of Planned Behavior to Intent

The *theory of planned behavior* has been used extensively in studies to predict a stated behavior and is well supported by empirical evidence (Ajzen, 1991). "The framework is particularly useful for those researchers who desire to turn their research from a descriptive study of unethical behavior to an investigation of the underlying structure of such behavior and the processes leading to it" (Randall & Gibson, 1991, p. 120).

Chang (1998) conducted a non-experimental study using male and female students from several Hong Kong universities about predicting unethical behavior and compared the *theory of reasoned action* and the *theory of planned behavior* as it related to unauthorized software copying. Chang's literature review was thorough pertaining to the frameworks and models for determining unethical behavior. Chang provided detailed analysis and comparisons between the two theories and the applications of each. Empirical studies reviewed (Shepherd & O'Keefe, 1984; Shimp & Kavas, 1984; Timko, 1987; Vallerand, et al., 1992) by the author lead to the major gap and the purpose of the study, to test whether the inclusion of a causal path will improve the predictive power of the *theory of planned behavior.*

Chang reported a data sample of 181 (99 male and 82 female) participants. No formal hypotheses were presented in this study. Chang used the statistical program EQS to perform data analysis and the Comparative Fit Index (CFI) to find an acceptable fit, structural equation modeling (SEM) for data analysis reporting a 0.001 and a poor CFI of 0.889 which did not provide a good fit to the validity of the *theory of reasoned action* (model 1) in predicting behavioral intention. The *theory of planned behavior* was used in model 2, again using SEM, and the model provided a reasonable fit of 69.269 and a CFI of 0.959. Chang used confirmatory factor analysis to assess the adequacy of the measurement model and reported 54.664 and a CFI of 0.973 representative of a good fit and convergent validity; indicating a value of 0.90 would be an acceptable fit for the model. Chang's (1998) research suggests that employing the *theory of planned behavior* with the additional construct perceived behavioral control construct, is suitable in the study of unethical behavior. The inclusion of the causal path linking subjective norm to attitude, according to Chang, improved the model fit considerably, suggesting what others perceive is favorable or unfavorable to the attitude formation. The author did not find a significant direct effect of subjective norm on behavioral intent. Chang's interpretation of these findings suggests the *theory of planned behavior* provides a solid theoretical basis for the study of unethical behavior compared to the *theory of reasoned action.*

Chih-Chung and Chang (2005) conducted a study applying the *theory of planned behavior* to measure and predict the intent of consumers to engage in online shopping/e-commerce, and extended the model to include added variables of past experience and channel knowledge. They used a non-experimental survey design of 400 employed

students in junior colleges and universities and 92 web-based surveys from Internet users. Chih-Chung and Chang's literature review was thorough, current, and provided a detailed analysis of each of the constructs and related online shopping research. Empirical studies of Chen (2000), Abend (2001), and Goldsmith (2001) were examined leading to the major gaps of applying the *theory of planned behavior* to online shopping.

The sampling plan resulted in the data producing sample of 426 usable questionnaires, a response rate of 83.5%. SPSS was used to run linear regression and descriptive statistics were used to understand respondents' reactions to the three variables of Ajzen and Fishbein's theory (Chih-Chung & Chang, 2005). To measure the constructs of the *theory of planned behavior*, the authors followed the scales developed by Ajzen and Fishbein (1980). To measure past experience, four 7-point Likert scales were used to measure channel knowledge, six 7-point Likert scales were used. Reliability was established using item-to-total correlation and Cronbach's alpha which reported a range of 0.84 and 0.93, resulting in adequate levels of reliability. Data collection procedures were clearly described and the authors found strong support that the *theory of planned behavior* is a good predictor for measuring consumer online shopping behavior. Findings supported all five hypotheses using multi-regression analysis (the hypotheses significance levels of were .528, .477, .165, .605, .506, respectively). Empirical evidence supported the *theory of planned behavior* in the study of online shopping behavior (Chih-Chung & Chang, 2005). Limitations reported by Chih-Chung and Chang are: 1) consumer bias due to the products and service is not classified; and 2) 43.9% of the respondents were full-time students which may be difficult to generalize the results. They generated the

following areas of future study: 1) the effect on shopping behavior when products and services are classified; and 2) extend the analysis to a larger and more diverse population.

Randall and Gibson (1991) conducted a study applying the *theory of planned behavior* to the medical profession. They used a non-experimental study of nurses employed at four hospitals located in the Pacific Northwest. The nurses were invited to participate in the study. Randall and Gibson's literature review was thorough related to the theoretical framework of the *theory of planned behavior* and the unethical decision making within the medical profession. The major gap in the literature was to provide a framework for guiding research in terms of the area of ethics. This resulted in Randall and Gibson's study testing the *theory of planned behavior* developed in 1980 by Fishbein and Ajzen with an added variable of moral obligation.

Randall and Gibson reported a data sample of 349 mailed surveys and had a response rate of 33%. Greater than half of the respondents reported a minimum of 11 years of experience. The *theory of planned behavior* was used to measure attitude, subjective norm, perceived behavioral control and intent and to assess the direct ability of moral obligation; one question was added that included a 7–point fully anchored scale asking "I believe I have a moral obligation to report..." (Randall & Gibson, 1991, p. 117). No formal hypotheses were presented in this article. Attitude and perceived behavioral control coefficient alphas were 0.78 and 0.64, respectively. Using regression analysis, the multiple correlation coefficient for the *theory of planned behavior* constructs was 0.78 and the analyses concluded that intent and attitude had the strongest influence. The inclusion of all three constructs explained approximately 61% of the variance of the intent to report the health professional for inadequate patient care (Randall & Gibson,

1991). Data collection procedures were clearly described and the findings supported the research in applying the *theory of planned behavior* as a framework to guide ethical research. Randall and Gibson included practical implications such as a behavioral change (reinforce the belief of protecting patients) within administration, which may assist in changing the beliefs of nurses who directly report to them. Limitations reported by Randall and Gibson include a low response rate which made it difficult to generalize the result, the validation of the model relied on correlational data, self-report measures, and that the research project only examined one ethical behavior—the intent to report a coworker who provides inadequate care. Randall and Gibson (1991) generated the following areas for future research: investigation of the behavioral intention/behavioral linkage aspect and expanding the sample size to permit antecedents of the constructs.

Allen (2004) conducted a study about applying the *theory of planned behavior* and measuring students' perception of the image of accounting and the impact the 150-hour requirement had on their consideration of accounting as a major. She used a non-experimental, quantitative survey design of business students enrolled in introductory accounting classes at one college and two universities in a large metropolitan area in one state. Empirical studies of Boone and Coe (2002), Albrecht and Sack (2000), and Saemann and Crooker (1999) were examined, leading to the gap in the literature related to the image of accounting and the impact the additional 150-hour requirement has on deterring high-quality students from choosing accounting as a major.

A data producing sample of 421 responses (67% white; 69% male; 79% ranging in age from 18 to 22) was collected, which is a response rate of 90%. Alpha reliability

measures were: 0.85 for the differential personal perception; 0.75 for the differential perception of important people; and 0.89 for perceived behavioral control.

Data collection procedures were clearly described and the findings supported the hypotheses tested. Students are able to assess the costs and benefits associated with the 150-hour additional requirement when choosing accounting as a major. It was documented that the target behavior was selecting accounting as a major, and the survey included initial salary and earning potential, course difficulty, math skills, job opportunities, and cost of the additional classes related to the 150-hour requirement on the survey instrument. Analysis confirmed that "factors shown to influence students' choice of major prior to the 150-hour requirement continue to influence students' choice of major in the presence of the 150-hour requirement" (Allen, 2004, p. 248). The results imply that the primary benefit of selecting accounting as a major include job opportunities and higher initial salary; both were statistically significant. General business or non-accounting majors perceived behavioral control of success, related to math skills, success in introductory courses, and course workload impacted their decision to not declare accounting as their major. Limitations reported by Allen include: 1) the study was conducted in one area, limiting the generalizability of the study; and 2) the data was self reported and Allen did not validate the accuracy and correctness of the data (Allen, 2004).

Applying the Theory of Planned Behavior to Intent to Commit Unethical Behavior

Weber and Gillespie (1998) conducted a study about the differences in ethical beliefs, intentions, and behaviors of cheating in academia. Weber and Gillespie provided an outline of the two theories they used--the *theory of planned behavior,* developed by

Ajzen and Fishbein (1980), and the *theory of moral development* (*TMD*), developed by Kohlberg (1981). The authors noted the gap in the literature existed between what a participant in a study ought to do versus what is actually done in relation to an ethical situation. This resulted in Weber and Gillespie's (1998) study testing the proposition of explaining and predicting ethical versus unethical behavior utilizing the two theories.

A convenience sample of 370 managers (62% male and 38% female) enrolled in an MBA program at a private university was used in this study. Using a self-report dichotomous yes/no answer to address whether they had witnessed cheating (responses were 89.2% yes and 10.8% no); and did you/would you/should you report the cheating, the following results were reported: did you report, 39.8% yes and 60.2% no; would you report, 64.1% yes and 35.9% no; should you report, 83.9% yes and 16.1% no. The authors noted some participants failed to address some of the questions. The *Abbreviated Scoring Guide* was used to measure reasoning data to determining the stage of moral reasoning used to justify the selected action. Interrater reliability estimates were 88.3% for complete agreement and 97.1% within one stage. Data collection procedures were clearly described and 10 of the 12 hypotheses were strongly supported, two were moderately supported using paired *t*–tests. The Mann-Whitney Mean Rank Test was used to compare each variable. Limitations reported by Weber and Gillespie were the ability to generalize the results, the use of a single self-selected observation where participants were asked to consider only a single experience related to cheating, and the focus was solely on the differences within and between participants and their responses. Weber and Gillespie generated the following areas of future study: 1) addressing the relationship between a participant's values or beliefs, intention to act, and their actual

behavior; and 2) the design of an improved research instrument to use when studying questions of ethical action.

Bailey (2006) used the *theory of planned behavior* to provide insight for retailers to help understand and deter employee theft. This study was employed to assist managers in determining the likelihood of employees stealing, and to try and understand the occurrences. Considering the major source of inventory shrinkage stems from employee theft, managers should take note of this study's results. The perceived behavioral control of employees surveyed portrayed a positive intent to steal when there was no difficulty engaging in the retail theft behavior. Bailey's methodology included employee surveys providing data demographics, experience levels, tenure and past encounters with theft. The author had found no prior research of the application of the *theory of planned behavior* in the employee theft area. Bailey (2006) suggested his research would be helpful for retailers when forming policies for new hires and employee manuals.

Stevens, Steensma, Harrison, and Cochran (2005) conducted a study about the influence of ethics codes on financial executives' decisions. They used a non-experimental design of 414 firms whose senior financial executives were members of the Financial Executives Research Foundation. This literature review was thorough and current and the authors provided surveys of firms who have formal codes of ethics and the theoretical framework of Ajzen and Fishbein's (1980) *theory of planned behavior.* Empirical studies of Mitchell, Agle, and Wood (1997), Ocasio and Kim (1999), and Weaver, Trevino, and Cochran (1999) were examined, leading to extending the theory by including stakeholder management literature into the framework and examining the joint

effects and how attitude is a channel in the relationship between stakeholder pressure and ethics codes (Stevens et al., 2005).

A probability, systematic sampling plan resulted in 407 firms and a response rate of 98% (attributed to Foundation sponsorship). The authors drew from the *theory of planned behavior* framework and an instrument developed by the authors relating to the ethics domain. Construct validity was established using a series of exploratory and confirmatory factor analysis. Convergent validity ranged from 0.54 to 0.97. Data collection procedures were clearly described and the findings partially supported the hypotheses that 1) stakeholder pressure will have a positive effect and 2) internal and external perceived benefits will have a positive influence on the financial executives' use of their firms' ethics codes in strategic decision-making process. Findings supported the remaining three hypotheses: 1) pressure from market stakeholders have a stronger influence that pressure from non-market stakeholders; 2) the relationship between stakeholder pressure and the use of ethics codes will be stronger when codes promote a positive external image; and 3) training in ethics codes will be positively related to financial executives' use of their firms' ethics codes in strategic decision-making (Stevens, et al., 2005). "What determines whether or not a financial executive relies on his/her firm's ethics codes when making decisions?" (Stevens et al., 2005, p. 183).

The *theory of planned behavior* was used by Carpenter and Reimers (2005) in their two-part (survey and experimental analysis) research of unethical and fraudulent financial reporting of corporate managers, and the predictive power of the *theory of planned behavior.* The literature review presented several aspects of fraud and accounting, including reasons why misrepresentation may occur, the types and cost of

fraud to the organization and outside parties. The authors noted the amount of empirical literature related to the current concerns related to business ethics. Their research for the current study was to measure the effect of an intended behavior when faced with an issue (deferment of a supplies expense) which would be a violation of generally accepted accounting principles (GAAP). Part one of the two-part study was a survey analysis of 73 MBA students (34 males and 39 females), resulting in a response rate of 96%. The participants were provided a scenario related to the improper deferral of expenses to meet projected earnings with their bonus contingent on meeting those projections. The ultimate goal of the study was not to measure the actual behavior, only the stated intent.

The study had demographic variables and ten measured variables, components of the *theory of planned behavior* as suggested by Ajzen and Fishbein (1980). Exploratory factor analysis using Kiser-Meyer-Olkin (KMO) reported a measure of sampling adequacy of 0.887, and the authors reported significant alpha coefficients; intention 0.95, attitude 0.90, and perceived behavioral control of 0.70, all of which are suitable for combining the three items for each variable to a single score to measure intention. Multiple regression ($R^2 = 0.72$) was used to test the relationships between the variables and a multiple linear regression model was used to test the hypothesized relationships between the constructs in the *theory of planned behavior.* The results of their research provided strong evidence that the *theory of planned behavior* helped explain the ethical decision making by business managers with the attitude construct as the best predictor of behavioral intent and an overwhelming 51.8% of the respondents would act unethically and fraudulently defer the expenses.

Part two of Carpenter and Reimers' (2005) study consisted of 62 different MBA student participants from the same institution. An experimental analysis was used to test the causal relationships between each of the independent variables of the *theory of planned behavior* and the dependent variable of behavioral intention. The second study experimented with separate treatments (manipulating each) for each of the constructs, resulting in six different cases. Using a 7-point Likert scale in their questionnaire, and a 3 X 2 ANOVA to test the hypotheses, the results reported that when the three constructs were manipulated (positively or negatively influenced), the outcome of intention of the behavior in question was positive or negative, respectively. Findings supported two of the three hypotheses; both attitude (p = 0.006) and subjective norm (p = 0.043) had a significant effect on the manager's intended behavior. The findings did not support hypothesis three; perceived behavioral control did not have an effect on the manager's intended behavior (not significant at the conventional levels p = 0.103). Carpenter and Reimers' interpretation of these led to the following conclusions that managers' attitudes are shaped by the tone set by top executives and our culture shifted to improved teaching of ethics (at schools and within the family) fraudulent behavior may be reduced. "Exploring the *theory of planned behavior* offers an opportunity to enhance our ability to understand, explain, predict and influence unethical conduct in organizations" (Carpenter & Reimers, 2005, p. 126). This led to the following two areas of future research suggested by the authors: 1) educators should search for additional ways to influence student norms and open discussions related to ethics and 2) increase management training to shape overall attitudes of their firms.

Link Between Unethical Behavior in Corporate and Academic Settings

Extensive research has been provided in relation to business ethics, fraud, academic dishonesty, lying, cheating, and other types of misdeeds. Educators, employers and society have a renewed interest in fraudulent activities and the cost to U.S. businesses. Estimates range from an average company losing approximately 6% of its gross revenue or roughly $400 billion annually (Cox & Weirich, 2002). Other reports suggest employee theft costs employers about 2% of all sales, and employee theft amounts to ten times street crime (Mustaine & Tewksbury, 2002). Riahi-Belkaoui and Picur (2000) report the cost of the unethical or criminal acts of employees to U.S. businesses is greater than $400 billion annually and provided a framework for companies to help identify conditions that are favorable for fraud to occur.

The disturbing factors are the translation from the college setting to the workforce. Much of the literature related to personality and unethical behavior referred to academic cheating. Cheating in the college setting has alarmed individuals in both the professional world and academia (Smyth & Davis, 2003). A wealth of information was found relating to students and academic dishonesty. "Cheating may indicate that values considered essential to good citizenship and to good business practice have not been instilled" (West, Ravenscroft, & Schrader, 2004, p. 173). The studies on academic cheating are in abundance and are supported in the literature. Studies have concluded that evidence of cheating in school can be interpreted as cheating in the real world (Klein, Levenburg, McKendall, & Mothersell, (2007); Carpenter, Harding, Finelli, & Montgomery, (2006); Premeauz, (2005); West, Ravenscroft, & Shrader, (2004)).

Angell (2006) conducted an exploratory study about academic cheating and the interrelationships among cheating behaviors, impulsiveness, personal efficacy, and academic motivation. He used a non-experimental quantitative design of undergraduate business students enrolled in a small private Catholic college in the Northeast. Angell's literature review was sufficient in reviewing the prior research related to academic cheating. Empirical studies of Smith (2003), Tang and Zuo (1997), and Michaels and Miethe (1989) related to cheating were examined and led to the gap of exploring the relationships between two additional measures: impulsiveness and motivation of college cheating.

A purposive sampling plan resulted in the data producing a sample of 61 students (24 males and 37 females); the initial sample size was not identified. The *Academic Integrity Scale*, an 18-item three-point scale, was used to measure the frequency that students committed a dishonest academic act. Items from the California Psychological Inventory (Gough, 1969) measured the influence peer pressure had on impulsiveness. The Inventory is comprised of a six-item measure with answers of true or false. The *Personal Efficacy Scale* (Paulus, 1983) assesses the level of control over the ability to achieve objectives, the scale contained 10 five-point Likert scales. The *Academic Motivation Scale College Version* created by Vallerand et al. (1992) measured three levels and seven types of motivation to learn based on a five-point scale (only 21 of the 28 questions were used). To measure for social response bias, the *Responding Desirably on Attitudes and Opinions* was used with responses of agree or disagree. Reliability for the *Academic Integrity Scale* reported for test assistance and plagiarism, Cronbach's alpha of .87 and .76, respectively, and the two factors accounted for 27% and 14% of the

variances using confirmatory factor analysis; for the *Personal Efficacy Scale*, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .59. Alpha reliability measures were .54 and .56 for two factors—the author noted the coefficients were not outstanding but will be used to develop the study. Reliability estimates for the *Academic Motivation Scale*, of the five factors that emerged, alpha coefficients of .81, .77, .81, .74, and .77 were reported. The author stated that he "chose to enhance reliability, which compromised validity somewhat, to enhance the stability of the relationships" (Angell, 2006, p. 127). Hypotheses were not presented in this study and data collection procedures were clearly described. Reported means for the *Academic Motivation Scale* were job (4.25), good life (3.80), choice (4.13), pleasure (4.03), discovering (3.97), authors (2.40), surpassing (3.03), completing (3.98), accomplishment (3.63), wasting (1.23), wonder (1.33), careless (1.13), material (3.23) and intelligent (3.38). Correlations were slight and significant at the $p < .05$ level.

Strengths of the study reported by Angell are the investigative nature and uniqueness in that researchers have seldom found individual difference variables to be related to cheating behaviors (Angell, 2006). The limitation reported in this study, using factor analyses, reduced the number of items per scale to potentially compromise the validity. Future studies should continue to investigate the sensitive relationships between additional personality variables and cheating, and develop scales that link academic dishonesty and personality variables.

Duizend and McCann (1998) conducted an exploratory study about the impact an ethics course had on business students' tendency to engage in illegal business practices. The literature review lacked current empirical studies; the authors did compare and

contrast some theories regarding moral reasoning (Gellerman, 1986; Kohlberg & Judd, 1969; Trevino, 1986) and ethics studies (McNichols & Zimmer, 1985; and Nwachukwu, 1988). These results led Duizend and McCann to further examine the propensity of collegiate business students to engage in illegal/questionable business practices (Duizend & McCann, 1998). The authors used a pre- and post-test control group to ascertain the effect of the business ethics course significantly affected the behavior.

The final data producing sample was comprised of undergraduate business students from Stetson University in Florida. Two groups were compared, the first (treatment) had taken courses in which ethics was an integral part and the second group (control) had not had the ethics component: 106 (pre-test) and 96 (post-test) from the control group and 90 (pre-test) and 88 (post-test) from the treatment group. A total of 196 (pre) and 184 (post) useable surveys were used, a response rate of 83.7% and 78.6%, respectively. The reported Cronbach's alpha reliability was 0.8128, within the acceptable range of greater than 0.70 (Nunally, 1967). Data collection procedures were described. The primary goal of this study was to gain insight and knowledge related to the target population. No specific hypotheses were tested.

Paired *t*-tests were used to determine whether the participants' mean responses to the scenarios in the survey instrument were statistically significant (mean scores for the pre-test ranged from 1.30 to 5.00 for the control; 1.24 to 5.20 for the treatment; mean scores-for the post-test-ranged from 1.47 to 4.57 for the control; 1.25 to 5.07 for the treatment), and to determine if there was a statistical difference to a situation between the responses of the students and how they believed a small business owner would respond (mean scores-pre-test-ranged from 1.18 to 6.10 for the control; 2.92 to 6.18 for the

treatment; mean scores-post-test-ranged from 3.39 to 5.85 for the control; 3.00 to 6.00 for the treatment). The students demonstrated a statistically significant difference from the legal standpoint expected score of 1 at the $p < 0.001$ level. Duizend and McCann's interpretation of these findings confirms that respondents do show tendency to engage in the questionable acts included on the survey instrument, and suggest students feel the small business owner would be more likely than themselves to engage in the questionable acts (Duizend & McCann, 1998). Strengths of the study reported by the authors include: 1) providing valuable new information in the research of small businesses; 2) the knowledge gained from the ethics courses increased the awareness of what was considered illegal; and 3) the need for more comprehensive research in this area. Limitations reported by Duizend and McCann are: 1) that this study is exploratory in nature and the conclusions drawn upon should be interpreted with caution until further research is replicated; and 2) the generalizability of the study.

Gurley, Wood, and Nijhawan (2007) conducted a study about the effect punishment would have on unethical decision making when personal gain was involved. They used a non-experimental, quantitative design survey. The literature review was fairly current and consisted primarily of theoretical literature related to research on ethics, ethical development, and the characteristics of the ethical issues, and behavioral approaches (Randall & Gibson, 1991; Ajzen, 1985). Most of the research viewed the consequences as being inflicted on a victim, which lead to Gurley et al. to further examine the ethical decision making process when personal gain is involved, investigating the effect of four variables: 1) valence of the outcome; 2) probability of getting caught; 3) severity of punishment; and 4) moral values.

Gurley et al. had a total of 115 students complete the survey; the initial sample size was not identified. The survey instruments were adopted from two external sources and comprised of scenarios that were already tested for validity; content validity was established by faculty in the field of business to make certain the scoring and content was clear, and the six scenarios had an average correlation coefficient of .75. Data collection procedures were described. Linear regression analysis was used to explain the variance of the four factors; three (moral values, R = .344, severity of punishment, R = .360, and valence, R = .367) of the four (probability of getting caught) variables were statistically significant in explaining the choice of ethical alternative. The correlation coefficients were statistically significant at the 0.01 and 0.05 level on a one-tailed *t*-test. Stepwise regression was used to report three of the variables (probability of getting caught, severity of punishment, and moral values) were significant at the 0.05 level in explaining the variance in the ethical score (Gurley et al., 2007). The collinear variable, probability of getting caught, using the four-step mediation analysis (Baron & Kenny, 1986) was first, and severity of punishment second (eliminating the first), proving the severity of punishment mediated the effect of probability of getting caught (and removed as a variable). Gurley et al.'s interpretation of these findings include that moral values, when choosing ethical options had the greatest impact, and the variable severity of punishment explained was the second largest variance in ethical choice. Strengths of the study reported by Gurley et al. include the results of the importance of punishment has on ethical decision making and the practical implications for educators, revealing the consequences of unethical actions. Gurley et al. reported that the study was conducted in only one setting and the students were aware they were participating in ethics research,

both considered limitations of this study. Areas for future research include investigating the differences in behavior when their own money is at risk versus hypothetical vignettes, and future research is needed to analyze the individual scenarios to determine the contribution of the variables as they relate to the impact and importance of different ethical issues to the subjects (Gurley et al., 2007).

Recommendations

Future empirical studies are needed to address ethical dilemmas, scenarios, and "what if" situations and focus on the intent of community college business students and their decision making process to report fraudulent financial information. There are studies in the literature that have been administered concerning personality traits and behavioral influences as they relate to ethics and moral reasoning related to fraudulent financial reporting (Sankaran & Bui, 2003; Coleman & Mahaffey, 2000), but none were noted at the community college level. The literature presented a wealth of information related to academic cheating (Carpenter, Harding, Finelli, Montgomery & Passow, 2006; Klein, Levenburg, McKendall & Mothersell, 2007; Coleman & Mahaffey, 2000) at the undergraduate level. The gap in the literature was the adaptation to the real business arena. "Research in the business of ethics arena continues to by stymied by the problem of determining, measuring, and/or predicting the actual behavior in real ethical decision situations" (Weber & Gillespie, 1998, p. 447). Difficulty was noted bridging the gap between the real world and classroom settings. Many articles, where scenarios were applied, placed the student in a hypothetical situation which may be beyond the scope of the students' perception (Uddin & Gillett, 2002; Duizend & McCann, 1998; Borkowski & Ugras, 1992, Cagle & Baucus, 2006).

Much of the research presented in the literature focused on the impact a business ethics course would have on student decision making (Fransworth & Kleiner, 2003; Dellaportas, 2006; Lopez, Rechner & Olson-Buchanan, 2005; Duizend & McCann, 1998). Most of the literature suggests formal business ethics education (whether across the curriculum or a required course) provides encouraging results towards a lesser degree of tolerance of unethical situations. One of the key gaps found was the response bias--are the students reporting what is the socially acceptable answer to such issues, or what the students would actually do if presented in such circumstances?

Conner and Abraham (2001) explored the relationship between past behavior, personality traits, intentions, and behavior. The conscientiousness personality trait was found to be consistently related to intentions and behaviors. Much of the literature related to personality traits (Type A and Type B personalities) and the effect on ethics (Sankaran & Bui, 2003, Coleman & Mahaffey, 2000). A gap in the literature that should be explored relates to linking personality dimension with ethical and unethical intentions. As a result of these weaknesses and gaps in the literature, an exploratory (comparative) and explanatory (correlational) survey research design was used to examine the relationships among student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intentions. The theoretical framework used to guide this study is presented next.

Theoretical Framework

The theoretical framework that guided this study was Ajzen's *theory of planned behavior* (1991), an extension of Ajzen and Fishbein's (1980) *theory of reasoned action.* Both theories suggest that people are practical in the use of information that is provided

to them (Ajzen & Fisbein, 1980). The *theory of reasoned action* maintains that the intention of a person has two constructs--attitude towards the behavior and the subjective norm.

The *theory of planned behavior* extended the theory to include the perceived behavioral control construct. Research suggests the *theory of planned behavior* was found to be better than the *theory of reasoned action* in predicting unethical behavior (Chang, 1998). The *theory of planned behavior*'s constructs toward the intention to perform a particular behavior includes attitude, subjective norm, and perceived behavioral control. This theory proposes a framework for factors that influence ethical and unethical intentions of individuals of financial reporting of fraudulent financial information. Carpenter and Reimers (2005) applied the *theory of planned behavior* and their results found "strong evidence that the *theory of planned behavior* can help explain ethical decision-making by business managers" (Carpenter & Reimers, 2005, p. 124). Randall and Gibson (1991), in their study of ethical decision making in the medical profession, concluded "The framework is particularly useful for those researchers who desire to turn their research from a descriptive study of unethical behavior to an investigation of the underlying structure of such behavior and the processes leading to it" (Randall & Gibson, 1991, p. 120).

Ajzen (1991) stated that for predictors of behavioral intention, attitude is first. This is the favorable or unfavorable assessment the individual has towards the behavior (Ajzen, 1991). The beliefs that cause a person's attitude towards the behavior are called behavioral beliefs (Ajzen & Fishbein, 1980). The second predictor of behavioral intentions is subjective norm, or the belief of whether others who are important would

support or not a behavior (Ajzen, 1991). Third, perceived behavioral control is the difficulty or ease one may feel to act upon a behavior, including any past experiences of future obstruction (Ajzen, 1991). The behavioral intention is the motivation to engage in the behavior. "Attitudes toward the behavior, subjective norms with respect to the behavior, and perceived behavioral control over the behavior are usually found to predict behavioral intentions with a high degree of accuracy" (Ajzen, 1991, p. 206). Generally, according to Beck and Ajzen (1991), the more favorable the attitude and subjective norm towards a targeted behavior and the more perceived behavioral control the individual feels they have over a targeted behavior, the more likely the intent will be to execute the targeted behavior.

Personality dimensions have been considered in various aspects of research related to career choices (Teng, 2007), employment performance (Gable & Dangello, 1994), and academic success (Ridgell & Lounsbury, 2004). In this study, the relationship between personality dimensions and fraudulent financial reporting was the focus. Feeley (2006) examined personality, environment, and the causes of white-collar crime, and the characteristics and behaviors that relate to white-collar crime. One of the propositions examined was "the role that personality and behavioral traits occupy in compelling executives to commit crime" (Feely, 2006, p. 202). Feeley (2006) suggested that those with a competitive personality cannot bear to lose – at any expense. Feeley (2006) proposed three dominant traits associated with a competitive personality: 1) a positive extravert, 2) the disagreeable businessman, and 3) the neurotic. Terpstra et al. (1993) examined the influence personality and demographic variables had on insider trading, and individuals who were highly competitive were more likely to act unethically.

Conner and Abraham (2001) reported that "both extraversion and neuroticism have been related to smoking and longitudinal studies have found that those with higher neuroticism scores are more likely to take up smoking and maintain the habit" (Conner & Abraham, 2001, p. 1549). The personality variables used were neuroticism, extraversion, and conscientiousness. The authors proposed "that conscientiousness has a particular, and perhaps independent, relationship to decision making and the enactment of intentions" (Conner & Abraham, 2001, p. 1549). In their health protection study, the authors noted that neuroticism and extraversion were not significant predictors of intentions.

Based on the critical analysis of theoretical and empirical literature influencing the behavior of fraudulently reporting financial information, research questions and hypotheses were proposed about the relationships among reporting of fraudulent financial information based on applying the *theory of planned behavior* for community college business students. These questions and hypotheses were based on the key gaps in the literature, the recommendations addressed in this study, and the theoretical framework that was used to guide this study. Based on the recommendation for future study resulting from the review of the literature, and the theoretical framework guiding this study, research questions and hypotheses were generated in this study about community college business students fraudulently reporting financial information.

Research Questions

1. What are the community college business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control, and behavioral intention to fraudulently report financial information?

2. Are there differences in personality dimensions according to community college business student characteristics?

3. Are there differences in attitude, subjective norm, and perceived behavioral control toward the behavior, and behavioral intention to fraudulently report financial information, according to community college business student characteristics?

Hypotheses

H1 Of the five personality dimensions explanatory variables, the order of importance in explaining intention to fraudulently report financial information among community college business students is as follows: extraversion → conscientiousness → neuroticism → agreeableness → openness to new experiences.

H2 There is a significant explanatory relationship among attitude, subjective norm, and perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college students.

H3 There is a significant explanatory relationship among business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control and behavioral intention of fraudulent reporting of financial information by community college business students.

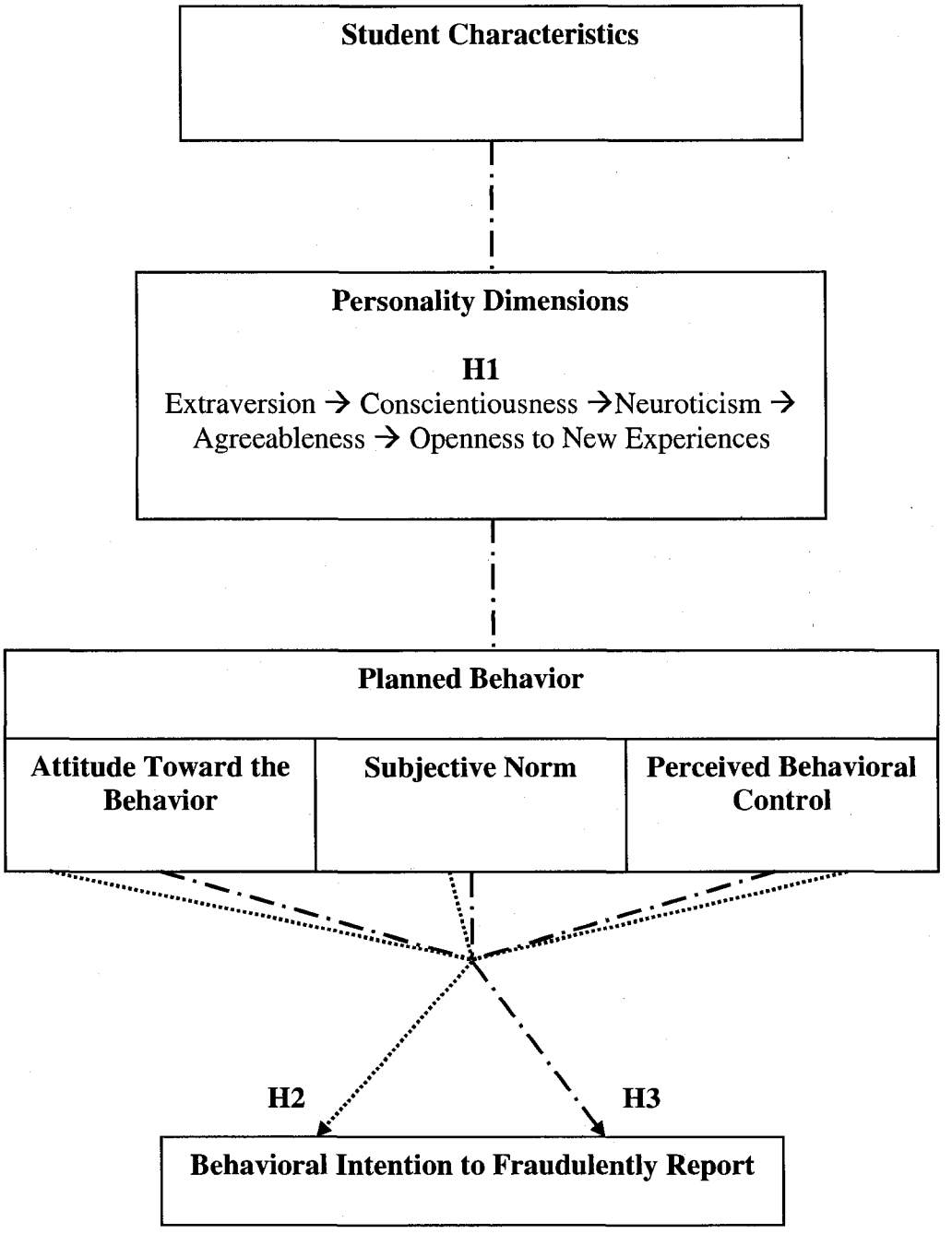


Figure 2-1. Hypothesized model of the relationship among community college business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control, and behavioral intention to fraudulently report financial information.

Chapter II provided a detailed review of the literature related to personality dimensions, and the theory of planned behavior constructs of attitude, subjective norm, perceived behavioral control, and intention. A hypothesized conceptual model, research questions, and research hypotheses were also presented in this chapter. Chapter III presents the methodology employed in answering the research questions and testing the hypotheses for this study about the relationship among personality dimensions, attitude, subjective norm, perceived behavioral control, and the behavioral intention among community college business students to fraudulently report financial information.

CHAPTER III

RESEARCH METHODOLOGY

Chapter III presents a description of the research methods used in this study concerning the relationship between the personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intention of community college business students to fraudulently report financial information. The research questions and hypotheses, which appeared at the end of Chapter II, evolved from gaps in the literature. This chapter begins with a discussion of the research design, and continues with the study's population and sampling, instrumentation, data collection procedures and ethical aspects, data analysis methods, and an evaluation of this study's research methods.

Research Design

An exploratory (comparative) and explanatory (correlational) research design was conducted. The entire accessible population of approximately 750 (805 less those absent on data collection days) first- and second- year community college business students attending the scheduled business classes (Principles of Accounting, Business Law, Economics-micro and macro, Introduction to Business, Principles of Marketing, and other business classes) was invited to participate in the survey. The final data-producing sample of 485 students was self-selected, consisting of those students present on the day of data collection who agreed to participate and return the survey.

The survey instrument for this study had three parts (see Appendix A). Demographic variables of age, gender, marital status, race, ethnicity, declared major, education level, employment status, and occupation was measured by *Part I: Student*

Characteristics, (attribute variables in RQ1, exploratory in RQ2 and RQ3, and explanatory in H3). Personality dimensions were measured by *Part II: The Ten-Item Personality Inventory* developed by Gosling, Rentfrow, and Swann (2003), (descriptive in RQ1, exploratory in RQ2, and explanatory in H1 and H3). *Part III: Theory of Planned Behavior* measured attitude, subjective norm, perceived behavioral control (exploratory in RQ3 and explanatory in H2, and H3), and behavioral intention (dependent variable in H1, H2, and H3, and RQ3) using a researcher-developed scenario and questionnaire based on the *theory of planned behavior* (TPB) model developed by Ajzen and Fishbein (1980).

To answer ***Research Question 1***, frequency distributions, measures of central tendency, and variability were used to report the student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intentions to fraudulently report financial information of community college business students. To answer ***Research Question 2***, independent *t*-tests (for two group comparisons such as gender and ethnicity), ANOVA with LSD and Scheffe post hoc comparisons (for three or more group comparisons such as race) were used to see if there were differences in personality dimensions according to business student characteristics. To answer ***Research Question 3***, independent *t*-tests (for two group comparisons such as gender and ethnicity), ANOVA with LSD and Scheffe post hoc comparisons (for three or more group comparisons such as race) to see if the intention to fraudulently report financial information differed significantly according to the student characteristics.

To test ***Hypothesis 1***, multiple regression analyses using the hierarchical (forward) method were used to examine the order of importance of the five personality

dimensions in explaining the intention to fraudulently report financial information among community college business students. To test ***Hypothesis 2***, multiple regression analyses using the stepwise method were used to examine whether there was a significant explanatory relationship among attitude, subjective norm, perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college students. To test ***Hypothesis 3***, multiple regression analyses using the hierarchical (forward) method were used to examine the relationship between business student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college business students.

Population and Sampling Plan

Target Population

The target population for this study consisted of first-and second-year college business students enrolled in business-related courses on the main campus at a community college in south Florida during the winter semester of 2008. Average semester enrollment of first and second-year college business students is approximately 2,242 students during each of the fall and winter semesters. The business classes offered at the community college include Principles of Accounting, Business Law, Economics (micro and macro), Introduction to Business, and Principles of Marketing. Average semester enrollment by class is shown in Table 3-1.

Table 3-1

Average Semester Enrollment of Community College Business Students

Student Enrollment	Average Fall Semester	Average Winter Semester	Total Average per Semester	Percentage
Business Classes				
Principles of Accounting	641	720	1,361	35%
Business Law	35	0	35	1%
Economics (Micro & Macro)	686	844	1,530	40%
Introduction to Business	135	188	323	8%
Principles of Marketing	59	94	153	4%
Other Business Classes	195	245	440	12%
Total	**1,751**	**2,091**	**3,842**	**100%**

Accessible Population

For this study, the accessible population was the approximately 805 students attending the scheduled business classes (Principles of Accounting, Business Law, Micro and Macro Economics, Introduction to Business, and Principles of Marketing) on the days the survey was administered. Absences reduced this number to approximately 750 accessible students. The community college has a block schedule format of Monday and Wednesday, or Tuesday and Thursday, and primary class times are 8:00 a.m., 9:30 a.m., 11:00 a.m., and 12:30 p.m. All classes are for one hour and fifteen minutes. The survey was administered during class time. Although some of the students were not anonymous

to the researcher during data collection, students were not asked to provide any identifying information.

Sampling Plan: Total Accessible

One of the strengths of the study is that the entire accessible population of 750 community college business students was asked to participate in this study, providing a chance for each member of the population to be represented. This enhances the sample representativeness of the target population and external validity (Trochim, 2001). As the sample consisted of the entire accessible population, sampling errors and bias are expected to be minimized.

Sample Size

This study included the use of multiple regression analyses to answer research questions and test hypotheses. There were 17 explanatory variables, including nine sociodemographic characteristics (attribute variables), three related to the *theory of planned behavior* (attitude, subjective norm, and perceived behavioral control), five personality dimensions (extraversion, conscientiousness, neuroticism, agreeableness, and openness to new experiences), and behavioral intention (dependent variable) in this study.

An estimate of the minimal sample size needed for multiple regression analysis can be found by multiplying the number of explanatory variables by 20 (Garson, 2007). For this study, the calculation would be 20 x 17, making the appropriate sample size 340. Green (1991) provides another formula for estimating sample size, which is based on having a number of cases greater than eight times the number of independent variables

plus 50. Based on this formula, the calculation would be 50 + (8 x 17), with an appropriate sample size of greater than 186.

To estimate the sample size needed to conduct exploratory factor analysis, the number of items in the longest scale needs to be identified. This would be the *Ten-Item Personality Inventory*. For exploratory factor analysis, the range is 3 to 12 times the number of items, which for this study would be 30 to 200 (Mundfrom, Shaw, & Ke, 2005).

To estimate the sample size needed for population validity, based on a population size of 2,242, according to Gay and Airasran (2001), an adequate sample size would be 327 for a population of 2,200, but a sample size of 500 would be an even more confident sample size. In summary, to conduct the statistical analysis, and to ensure a sufficient sample size based on the population size, a range of 194 to 500 would represent an adequate and optimal total sampling, respectively. The final data-producing sample will be self-selected based on those students who agree to participate in the study.

Eligibility Criteria and Exclusion Criteria

Inclusion criteria. Prospective participants were included in the study if they met the following criteria:

1. 18 years old or older.
2. Currently enrolled in a business-related course (Principles of Accounting, Business Law, Economics--micro and macro, Introduction to Business, and Principles of Marketing).
3. Able to read and write in English.
4. Present in class on the date of data collection.

Exclusion criteria. Prospective participants were not included in the study if they met any of the following exclusion criteria:

1. Were under 18 years of age.
2. Not currently enrolled in a business-related course (Principles of Accounting, Business Law, Economics--micro and macro, Introduction to Business, and Principles of Marketing).
3. Were unable to read and write in English.
4. Not present in class on the date of data collection.

Setting

The survey was distributed to community college business students attending a scheduled business class (Principles of Accounting, Business Law, Economics--micro and macro, Introduction to Business, and Principles of Marketing). Average class size at the two-year community college was 30-40 students. The length of the class period was one hour and 15 minutes (Monday-Wednesday or Tuesday-Thursday), providing sufficient time to complete the survey.

Colleagues at the community college assisted in administering the survey to their classes. They were provided a detailed instruction script to read aloud prior to the distribution of the survey instrument (see Appendix A). Questionnaires were distributed in the classroom and collected immediately after completion.

Instrumentation

This study included the use of a three-part survey, organized as follows: 1) Part 1: *Student Characteristics*, completed by the students for use in describing the sample and setting characteristics, and exploring the influence of demographic characteristics on

participant responses; 2) Part 2: *Ten-Item Personality Inventory,* which asked participants to respond to a series of ten descriptive words, using the common stem, "I see myself as," for the purpose measuring the five personality dimensions (extraversion, agreeableness, conscientiousness, emotional stability, and openness to experiences); and 3) Part 3: *Theory of Planned Behavior*, a scenario and related measurement scale adapted from Ajzen (1980) to measure the attitude, subjective norm, perceived behavioral control, and behavioral intention of fraudulent financial reporting by students.

Part 1: Student Characteristics

Students were asked to provide their age, gender, marital status, race, ethnicity, declared major, education level, employment status, and occupational level for the purpose of exploring whether there was a relationship between student characteristics and attitude, subjective norm, perceived behavioral control, and the behavioral intention to fraudulently report financial information.

Occupation and education level were deemed relevant to this study because of the numerous nontraditional students enrolled at the community college. The occupational and educational scales were adapted from the Hollingshead's 2-factor index, which appear in Miller and Salkind, (2002). Age was measured in years, with students filling in the blank for that question. For the remaining questions, students selected from the multiple choice answer that best described them by placing a checkmark in front of that answer.

Part 2: Ten-Item Personality Inventory

Personality was an attribute variable in this study and was measured using the *Ten-Item Personality Inventory* (Gosling, Rentfrow, & Swann, 2003). The *Ten-Item Personality Inventory* (*TIPI*) was developed as a brief measure of the Big-Five personality dimensions. The developers reported "although somewhat inferior to the standard multi-item instruments, the instruments reached adequate levels in terms of the following: 1) convergence with widely used Big-Five measures in self, observer, and peer reports; 2) test-retest reliability; 3) patterns of predicted external correlates; and 4) convergence between self and observer ratings" (Gosling et al., p. 504). The time estimated for completion of the instrument was approximately two to three minutes.

The ten-item personality inventory consists of ten items. Each of the ten items contains a set of two words, separated by a comma, using the common stem, "I see myself as." The two words are either descriptive of one of the five dimensions, or the opposite of the personality dimension. For extraversion, the positively scored item is "extraverted and enthusiastic," while the reverse-scored item is "reserved and quiet." For agreeableness, the positively-scored item is "sympathetic and warm," while the reverse-scored item is "critical and quarrelsome." For conscientiousness, the positively-scored item is "dependable and self-disciplined," while the reverse-scored item is "disorganized and careless." For emotional stability, the positively-scored item is "calm and emotionally stable," while the reverse-scored item is "anxious and easily upset." For openness to experiences, the positively-scored item is "open to new experiences and complex," while the reverse-scored item is "conventional and uncreative." The TIPI uses a 7-point Likert-type scale. The response format for positively-scored items is 1= disagree strongly; 2= disagree moderately; 3= disagree a little; 4= neither agree nor disagree; 5= agree a little; 6= agree moderately; and 7= agree strongly. Scoring is reversed for the reverse-scored items. Scores for each dimension range from 2 to 14. The scoring for the *TIPI* measure of the Big-Five dimensions is such that the higher the score, the greater the tendency toward the personality dimension being measured (i.e., a score of 6 for emotional stability would be interpreted as a more emotionally stable personality). Conversely, the lower the score, the lower the tendency toward the personality dimension being measured (i.e., a score of 2 for emotional stability would be interpreted as a less emotionally stable personality) (Gosling et al., 2003).

Reliability

Estimates of reliability are available for the *TIPI.* Gosling et al. (2003) tested and retested *TIPI,* using 1,813 undergraduate students and 180 undergraduate students. "The test-retest correlations for the *TIPI,* are substantial (mean $r = .72$), albeit weaker than the two–week test-retest correlations of the *BFI* (mean $r = .80$)" (Gosling et al., p. 518). *TIPI* paralleled correlations of the *Big Five Instrument (BFI)* with correlations exceeding .90 (Gosling et al., 2003). For internal consistency, the authors reported the following Cronbach's alphas for the different dimensions: 1) Extraversion, .68; 2) Agreeableness, .40; 3) Conscientiousness, .50; 4) Emotional Stability, .73; and 5) Openness to Experience, .45. For this study, Cronbach's alphas were calculated for each of the five personality dimensions.

Validity

Gosling et al. (2003) provided evidence of construct validity for the *TIPI* measure using a sample of 1,813 mostly white female undergraduate students. "The convergent correlations (mean $r = .77$ far exceeded the discriminate correlations, absolute mean $r = .20$) and none of the discriminate correlations exceeded .36" (Gosling et al. p. 518). The *TIPI* "two items per scale emphasizes content validity considerations, resulting in lower inter-item correlations than is typical of more homogeneous scales" (Gosling et al., 2003). The authors reported that the *TIPI* has limited evidence of validity; the focus was on content validity. The general finding by the authors suggests the brief 10-item *TIPI* instrument has been established as an acceptable measure when a brief measure is needed. Exploratory factor analysis was used to test the dimensionality of *TIPI.*

Part 3: Theory of Planned Behavior

Description

Ajzen and Fishbein (1980) suggested a survey instrument containing a series of statements be used to measure the key constructs related to the *theory of planned behavior* intention, attitude, subjective norm, and perceived behavioral control. Each construct was measured with three items using a 7-point semantic differential scale, consistent with Ajzen and Fishbein's (1980) recommendations. The nature of scenarios related to hypothetical situations cannot measure the actual behavior of the student. This study measured the intent to perform the actual behavior. The higher the score for intention, attitude, subjective norm, and perceived behavioral control, the more ethical the student's response to the scenario.

The scenario, created by the researcher, places the student in a hypothetical situation as the supervisor. The scenario places the student in a position with a dilemma related to the cash drawer not equaling the evening ticket sales. The ten questions in the survey instrument following the scenario pertain to the *theory of planned behavior.* The questions are based on the attitude, subjective norm, perceived behavioral control, and intention to act unethically to the described scenario. The questions in the survey instrument are based on the recommendations made by Ajzen and Fishbein (1980).

Intention was measured using a series of three questions related to the student's intended behavior toward voiding the ticket: 1) I intend to; 2) I plan to; and 3) I expect to. The poles for the semantic differential scale for intention are extremely probable (score = 1), and extremely improbable (score = 7). Scores range from 3 to 21. Higher scores

indicate a greater intention toward not voiding the ticket sales, and reflect more ethical behavior.

Measuring attitude had three responses related to the student's attitude toward voiding the ticket: The poles for the semantic differential scale for intention are good (score = 1) and bad (score = 7); wise (score = 1) and foolish (score = 7); beneficial (score = 1) and harmful (score = 7); in response to the following question: Do you feel like (behavior) would be? Scores range from 3 to 21. Lower scores indicate a greater attitude toward voiding the ticket sales, and reflect less ethical behavior.

To measure subjective norm, three questions were asked related to those opinions of important people to the student. The first question was as follows: most people who are important to me would approve (of the behavior); the poles for the semantic differential scale for this question are extremely probable (score = 1) and extremely improbable (score = 7). Question two: most people who are important to me will be disappointed in me if I (performed the behavior); the poles for the semantic differential scale are unlikely (score = 1) and likely (score = 7). Question three: no one who is important to me thinks it would be OK to (perform the behavior). The poles for the semantic differential scale for this question are disagree (score = 1), and agree (score = 7). Scores range from 3 to 21. Higher scores indicate a greater subjective norm influence toward not voiding the ticket sales, and reflect more ethical behavior.

To measure perceived behavioral control, three questions were asked of the student: 1) for me (the behavior) is easy; 2) if I want to I could easily (perform the behavior); and 3) I have complete control of making the decision to (perform the behavior). The poles for the semantic differential scale for perceived behavioral control

are strongly agree (score = 1), and strongly disagree (score = 7). Scores range from 3 to 21. Higher scores indicate less perceived behavioral control over voiding the ticket sales, and reflect more ethical behavior.

Reliability

Buchan (2005) measured internal consistency for each of the constructs using composite scale reliability (similar to the Cronbach's alpha). Reliability was reported for attitude (.875), subjective norm (.835), perceived behavioral control (.546), and intention (.880), when measuring the ethical decision making in a sample of 95 individuals in the public accounting field. Previous research by Buchan (2005) referenced a recommended more conservative cutoff of 0.7.

Carpenter and Reimers (2005) surveyed 70 MBA students in their study related to unethical and fraudulent financial reporting. They reported coefficient alphas for intention (.95), attitude (.90), and perceived behavioral control (.70).

Validity

Convergent validity for the theory of planned behavior constructs was established by Buchan (2005) when measuring the ethical decision making in a sample of 95 individuals in the public accounting field. Research proposes the average variance extracted (AVE) to be 0.5. In Buchan's study the AVE for the constructs measured were as follows: 1) attitude, 0.643; 2) subjective norm, 0.643; 3) perceived behavioral control, 0.31; and 4) ethical intention, 0.71. All measurements exceeded the suggested minimum. Carpenter and Reimers' (2005) factor analysis resulted in a Kaiser-Meyer-Olkin (KMO) reported measure of sampling adequacy of 0.887 (respondents were 70 MBA students). In this study, exploratory factor analysis was used to see how many factors emerged.

Procedures: Ethical Considerations and Data Collection Methods

The following section describes ethical considerations that were taken into account for the protection of all participants. Additionally, each step in the data collection process will be discussed in sequence.

1. Obtaining permission to use the instruments in this study was the first required action before obtaining IRB approval and collecting data (see Appendix B) for approvals).
2. The successful defense of the research study proposal was the next step in the dissertation process.
3. Obtaining permission to use the site for data collection was the next required step. The site institution for this study required the following before it would grant permission to use the site.
    a. A letter outlining the proposed dissertation and the nature and extent of the research study to be conducted at the target institution, including a statement that there would be no negative impact on the subjects (the students), that participation in the survey would be completely voluntary, that all results of the survey would be anonymous, and that prior approval would be obtained from faculty members who chose to participate in the administration of the survey.
    b. A signed letter from each business related faculty member authorizing the researcher to enter their respective classroom and administer the survey instrument.

4. The next required step was to obtain approval for the study from Lynn University's Institutional Review Board. Data collection began once approval was received:
    a. Lynn University's Institutional Review Board. The following required forms and the research protocol were submitted to the Lynn University Institutional Review Board for the Protection of Human Subjects (IRB) for review and approval.
        - IRB Form 1 - Application and Research Protocol for Review of Research Involving Human Subjects in a New Project IRB (IRB Form I included a request for waiver of documentation of signed consent).
        - Form 3 – Request for Expedited Review
        - The Authorization for Informed Consent (Appendix D).
5. Following Lynn IRB approval, the researcher coordinated data collection with the associate dean and instructors.
    a. The respective classroom teacher made an announcement to the business students who were enrolled in a business related class inviting their participation in the survey. The researcher was located in the back of the classroom to answer any questions students might have had before the survey. There were no identifiers on the survey to identify participants. The survey was distributed to the first and second year community college business students who were attending class during regular class time.

b. The survey consisted of the survey itself (see Appendix A), along with the authorization for voluntary consent form, which described the purpose, procedures, and duration of the survey (see Appendix D). The survey took respondents between 2 to 3 minutes to complete. The Authorization for Voluntary Consent form informed participants of the minimal risk (time to complete the survey and the possibility of sensitive questions) and the potential benefits associated with the study. The benefit of the contribution of knowledge about the relationship between student characteristics, personality dimensions, and intention to fraudulently report financial information outweighed the risk of the slight discomfort participants may have experienced during the survey. The ultimate goal of this study was to contribute to knowledge about intention to fraudulently report financial information. Participants' rights to voluntary participation, and to ask questions about the research were fully addressed. Participants were advised their participation would result in neither a financial gain nor loss. Participants were informed of the procedures for completing and returning the survey. Participants were informed that because the survey was anonymous, they should not include any identifiers on the survey. Participants were informed that submission of the survey constituted their informed consent to participate in the study. Because there were no identifiers in the survey, a request was made to IRB to waive documentation of a signed consent.

c. The faculty and the researcher left the room.

d. A box (with a small opening) was provided at the front of the classroom to deposit their completed surveys.

6. The data collection process was conducted for approximately two weeks, and completion occurred less than one year after IRB approval.
7. The start date was April 8, 2008, following the April 7, 2008 date that this study was approved by the IRB. The study was completed April 22, 2008.
8. Within one month of the conclusion of completion of data collection, the researcher submitted the Lynn University IRB Report of Termination of Project.
9. Data analyses were performed as described in the data analysis section using SPSS 16. Data was stored on a password protected computer.
10. Hard copy survey data are kept at the researcher's home in a locked file cabinet.
11. Data will be destroyed after five years.

Methods of Data Analysis

Frequency distributions, measures of central tendency, and variability were used to answer research question 1. Descriptive statistics, independent *t*-tests, ANOVA with post hoc comparisons using Scheffe and LSD were used to answer research questions 2 and 3. Multiple regression analysis using the hierarchical (forward) method was used to test hypotheses 1 and 3. Multiple regression analysis using the stepwise analysis was used to test hypothesis 2. Data collected was analyzed using SPSS version 16.0. Additional statistical data analysis procedures included the calculation of Cronbach's alphas and exploratory factor analysis to evaluate the psychometric qualities of the scales before analysis for research questions and hypotheses testing.

Following are the notations for the constant, unstandardized coefficient, error, and variables related to this study used in regression analysis for Hypotheses 1, 2, and 3:

Constant, unstandardized coefficient, and error:

b_0=constant

b = unstandardized coefficient

ε_1 = error

Explanatory variables:

X_1 = Age in Years

X_2 = Gender

X_3 = Marital Status

X_4 = Race

X_5 = Ethnicity

X_6 = College Major

X_7 = Highest Education Level

X_8 = Employment Status

X_9 = Occupational Level

X_{10} = Attitude

X_{11}= Subjective Norm

X_{12}= Perceived Behavioral Control

X_{13} = Extraversion

X_{14} = Agreeableness

X_{15} = Conscientiousness

X_{16} = Emotional Stability

X_{17} = Openness to Experiences

Outcome variables:

Y_1 = Behavioral Intention

Reliability and Validity Analysis

Data was analyzed to see if parametric assumptions were met. Alternate statistics (Welch *F*) were reported in situations where variances were unequal. Coefficient alphas were used to provide estimates of the reliability and internal consistency of the attitude, subjective norm, and perceived behavioral control, and behavioral intentions to fraudulently report financial information of community college business students, as well as for the total *TIPI* and each individual dimension. Factor analysis was conducted to test for the emergence of attitude, subjective norm, perceived behavioral control, and intention to establish construct validity for the *theory of planned behavior.* Factor analysis was conducted to test for the emergence of five dimensions for the *TIPI.*

Research Questions

Research Question 1

What are the community college business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control, and behavioral intention to fraudulently report financial information?

Measures of frequency distributions, measures of central tendency, and variability were used to report the student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control and behavioral intentions to fraudulently report financial information of community college business students.

Research Question 2

Are there differences in personality dimensions according to community college business student characteristics?

Independent *t*-tests (for two group comparisons such as gender and ethnicity), ANOVA with LSD and Scheffe post hoc comparisons (for three or more group comparisons such as race) were used to see if there were differences in personality dimensions according to business student characteristics.

Research Question 3

Are there differences in attitude, subjective norm, and perceived behavioral control toward the behavior, and behavioral intention to fraudulently report financial information, according to community college business student characteristics?

Independent *t*-tests (for two group comparisons such as gender and ethnicity), ANOVA with LSD and Scheffe post hoc comparisons (for three or more group comparisons such as race) were used to see if the intention to fraudulently report financial information differed significantly according to the student characteristics.

Hypotheses

Hypothesis 1

Of the five personality dimensions explanatory variables, the order of importance in explaining intention to fraudulently report financial information among community college business students is as follows:

extraversion →conscientiousness →neuroticism →agreeableness →openness to new experiences.

Multiple regression analysis using the hierarchical (forward) method was used to examine the importance of the five personality dimensions in explaining the intention to fraudulently report financial information among community college business students. The regression model for Hypothesis 1 used the following equation:

$$Y_1 = (b_0 + b_{13}X_{13} + b_{14}X_{14} + b_{15}X_{15} + b_{16}X_{16}\, b_{17}X_{17}) + \varepsilon_i$$

Hypothesis 2

There is a significant explanatory relationship among attitude, subjective norm, and perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college students.

Multiple regression analysis using the stepwise method was used to examine whether there was a significant explanatory relationship between attitude, subjective norm, and perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college business students. The regression model for Hypothesis 2 used the following equation:

$$Y_1 = (b_0 + b_{10}X_{10} + b_{11}X_{11} + b_{12}X_{12}) + \varepsilon_i$$

Hypothesis 3

There is a significant explanatory relationship among business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control and behavioral intention of fraudulent reporting of financial information by community college students.

Multiple regression analysis using the hierarchical (forward) method was used to examine the relationship between business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control and behavioral intention of fraudulent reporting of financial information by community college business students. The regression model for Hypothesis 3 used the following equation:

$$Y_1 = (b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + b_{10}X_{10} + b_{11}X_{11} + b_{12}X_{12} + b_{13}X_{13} + b_{14}X_{14} + b_{15}X_{15} + b_{16}X_{16} + b_{17}X_{17}) + \varepsilon_i$$

Evaluation of Research Methods

In the evaluation of research methods, the internal validity and external validity of the research methods was examined. Huck, Cormier, and Bounds (1974) referred to internal validity as a causal relationship and external validity as the extent to which the results of the study can be generalized to other populations. This non-experimental study does not have the same level of internal validity established in experimental designs. The purpose of the research methods was to improve the strength of the cause-and-effect relationship between the independent and dependent variables and to improve population and ecological validity. The internal and external validity of this study were examined by evaluating the strengths and weaknesses of the research methods. The research methods

that either strengthened or threatened internal and external validity are described in the following section.

Internal Validity

Strengths

1. The use of correlational (explanatory) and comparative (exploratory) research is a strength. However, it is not as strong as an experimental study with randomization, controls, and manipulation of the independent variable.
2. The instruments used in this study had evidence of good estimates of reliability providing strength to the study. Instruments were further evaluated by calculating Cronbach's alphas and conducting exploratory factor analysis, and by interpreting those findings. Corrected item-total correlations were also reviewed, especially when reverse-coded items yielded low item-total correlations.
3. The statistical procedures used in data analysis (multiple regression) related to the research questions and hypotheses testing were rigorous, representing an internal strength of the study.
4. The data producing sample size of 485 community college business students represents a strength, and was sufficiently large enough to conduct the multiple regression and factor analyses planned for the study.
5. The use of a homogeneous sample of community college business decreased the potential effects of extraneous variables.

Weakness

1. One of the instruments used in this study had limited evidence of construct validity, representing a weakness to the study. This study looked for further evidence of construct validity for the *Ten-Item Personality Inventory*, using

exploratory factor analysis to test the multidimensionality of the personality construct.

External Validity

Strengths

1. Both population and ecological (setting) validity was strengthened by surveying the entire accessible population of 805 (reduced to 750 providing for absences) community college business students, increasing the ability to generalize results to the target population.
2. The survey occurred in a natural (classroom) environment, avoiding the threats to external validity associated with laboratory settings.
3. The data producing sample size of 485 students is a strength to external validity based on the size of the target population (Gay & Airasian, 2000).

Weakness

1. Because the final data producing sample was self-selected (those agreeing to participate from the accessible population), this introduced a selection bias, representing a threat.

Chapter III presented the research methods employed in answering the research questions and testing the hypotheses for this study about the relationship among personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intention among community college business students to fraudulently report financial information. Chapter IV will present the results of the data analyses performed as part of this study. In addition to providing the results of analyses related to answering the research questions and testing the hypotheses, Chapter IV will also include the

descriptive statistics for the data-producing sample and instrumentation, and results of analyses of the psychometric characteristics of the instruments used in this study.

CHAPTER IV

RESULTS

Chapter IV presents the results related to the research questions and hypotheses from this study about factors influencing fraudulent financial reporting by community college business students: applying the theory of planned behavior. Surveys were distributed to 505 students during scheduled class time. A total of 485 usable surveys were returned, resulting in a response rate of 96%. Descriptive statistics, including measures of central tendency and frequency distributions, were used to answer research question one, about the student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intentions of the sample. Independent *t*-tests (for two group comparisons such as gender and ethnicity), and ANOVA with LSD and Scheffe post hoc comparisons (for three or more group comparisons such as race) were used to answer research questions two and three about differences in personality and intent based on student characteristics. Multiple regression analyses using the hierarchical (H1 and H3) and stepwise (H2) methods were used to test the hypothesized relationships between the independent variables and the dependent variable. Respondents consisted of 255 male (52.6%) and 230 female (47.4%) community college business students who were an average of 22.17 years old. The average age of the males was 21.89 years, while the average age of the females was 22.49 years. Respondents also tended to be single (88.2%), white (67.0%), and not Hispanic or Latino (64%). Additionally, most students were currently employed (75.7%). Business Administration was the most frequently reported major (34.8%), followed by Accounting

majors (21%). Other analyses conducted were reliability analysis and exploratory factor analysis.

Psychometric Analysis of the Survey Instruments

Reliability and Validity of the Ten-Item Personality Inventory (TIPI)

Reliability

Total sample. Cronbach's alpha was calculated for the total *Ten-Item Personality Inventory Questionnaire.* A Cronbach's alpha of .7 to .8 indicates a scale has "good" reliability (Field, 2005). The Cronbach's alpha for the total sample (N=474) of community college business students was .605. Only two items, item 2 "critical, quarrelsome," and item 6 "reserved, quiet" would cause the alpha for the total inventory to increase if they were deleted. Corrected item-total correlations should usually be greater than .30 (Garson, 2007). The *Ten-Item Personality Inventory Questionnaire* had several corrected item-total correlations below .40 (Baillie, 1997), and four below .30. The researcher reviewed the coding of these items for accuracy.

Corrected item-total correlations for the *Ten-Item Personality Inventory Questionnaire* for the total sample of (N=474) community college business students (male and female) are shown in Table 4-1.

Table 4-1

Corrected Item-total Correlations for the TIPI: Total Sample (N = 474)

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
1. Extraverted, enthusiastic.	.432	.546
2. Critical, quarrelsome.	.122	.620
3. Dependable, self-disciplined.	.254	.586
4. Anxious, easily upset.	.322	.569
5. Open to new experiences, complex.	.461	.545
6. Reserved, quiet.	.136	.623
7. Sympathetic, warm.	.320	.572
8. Disorganized, careless.	.233	.592
9. Calm, emotionally stable.	.303	.576
10. Conventional, uncreative.	.344	.564
$\alpha = .605$		

Cronbach's alphas were calculated for each of the five personality dimensions of the *TIPI*. The Cronbach's alpha for the total sample of community college business students by dimension was as follows: 1) .409 for extraversion; 2) .083 for agreeableness; 3) .415 for conscientiousness; 4) .488 for emotional stability; and 5) .456 for openness to new experiences. As a result of the unusually low agreeableness Cronbach's alpha to make certain the data was input correctly into SPSS, several original surveys were compared with the data entered into SPSS. The researcher established that the data for the agreeableness personality dimension item 2 was correctly entered into SPSS and properly recoded, and that item 7 was also entered correctly.

Male students. For male students, the calculated Cronbach's alpha for the total *Ten-Item Personality Inventory Questionnaire* was .633. Corrected item-total correlations were all over .3, except for items two, six, and eight. Item two, "critical, quarrelsome" would cause the total scale alpha to increase to .659 if deleted. Item six, "open to new experiences, complex" would cause the total scale alpha to increase to .653 if deleted. Corrected item-total correlations for the *Ten-Item Personality Inventory Questionnaire* for male community college business students are shown in Table 4-2.

Table 4-2

Corrected Item-Total Correlations for the TIPI: Male Students (N = 248)

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
1. Extraverted, enthusiastic.	.450	.577
2. Critical, quarrelsome.	.077	.659
3. Dependable, self-disciplined.	.360	.598
4. Anxious, easily upset.	.340	.599
5. Open to new experiences, complex.	.509	.570
6. Reserved, quiet.	.133	.653
7. Sympathetic, warm.	.363	.595
8. Disorganized, careless.	.220	.628
9. Calm, emotionally stable.	.361	.597
10. Conventional, uncreative.	.353	.597
$\alpha = .632$		

Cronbach's alphas were calculated for each of the five personality dimensions of the *TIPI* for the male students. The Cronbach's alphas for male college business students by dimension were as follows: 1) .325 for extraversion; 2) .047 for agreeableness; 3) .406 for conscientiousness; 4) .453 for emotional stability; and 5) .451 for openness to new experiences.

Female students. For female students, the calculated Cronbach's alpha for the *Ten-Item Personality Inventory Questionnaire* was .583. While most of the item-total

correlations were below .3, only two items (3 and 6) would cause the total scale alpha to increase if deleted. Item three, "dependable, self-disciplined" would cause the total scale alpha to increase to .589 if deleted. Item six, "open to new experiences, complex" would cause the total scale alpha to increase to .591 if deleted. Corrected item-total correlations for the *Ten-Item Personality Inventory Questionnaire* for female community college business students are shown in Table 4-3.

Table 4-3

Corrected Item-Total Correlations for the TIPI: Female Students (N = 226)

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
1. Extraverted, enthusiastic.	.402	.525
2. Critical, quarrelsome.	.171	.583
3. Dependable, self-disciplined.	.104	.589
4. Anxious, easily upset.	.370	.524
5. Open to new experiences, complex.	.395	.531
6. Reserved, quiet.	.168	.591
7. Sympathetic, warm.	.269	.558
8. Disorganized, careless.	.245	.561
9. Calm, emotionally stable.	.259	.558
10. Conventional, uncreative.	.327	.539
α = .583		

Cronbach's alphas were calculated for each of the five personality dimensions of the *TIPI* for the female students. The Cronbach's alphas for female college business students by dimension were as follows: 1) .517 for extraversion; 2) .062 for agreeableness; 3) .401 for conscientiousness; 4) .499 for emotional stability; and 5) .471 for openness to new experiences.

Exploratory Factor Analysis

Principal components analysis using varimax rotation was conducted for the total sample and for male and female students to test the unidimensionality of the *Ten-Item Personality Inventory Questionnaire*. The number of factors extracted was determined by the number of items with eigenvalues greater than 1. Factor loadings less than .3 were suppressed to make interpretation easier, and to ensure every item loaded onto a factor. Initial output was reviewed for singularity and multicollinearity of data. There were no highly correlated items ($r > .9$), and for the total sample and male and female students, the determinant of the correlation matrix was greater than .001, well above the recommended value of .00001 (Field, 2005).

Total sample (male and female students combined). For the total sample, eigenvalues indicated four factors, explaining 63.875% of the total variance, and the scree plot indicated two to four factors. Item factor loadings ranged from .467 to .734. Sub-scale names were assigned to these factors by the researcher, based on the most common characteristics shared by the items. Factor one was named *Personality Type*. Five of the personality items (one, three, five, seven, and ten) loaded onto this factor. Factor two was named *Emotional* because two of the items (two and four) pertained to an aggressive personality. Factor three was named *Conventional*, which contained one item (one) pertaining to enthusiastic behavior. Factor four was named *Stability* and contained one item (eight) which pertained to a more careless behavior. The *Ten-Item Personality Questionnaire* factor loadings for the total sample of community college business students (male and female) are shown in Table 4-4.

Table 4-4

Factor Item Loadings for the TIPI Questionnaire: Total Sample (N = 331)

	Component			
	1	2	3	4
Subscale Name	**Personality Type**	**Emotional**	**Conventional**	**Stability**
Item				
1. Extraverted, enthusiastic.	.592			
2. Critical, quarrelsome.		.785		
3. Dependable, self-disciplined.	.525			
4. Anxious, easily upset.		.784		
5. Open to new experiences, complex.	.707			
6. Reserved, quiet.			.845	
7. Sympathetic, warm.	.732			
8. Disorganized, careless.				.831
9. Calm, emotionally stable.	.630			
10. Conventional, uncreative.				.455

Male students. For the sample of males, eigenvalues indicated four factors, explaining 65.63% of the total variance, and the scree plot indicated two to four factors. Item factor loadings ranged from .405 to .841. Sub-scale names were assigned to these factors by the researcher based on the most common characteristics shared by the items. Factor one was named *Personality Type*. Five of the personality items (one, three, five, seven, and nine) loaded onto this factor. Factor two was named *Emotional* because two of the items (two and four) pertained to an aggressive personality. Factor three was named *Conventional*, which contained one item (six) pertaining to enthusiastic behavior. Factor four was named *Stability* and contained one item (eight) which pertained to a more careless behavior. The *Ten-Item Personality Questionnaire* factor loadings for male community college business students are shown in Table 4-5.

Table 4-5

Factor Item Loadings for the TIPI Questionnaire: Male Students (N = 157)

	Component			
	1	2	3	4
Subscale Name	**Personality Type**	**Emotional**	**Conventional**	**Stability**
Item				
1. Extraverted, enthusiastic.	.598			
2. Critical, quarrelsome.		.836		
3. Dependable, self-disciplined.	.617			
4. Anxious, easily upset.		.792		
5. Open to new experiences, complex.	.755			
6. Reserved, quiet.			.847	
7. Sympathetic, warm.	.749			
8. Disorganized, careless.				.908
9. Calm, emotionally stable.	.686			
10. Conventional, uncreative.			.511	

Female students. For the sample of female eigenvalues indicated four factors explaining 62.53% of the total variance and the scree plot indicated two to four factors. Item factor loadings ranged from .502 to .719. Sub-scale names were assigned to these factors by the researcher based on the most common characteristic shared by the items Factor one was named *Outgoing*. Three of the personality items (one, five, and eight) loaded onto this factor. Factor two was named *Agreeableness* because two of the items (seven and nine) pertained to a caring and pleasant personality. Factor three was named *Emotional*, which contained two items (two and four) pertaining to an aggressive personality. Factor four was named *Stability,* which contained two items (three and eight), which pertained to the careless behavior. *Ten-Item Personality Questionnaire* factor loadings for female community college business students are shown in Table 4-6.

Table 4-6

Factor Item Loadings for the TIPI Questionnaire: Female Students (N = 174)

	Component			
	1	2	3	4
Subscale Name	**Outgoing**	**Agreeableness**	**Emotional**	**Stability**
Item				
1. Extraverted, enthusiastic.	.734			
2. Critical, quarrelsome.			.773	
3. Dependable, self-disciplined.				.630
4. Anxious, easily upset.			.734	
5. Open to new experiences, complex.	.479			
6. Reserved, quiet.	.794			
7. Sympathetic, warm.		.771		
8. Disorganized, careless.				.785
9. Calm, emotionally stable.		.712		
10. Conventional, uncreative.				.498

Reliability and Validity of the Theory of Planned Behavior

Reliability

Total sample. Cronbach's alpha was calculated for the total *TPB*. A Cronbach's alpha of .7 to .8 indicates a scale has "good" reliability (Field, 2005). For the total TPB construct, the Cronbach's alpha for the total sample of students was .841. Corrected item-total correlations should usually be greater than .30 (Garson, 2007). The *TPB Questionnaire* had no corrected item-total correlations below .40 (Baillie, 1997) for the total sample except for item ten. Item ten, "I have complete control of making the decision to void the ticket sales" would cause the total scale alpha to increase to .861 if deleted. Corrected item-total correlations for the *Theory of Planned Behavior Questionnaire* for the total sample of community college business students (male and female) are shown in Table 4-7.

Table 4-7

Corrected Item-total Correlations for the TPB: Total Sample (N=448)

Item		Corrected Item-Total Correlation	Alpha if Item Deleted
1.	I intend to void the ticket sales:	.682	.817
2.	I plan to void the ticket sales:	.699	.817
3.	I expect to void the ticket sales:	.695	.816
4.	Do you feel like voiding the ticket sales would be		
a.	Good/Bad	.597	.824
b.	Wise/Foolish	.645	.820
c.	Beneficial/Harmful	.614	.820
5.	Most people who are important to me would approve of me voiding the ticket sales.	.542	.826
6.	Most people who are important to me will be disappointed in me if I voided the ticket sales.	.510	.829
7.	No one who is important to me thinks it would be OK to void the ticket sales.	.308	.845
8.	For me to void the ticket sales is easy:	.518	.828
9.	If I want to I could easily void the ticket sales.	.413	.839
10.	I have complete control of making the decision to void the ticket sales.	.164	.861

$\alpha = .841$

Cronbach's alpha was calculated for the *TPB* by construct. A Cronbach's alpha of .7 to .8 indicates a scale has "good" reliability (Field, 2005). The Cronbach's alphas for the total sample of students by construct was as follows: 1) intention, .942; 2) attitude, .829; 3) subjective norm, .607; and 4) perceived behavioral control, .627. Corrected item-total correlations should usually be greater than .30 (Garson, 2007). For each construct, there were no corrected item-total correlations below .40 (Baillie, 1997) for the total sample except for items seven (subjective norm) and ten (perceived behavioral control). Item seven, "No one who is important to me thinks it would be OK to void the

ticket sales" would cause the total scale alpha to increase to .729 if deleted. Item ten, "I have complete control of making the decision to void the ticket sales" would cause the total scale alpha to increase to .711 if deleted. Corrected item-total correlations for the *Theory of Planned Behavior Questionnaire* by construct for the total sample of community college business students (male and female) are shown in Table 4-8.

Table 4-8

Corrected Item-total Correlations for the TPB (by construct): Total Sample (N=448)

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
Intention		
1. I intend to void the ticket sales:	.865	.927
2. I plan to void the ticket sales:	.886	.912
3. I expect to void the ticket sales:	.890	.908
$\alpha = .942$		
Attitude		
4. Do you feel like voiding the ticket sales would be		
a. Good/Bad	.709	.751
b. Wise/Foolish	.731	.723
c. Beneficial/Harmful	.646	.825
$\alpha = 829.$		
Subjective Norm		
5. Most people who are important to me would approve of me voiding the ticket sales.	.496	.402
6. Most people who are important to me will be disappointed in me if I voided the ticket sales.	.501	.395
7. No one who is important to me thinks it would be OK to void the ticket sales.	.288	.729
$\alpha = .607$		
Perceived Behavioral Control		
8. For me to void the ticket sales is easy:	.473	.483
9. If I want to I could easily void the ticket sales.	.550	.355
10. I have complete control of making the decision to void the ticket sales.	.306	.711
$\alpha = 627.$		

Male students. For male students, the calculated Cronbach's alpha for the *TPB Questionnaire* was .839. Corrected item-total correlations were all over .3 except for

items seven (subjective norm) and ten (perceived behavioral control). Item seven, "No one who is important to me thinks it would be OK to void the ticket sales" would cause the total scale alpha to increase to .847 if deleted and item ten, "I have complete control of making the decision to void the ticket sales" would cause the total scale alpha to increase to .860 if deleted. Corrected item-total correlations for the *Theory of Planned Behavior Questionnaire* for the male sample of community college business students are shown in Table 4-9.

Table 4-9

Corrected Item-total Correlations for the TPB: Male Students (N = 237)

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
1. I intend to void the ticket sales:	.699	.813
2. I plan to void the ticket sales:	.726	.812
3. I expect to void the ticket sales:	.722	.812
4. Do you feel like voiding the ticket sales would be		
d. Good/Bad	.598	.821
e. Wise/Foolish	.655	.816
f. Beneficial/Harmful	.624	.817
5. Most people who are important to me would approve of me voiding the ticket sales.	.549	.824
6. Most people who are important to me will be disappointed in me if I voided the ticket sales.	.525	.826
7. No one who is important to me thinks it would be OK to void the ticket sales.	.255	.847
8. For me to void the ticket sales is easy:	.483	.829
9. If I want to I could easily void the ticket sales.	.335	.842
10. I have complete control of making the decision to void the ticket sales.	.109	.860

$\alpha = .839$

Female students. For female students, the calculated Cronbach's alpha for the *TPB Questionnaire* was .812. All item-total correlations were over .3 except for item ten. Item ten, "I have complete control of making the decision to void the ticket sales" would cause the total scale alpha to increase to .837 if deleted. Corrected item-total correlations for the *Theory of Planned Behavior Questionnaire* for the female sample of community college business students are shown in Table 4-10.

Table 4-10

Corrected Item-total Correlations for the TPB: Female Students (N = 211)

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
1. I intend to void the ticket sales:	.635	.786
2. I plan to void the ticket sales:	.635	.787
3. I expect to void the ticket sales:	.654	.784
4. Do you feel like voiding the ticket sales would be		
a. Good/Bad	.554	.796
b. Wise/Foolish	.581	.793
c. Beneficial/Harmful	.550	.791
5. Most people who are important to me would approve of me voiding the ticket sales.	.491	.797
6. Most people who are important to me will be disappointed in me if I voided the ticket sales.	.455	.799
7. No one who is important to me thinks it would be OK to void the ticket sales.	.319	.814
8. For me to void the ticket sales is easy:	.498	.795
9. If I want to I could easily void the ticket sales.	.445	.804
10. I have complete control of making the decision to void the ticket sales.	.178	.837

α = .812

Male students. For male students, the calculated Cronbach's alphas for the *TPB Questionnaire* by construct was as follows: 1) intention, .950; 2) attitude, .829; 3)

subjective norm, .601; and perceived behavioral control, .606. Corrected item-total correlations were all over .3 except for items seven (subjective norm) and ten (perceived behavioral control). Item seven, "No one who is important to me thinks it would be OK to void the ticket sales" would cause the subjective norm alpha to increase to .713 if deleted, and item ten, "I have complete control of making the decision to void the ticket sales" would cause the perceived behavioral control alpha to increase to .665 if deleted. Corrected item-total correlations for the *Theory of Planned Behavior Questionnaire* for the male sample of community college business students are shown in Table 4-11.

Table 4-11

Corrected Item-total Correlations for the TPB (by construct): Male Students (N = 237)

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
Intention		
1. I intend to void the ticket sales:	.876	.941
2. I plan to void the ticket sales:	.886	.933
3. I expect to void the ticket sales:	.922	.905
$\alpha = .950$		
Attitude		
4. Do you feel like voiding the ticket sales would be		
g. Good/Bad	.703	.752
h. Wise/Foolish	.752	.700
i. Beneficial/Harmful	.621	.841
$\alpha = .829$		
Subjective Norm		
5. Most people who are important to me would approve of me voiding the ticket sales.	.469	.419
6. Most people who are important to me will be disappointed in me if I voided the ticket sales.	.510	.369
7. No one who is important to me thinks it would be OK to void the ticket sales.	.283	.713
$\alpha = .601$		
Perceived Behavioral Control		
8. For me to void the ticket sales is easy:	.440	.469
9. If I want to I could easily void the ticket sales.	.516	.351
10. I have complete control of making the decision to void the ticket sales.	.300	.665
$\alpha = .606$		

Female students. For female students, the calculated Cronbach's alphas for the *TPB Questionnaire* by construct were as follows: 1) intention, .928; 2) attitude, .799; 3) subjective norm, .584; and 4) perceived behavioral control, .609. Corrected item-total

correlations were all over .3 except for items seven (subjective norm) and ten (perceived behavioral control). Item seven, "No one who is important to me thinks it would be OK to void the ticket sales" would cause the subjective norm alpha to increase to .737 if deleted and item ten, "I have complete control of making the decision to void the ticket sales" would cause the perceived behavioral control alpha to increase to .727 if deleted. Corrected item-total correlations for the *Theory of Planned Behavior Questionnaire* for the female sample of community college business students are shown in Table 4-12.

Table 4-12

Corrected Item-total Correlations for the TPB (by construct): Female Students (N = 211)

Item	Corrected Item-Total Correlation	Alpha if Item Deleted
Intention		
1. I intend to void the ticket sales:	.841	.904
2. I plan to void the ticket sales:	.878	.876
3. I expect to void the ticket sales:	.840	.907
$\alpha = .928$		
Attitude		
4. Do you feel like voiding the ticket sales would be		
a. Good/Bad	.683	.707
b. Wise/Foolish	.648	.726
c. Beneficial/Harmful	.653	.753
$\alpha = .799$		
Subjective Norm		
5. Most people who are important to me would approve of me voiding the ticket sales.	.507	.342
6. Most people who are important to me will be disappointed in me if I voided the ticket sales.	.465	.385
7. No one who is important to me thinks it would be OK to void the ticket sales.	.259	.737
$\alpha = .584$		
Perceived Behavioral Control		
8. For me to void the ticket sales is easy:	.467	.459
9. If I want to I could easily void the ticket sales.	.547	.304
10. I have complete control of making the decision to void the ticket sales.	.276	.727
$\alpha = .609$		

Exploratory Factor Analysis

Principal components analysis using varimax rotation was conducted for the total sample and for male and female students to test the dimensionality of the *Theory of*

Planned Behavior Questionnaire. The number of factors extracted was determined by the number of items with eigenvalues greater than 1. Factor loadings less than .3 were suppressed to make interpretation easier, with the lower threshold used to ensure every item loaded onto a factor. Initial output was reviewed for singularity and multicollinearity of data. There were no highly correlated items ($r > .9$), and for the total sample and male and female community college business students, the determinant of the correlation matrix was greater than .001, well above the recommended value of .00001 (Field, 2005).

Total sample. For the total sample, eigenvalues indicated three factors, explaining 64.776% of the total variance, and the scree plot indicated two to four factors. Item factor loadings ranged from .448 to .794.

Sub-scale names were assigned to these factors by the researcher, based on the most common characteristics shared by the items. Factor one was named *Character.* Six of the behavioral items (one, two, three, four a, four b, and four c) loaded onto this factor and pertained to intention and attitude. Factor two was named *Subjective Norm* because three of the items (five, six, and seven) pertained to the opinions of people who are important to the student. Factor three was named *Perceived Behavioral Control,* which contained three items (eight, nine, and ten) pertaining to the level of control the student felt they had related to the situation presented. The *Theory of Planned Behavior Questionnaire* factor loadings for the total sample of community college business students (male and female) are shown in Table 4-13.

Table 4-13

Factor Item Loadings for the TPB Questionnaire: Total Sample (N = 331)

	Component		
	1	2	3
Subscale Name	**Character**	**Subjective Norm**	**Perceived Behavioral Control**
Item			
Intention			
1. I intend to void the ticket sales:	.859		
2. I plan to void the ticket sales:	.867		
3. I expect to void the ticket sales:	.871		
Attitude			
4. Do you feel like voiding the ticket sales would be			
d. Good/Bad	.769		
e. Wise/Foolish	.773		
f. Beneficial/Harmful	.664		
Subjective Norm			
5. Most people who are important to me would approve of me voiding the ticket sales.		.712	
6. Most people who are important to me will be disappointed in me if I voided the ticket sales.		.768	
7. No one who is important to me thinks it would be OK to void the ticket sales.		.683	
Perceived Behavioral Control			
8. For me to void the ticket sales is easy:			.714
9. If I want to I could easily void the ticket sales.			.825
10. I have complete control of making the decision to void the ticket sales.			.665

Male students. For the sample of male students, eigenvalues indicated three factors, explaining 65.665% of the total variance, and the scree plot indicated two to four factors. Item factor loadings ranged from .460 to .813.

Sub-scale names were assigned to these factors by the researcher, based on the most common characteristic shared by the items. Factor one was named *Character.* Six of the behavioral items (one, two, three, four a, four b, and four c) loaded onto this factor and pertained to intention and attitude. Factor two was named *Subjective Norm* because three of the items (five, six, and seven) pertained to the opinions of those who are important to the student. Factor three was named *Perceived Behavioral Control*, which contained three items (eight, nine, and ten) pertaining to the level of control the student felt they had related to the situation presented. The *Theory of Planned Behavior Questionnaire* factor loadings for male community college business students are shown in Table 4-14.

Table 4-14

Factor Item Loadings for the TPB Questionnaire: Male Students (N =157)

	Component		
Subscale Name	**1**	**2**	**3**
Item	**Character**	**Subjective Norm**	**Perceived Behavioral Control**
Intention			
1. I intend to void the ticket sales:	.866		
2. I plan to void the ticket sales:	.871		
3. I expect to void the ticket sales:	.871		
Attitude			
4. Do you feel like voiding the ticket sales would be			
g. Good/Bad	.784		
h. Wise/Foolish	.821		
i. Beneficial/Harmful	.658		
Subjective Norm			
5. Most people who are important to me would approve of me voiding the ticket sales.		.650	
6. Most people who are important to me will be disappointed in me if I voided the ticket sales.		.709	
7. No one who is important to me thinks it would be OK to void the ticket sales.		.785	
Perceived Behavioral Control			
8. For me to void the ticket sales is easy:			.698
9. If I want to I could easily void the ticket sales.			.814
10. I have complete control of making the decision to void the ticket sales.			.673

Female students. For the sample of female students eigenvalues indicated three factors explaining 61.842% of the total variance and the scree plot indicated two to four factors. Item factor loadings ranged from .238 to .794. Sub-scale names were assigned to these factors by the researcher, based on the most common characteristic shared by the items. Factor one was named *Character*. Six of the behavioral items (one, two, three, four a, four b, and four c) loaded onto this factor and pertained to intention and attitude. Factor two was named *Subjective Norm* because three of the items (five, six, and seven) pertained to the opinions of those who are important to the student. Factor three was named *Perceived Behavioral Control*, which contained three items (eight, nine, and ten) pertaining to the level of control the student felt they had related to the situation presented. The *Theory of Planned Behavior Questionnaire* factor loadings for female community college business students are shown in Table 4-15.

Table 4-15

Factor Item Loadings for the TPB Questionnaire: Female Students (N = 174)

Subscale Name / Item	Component 1 Character	2 Subjective Norm	3 Perceived Behavioral Control
Intention			
1. I intend to void the ticket sales:	.848		
2. I plan to void the ticket sales:	.865		
3. I expect to void the ticket sales:	.877		
Attitude			
4. Do you feel like voiding the ticket sales would be			
j. Good/Bad	.713		
k. Wise/Foolish	.654		
l. Beneficial/Harmful	.636		
Subjective Norm			
5. Most people who are important to me would approve of me voiding the ticket sales.		.809	
6. Most people who are important to me will be disappointed in me if I voided the ticket sales.		.817	
7. No one who is important to me thinks it would be OK to void the ticket sales.		.419	
Perceived Behavioral Control			
8. For me to void the ticket sales is easy:			.734
9. If I want to I could easily void the ticket sales.			.841
10. I have complete control of making the decision to void the ticket sales.			.613

Research Questions

Research Question 1: Student Characteristics, Personality Dimensions, Attitude, Subjective Norm, Perceived Behavioral Control, and Behavioral Intention of Community College Business Students

What are the community college business student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control, and behavioral intention to fraudulently report financial information?

Student Characteristics

Age, gender, race, ethnicity, declared major, education level, and employment status were analyzed for the total sample of community college business students. The data-producing sample was made up of 485 community college business students consisting of 255 male (52.6%) and 230 female (47.4%). The age for the total sample ranged from 18 to 58 years, with an average age of 22.17 years. The average age of the males was 21.89 years, while the average age of the females was 22.49 years.

Of the total 485 respondents, 255 (52.6%) were male and 230 (47.4%) were female. Most of the students (83.9%) belonged to the 18 to 24 age category, with the fewest, 14 (2.9%), in the 31to 35 category. A majority, 428 students (88.2%), were single or never married. In terms of the racial composition of the sample, most students were White (67.0%), followed by African American 22.4%. For the ethnicity of the total sample, 64% reported not Hispanic or Latino, and 36% reported Hispanic or Latino. For education level, the majority of respondents classified themselves as having "one to three years of college" (67.8%), and 135 (27.8%) were "high school graduates." The majority

of the students were currently employed (75.7%), 12.8% reported seeking employment, and the remaining respondents were not working or were homemakers.

Reported majors for the total sample were 34.8% Business Administration, 14% Business Management, 21% Accounting, 2.5% Computer Science, 6.6% Health Sciences/Healthcare Administration, 1.6% Economics, and 19.4% Other. Of the 255 male respondents, 103 (40.4%) reported Business Administration as their major, 35 (13.7%) reported Business Management as a major, and 52 (20.4%) declared Accounting as a major. Of the 230 female respondents, 66 (28.7%) reported Business Administration as their major, 33 (14.3%) reported Business Management as a major, 50 (21.7%) declared Accounting as a major, and 26 (11.3%) reported Health Sciences/Healthcare Administration as a major. Community college business student characteristics are shown in Table 4-16.

Table 4-16

Student Characteristics: Total Sample and by Gender

Demographic Variables	Male		Female		Total Sample	
	Frequency	Valid Percent	Frequency	Valid Percent	Frequency	Valid Percent
Age						
18 to 24	216	84.7	191	83	407	83.9
25 to 30	26	10.2	12	5.2	38	7.8
31to 35	4	1.6	10	4.3	14	2.9
36 and over	9	3.5	17	7.4	26	5.4
Marital Status						
Married	14	5.5	30	13.0	44	9.1
Single, Never Married	236	92.5	192	83.5	428	88.2
Divorced or Separated	5	2.0	8	3.5	13	2.7
Widow or Widower	0	0.0	0	0.0	0	0.0
Race						
White	159	68.2	134	65.7	293	67.0
Black or African American	56	24.0	42	20.6	98	22.4
American Indian or Alaska Native	1	0.4	6	2.9	7	1.6
Asian	17	7.3	17	8.3	34	7.8
Native Hawaiian or Pacific Islander	0	0.0	5	2.5	5	1.1
Ethnicity						
Not Hispanic or Latino	159	64.1	142	64.0	301	64.0
Hispanic or Latino	89	35.9	80	36.0	169	36.0
Declared Major						
Business Administration	103	40.4	66	28.7	169	34.8
Business Management	35	13.7	33	14.3	68	14.0
Accounting	52	20.4	50	21.7	102	21.0
Computer Science	10	3.9	2	0.9	12	2.5
Health Sciences (Healthcare Administration)	6	2.4	26	11.3	32	6.6
Economics	7	2.7	1	0.4	8	1.6
Other	42	16.5	52	22.6	94	19.4

(Continued)

Table 4-16 (Continued)

Highest Education Level						
Four-year graduate	10	3.9	11	4.8	21	4.3
One to three years	169	66.3	160	69.6	329	67.8
High school graduate	76	29.8	59	25.7	135	27.8
Employment Status						
Currently employed	199	78.0	168	73.0	367	75.7
Retired	3	1.2	0	0.0	3	0.6
Seeking employment	33	12.9	29	12.6	62	12.8
Disabled or Not Working	18	7.1	24	10.4	42	8.7
Homemaker	2	0.8	9	3.9	11	2.3

Personality Dimensions

Personality dimensions were measured using the *Ten-Item Personality Inventory Questionnaire,* consisting of 10 items, containing a set of two words, separated by a comma, using the common stem, "I see myself as." The two words are either descriptive of the five personality dimensions, or the opposite of the personality dimension. Possible scores ranged from 2 to 14, with higher scores indicating a greater tendency toward the personality dimension. Conversely, the lower the score, the lower the tendency toward the personality dimension being measured. The response format is a 7-point Likert-type scale. Positively and negatively-scored items include: 1= disagree strongly; 2= disagree moderately; 3= disagree a little; 4= neither agree nor disagree; 5= agree a little; 6= agree moderately; 7= agree strongly.

Total sample. Among the total sample, responses to the *Ten-Item Personality Inventory Questionnaire* indicated item three, "dependable, self-disciplined" had the highest mean (M= 6.09, SD= 1.24). Item six "reserved, quiet" had the lowest mean

(*M*=3.80, *SD*= 1.87). The mean and standard deviation by dimension were as follows: 1) extraversion (*M*= 9.35, *SD*= 2.62); 2) agreeableness (*M*= 9.52, *SD*= 2.21); 3) conscientiousness (*M*= 11.50, *SD*= 2.32); 4) emotionally stable (*M*= 10.15, *SD*= 2.54); and 5) openness to new experiences (*M*= 11.44, *SD*= 2.24). Item response rates and means for the total sample are shown in Table 4-17.

Table 4-17

TIPI Response Distributions: Total Sample (N = 485)

	Response Categories Percentage Distribution								
Item	**Disagree Strongly**	**Disagree Moderately**	**Disagree a Little**	**Neither Agree or Disagree**	**Agree a Little**	**Agree Moderately**	**Agree Strongly**	**Mean Score**	**Standard Deviation**
1. Extraverted, enthusiastic	2.3%	3.1%	5.0%	5.2%	20.2%	40.1%	24.1%	5.55	1.40
2. Critical, quarrelsome	9.1%	10.7%	11.0%	19.8%	27.7%	14.9%	6.8%	3.82	1.68
3. Dependable, self-disciplined	1.9%	1.9%	0.6%	3.5%	10.6%	35.0%	46.0%	6.09	1.24
4. Anxious, easily upset	16.4%	20.9%	14.5%	11.5%	23.2%	8.3%	5.2%	4.50	1.79
5. Open to new experiences, complex	1.7%	1.2%	2.9%	2.7%	14.3%	35.0%	42.2%	6.01	1.24
6. Reserved, quiet.	11.8%	12.0%	11.8%	11.5%	26.0%	15.9%	11.0%	3.80	1.87
7. Sympathetic, warm	2.1%	3.1%	2.7%	5.4%	17.7%	39.7%	29.3%	5.70	1.36
8. Disorganized, careless	36.2%	21.7%	14.0%	9.9%	13.0%	2.9%	2.3%	5.40	1.66
9. Calm, emotionally stable	1.2%	1.9%	4.7%	7.9%	19.4%	38.2%	26.7%	5.64	1.29
10. Conventional, uncreative	31.0%	25.6%	17.1%	15.1%	6.2%	3.3%	1.7%	5.44	1.51

Male students. The *Ten-Item Personality Inventory Questionnaire* response rate for males (n = 254) showed the item with the highest mean score for males was item three, "dependable, self-disciplined" (*M*= 5.98, *SD*= 1.32.). Item two, "critical, quarrelsome" had the lowest mean (*M*=3.70, *SD*= 1.69) among male students. Item response rates and means for male students are shown in Table 4-18.

Table 4-18

TIPI Response Distributions: Male Students

	Response Categories Percentage Distribution								
	Disagree Strongly	**Disagree Moderately**	**Disagree a Little**	**Neither Agree or Disagree**	**Agree a Little**	**Agree Moderately**	**Agree Strongly**	**Mean Score**	**Standard Deviation**
Item									
1. Extraverted, enthusiastic	2.4%	2.7%	6.7%	7.5%	20.6%	35.2%	24.9%	5.46	1.45
2. Critical, quarrelsome	9.8%	7.5%	10.2%	21.6%	25.9%	17.3%	7.8%	3.71	1.69
3. Dependable, self-disciplined	2.8%	1.6%	0.4%	4.4%	13.9%	33.9%	43.0%	5.99	1.32
4. Anxious, easily upset	19.0%	23.7%	14.6%	14.2%	19.0%	6.7%	2.8%	4.78	1.71
5. Open to new experiences, complex	2.4%	0.8%	2.4%	3.1%	14.6%	35.4%	41.3%	5.98	1.27
6. Reserved, quiet.	12.6%	13.8%	12.2%	13.4%	24.4%	14.2%	9.4%	3.96	1.87
7. Sympathetic, warm	3.1%	4.3%	3.5%	7.5%	23.1%	38.6%	19.7%	5.38	1.47
8. Disorganized, careless	28.7%	23.6%	13.5%	12.2%	14.6%	3.9%	3.5%	5.14	1.73
9. Calm, emotionally stable	2.0%	2.0%	3.1%	5.1%	18.5%	37.0%	32.3%	5.76	1.32
10. Conventional, uncreative	26.8%	27.6%	16.1%	18.1%	5.9%	3.9%	1.6%	5.33	1.51

Female students. The *Ten-Item Personality Inventory Questionnaire* response rate for females (n = 230) showed the item with the highest mean score for females was item three, "dependable, self-disciplined" (*M*= 6.21, *SD*= 1.13). Item six, "reserved, quiet" had the lowest mean (*M*=3.63, *SD*= 1.87). Item response rates and means for female students are shown in Table 4-19.

Table 4-19

TIPI Response Distributions: Female Students

	Response Categories Percentage Distribution								
	Disagree Strongly	**Disagree Moderately**	**Disagree a Little**	**Neither Agree or Disagree**	**Agree a Little**	**Agree Moderately**	**Agree Strongly**	**Mean Score**	**Standard Deviation**
Item									
1. Extraverted, enthusiastic	2.2%	3.5%	3.1%	2.6%	19.7%	45.6%	23.3	5.64	1.34
2. Critical, quarrelsome	8.3%	14.4%	11.8%	17.9%	29.7%	12.2%	5.7%	3.94	1.66
3. Dependable, self-disciplined	0.9%	2.2%	0.9%	2.6%	7.9%	36.2%	49.3%	6.21	1.13
4. Anxious, easily upset	13.5%	17.8%	14.3%	8.7%	27.8%	10.1%	7.8%	4.19	1.85
5. Open to new experiences, complex	0.9%	1.7%	3.5%	2.2%	14.0%	34.5%	43.2%	6.03	1.22
6. Reserved, quiet.	10.9%	10.0%	11.3%	9.6%	27.8%	17.8%	12.6%	3.63	1.87
7. Sympathetic, warm	0.9%	1.7%	1.7%	3.1%	11.7%	40.9%	40.0%	6.06	1.14
8. Disorganized, careless	44.3%	19.6%	14.8%	7.4%	11.3%	1.7%	0.9%	5.69	1.52
9. Calm, emotionally stable	0.5%	1.7%	6.5%	10.9%	20.4%	39.6%	20.4%	5.49	1.25
10. Conventional, uncreative	35.7%	23.5%	18.3%	11.7%	6.5%	2.6%	1.7%	5.55	1.50

Attitude, Subjective Norm, Perceived Behavioral Control, and Behavioral Intention

The *Theory of Planned Behavior Scale* was used to measure the attitude, subjective norm, perceived behavioral control, and behavioral intention of community college business students. Scores for the twelve-item scale ranged from 3 to 21. To measure intent, higher scores indicated greater levels of student's intent to not void the ticket sales and reflect more ethical behavior (questions 1, 2, and 3). Lower scores indicated a greater intent toward voiding the ticket sales and a reflection of less ethical behavior (questions 4a, b, and c). For subjective norm, higher scores indicated a greater tendency to be influenced by others' opinions toward not voiding the ticket sales, and reflect more ethical behavior (questions 5, 6, and 7). When measuring perceived behavioral control, higher scores indicated less perceived control over voiding the ticket sales, and reflect more ethical behavior (questions 8, 9, and 10). The response format was a seven-point semantic differential scale with the following response categories: 1=Extremely Probable to 7=Extremely Improbable (intention); 1=Good to 7=Bad; 1=Wise to 7=Foolish; 1=Beneficial to 7=Harmful (attitude); 1=Unlikely to 7=Likely; 1=Disagree to 7=Agree (subjective norm); 1=Strongly Agree to 7=Strongly Disagree (perceived behavioral control).

Total sample. For the total sample of community college business students (N = 463), the *Theory of Planned Behavior* mean score was 46.41 (*SD* = 1.02). The response distribution for most of the *Theory of Planned Behavior Scale* was skewed with positively worded items mostly in the direction of "extremely probable" or "likely," and negatively worded items mostly in the direction of "extremely improbable" or "unlikely." Item 4a, "Do you feel like voiding the ticket sales would be," and had responses ranging

from "good to bad" had the highest mean (M = 6.10, SD = 1.48). Item ten "I have complete control of making the decision to void the ticket sales," had the lowest mean (M = 3.00, SD = 2.35). Item response rates and means for the total sample of community college business students are shown in Table 4-20.

Table 4-20

TPB Response Distributions: Total Sample (N =463)

	Response Categories Percentage Distribution								Mean Score	Standard Deviation
Item (Intent)	**Extremely Probable**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Extremely Improbable**	
I intend to void the ticket sales:		**4.4%**	**2.1%**	**4.4%**	**9.0%**	**7.3%**	**16.9%**	**55.9%**		**5.87**	**1.68**
I plan to void the ticket sales:		**3.6%**	**1.9%**	**3.6%**	**10.0%**	**7.9%**	**17.4%**	**55.6%**		**5.92**	**1.59**
I expect to void the ticket sales:		**4.0%**	**2.1%**	**4.2%**	**9.4%**	**7.0%**	**14.9%**	**58.4%**		**5.91**	**1.66**
Item (Attitude)											
Do you feel like voiding the ticket sales would be?	**Good**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Bad**		
		2.8%	**1.9%**	**1.5%**	**9.1%**	**8.1%**	**14.3%**	**62.3%**		**6.10**	**1.48**
Do you feel like voiding the ticket sales would be?	**Wise**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Foolish**		
		3.0%	**2.2%**	**3.7%**	**9.3%**	**9.1%**	**12.7%**	**60.0%**		**5.97**	**1.58**
Do you feel like voiding the ticket sales would be?	**Beneficial**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Harmful**		
		5.4%	**5.6%**	**4.5%**	**12.2%**	**9.4%**	**11.6%**	**51.3%**		**5.55**	**1.88**

(Continued)

Table 4-20 (Continued)

Item (Subjective Norm)										
	Extremely Probable	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Extremely Improbable**	
Most people who are important to me would approve of me voiding the ticket sales.		**4.4%**	**2.5%**	**5.0%**	**6.9%**	**9.9%**	**17.0%**	**54.3%**	**5.83**	**1.69**
	Unlikely	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Likely**	
Most people who are important to me will be disappointed in me if I voided the ticket sales.		**4.4%**	**2.5%**	**3.8%**	**8.2%**	**7.2%**	**15.2%**	**58.6%**	**5.91**	**1.68**
	Disagree	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Agree**	
No one who is important to me thinks it would be OK to void the ticket sales.		**12.3%**	**4.8%**	**5.6%**	**15.6%**	**11.1%**	**11.1%**	**39.5%**	**4.99**	**2.12**
Item (Perceived Behavioral Control)										
	Strongly Agree	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Strongly Disagree**	
For me to void the ticket sales is easy.		**10.9%**	**6.2%**	**7.5%**	**9.6%**	**9.4%**	**15.5%**	**40.9%**	**5.11**	**2.12**
If I want to I could easily void the ticket sales.		**24.9%**	**8.6%**	**11.7%**	**13.4%**	**9.2%**	**6.7%**	**25.5%**	**3.96**	**2.32**
I have complete control of making the decision to void the ticket sales.		**47.5%**	**9.2%**	**6.7%**	**7.9%**	**6.5%**	**5.0%**	**17.2%**	**3.00**	**2.35**

Male students. For male community college business students (N = 246) the *Theory of Planned Behavior* mean score was 43.58 (*SD* = 1.02). The response distribution for most of the *Theory of Planned Behavior Scale* was skewed with positively worded items mostly in the direction of "extremely probable" or "likely," and negatively worded items, mostly in the direction of "extremely improbable" or "unlikely." For item 4a, "Do you feel like voiding the ticket sales would be:" and had responses ranging from good to bad had the highest mean (*M* = 5.82, *SD* = 1.68). Item ten "I have complete control of making the decision to void the ticket sales," had the lowest mean (*M* = 2.72, *SD* = 2.18). Item response rates and mean for the male sample of community college business students are shown in Table 4-21.

Table 4-21

TPB Response Distribution: Male Students (N =246)

	Response Categories Percentage Distribution (Male)										
										Mean Score	**Standard Deviation**
Item (Intent)	**Extremely Probable**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Extremely Improbable**		
I intend to void the ticket sales:		**5.6%**	**2.8%**	**6.3%**	**10.3%**	**7.9%**	**18.7%**	**48.4%**		**5.62**	**1.80**
I plan to void the ticket sales:		**4.4%**	**2.0%**	**5.6%**	**11.9%**	**9.5%**	**19.0%**	**47.6%**		**5.68**	**1.69**
I expect to void the ticket sales:		**4.4%**	**2.4%**	**5.6%**	**10.8%**	**8.4%**	**17.7%**	**50.7%**		**5.72**	**1.72**
Item (Attitude)											
Do you feel like voiding the ticket sales would be?	**Good**	**1** **4.8%**	**2** **2.4%**	**3** **1.6%**	**4** **12.5%**	**5** **8.5%**	**6** **16.1%**	**7** **54.1%**	**Bad**	**5.82**	**1.68**
Do you feel like voiding the ticket sales would be?	**Wise**	**1** **4.5%**	**2** **3.3%**	**3** **4.9%**	**4** **12.1%**	**5** **11.8%**	**6** **11.8%**	**7** **51.6%**	**Foolish**	**5.65**	**1.76**
Do you feel like voiding the ticket sales would be?	**Beneficial**	**1** **8.1%**	**2** **6.1%**	**3** **5.2%**	**4** **16.3%**	**5** **9.8%**	**6** **12.2%**	**7** **42.3%**	**Harmful**	**5.19**	**2.00**

(Continued)

Table 4-21 (Continued)

Item (Subjective Norm)										
	Extremely Probable	1	2	3	4	5	6	7	Extremely Improbable	
Most people who are important to me would approve of me voiding the ticket sales.		5.5%	3.2%	6.4%		10.8%	19.5%	47.0%		5.61	1.79
	Unlikely	1	2	3	4	5	6	7	Likely		
Most people who are important to me will be disappointed in me if I voided the ticket sales.		4.4%	3.1%	4.8%	9.6%	10.0%	18.7%	49.4%		5.71	1.72
	Disagree	1	2	3	4	5	6	7	Agree		
No one who is important to me thinks it would be OK to void the ticket sales.		13.9%	5.2%	8.7%	16.3%	13.5%	10.7%	31.7%		4.69	2.12
Item (Perceived Behavioral Control)										
	Strongly Agree	1	2	3	4	5	6	7	Strongly Disagree		
For me to void the ticket sales is easy.		12.7%	8.4%	9.6%	12.0%	11.5%	13.5%	32.3%		4.71	2.16
If I want to I could easily void the ticket sales.		27.8%	11.9%	13.1%	15.9%	7.5%	6.7%	17.1%		3.52	2.18
I have complete control of making the decision to void the ticket sales.		50.4%	10.3%	7.1%	9.5%	6.0%	4.4%	12.3%		2.72	2.18

Female students. For female community college business students (N = 217) the *Theory of Planned Behavior* mean score was 4958 (*SD* = 9.25). The response distribution for most of the *Theory of Planned Behavior Scale* was skewed with positively worded items mostly in the direction of extremely probable" or "likely," and negatively worded items mostly in the direction of "extremely improbable" or "unlikely." For item four a, "Do you feel like voiding the ticket sales would be" and had responses ranging from good to bad had the highest mean (*M* = 6.41, *SD* = 1.13). Item ten "I have complete control of making the decision to void the ticket sales," had the lowest mean (*M* = 3.31, *SD* = 2.50). Item response rates and mean for the female sample of community college business students are shown in Table 4-22.

Table 4-22

TPB Response Distribution: Female Students (N =217)

	Response Categories Percentage Distribution (Female)									
									Mean Score	Standard Deviation
Item (Intent)	**Extremely Probable**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Extremely Improbable**	
I intend to void the ticket sales:		**3.1%**	**1.3%**	**2.2%**	**7.5%**	**6.6%**	**15.0%**	**64.3%**		**6.15**	**1.47**
I plan to void the ticket sales:		**2.6%**	**1.8%**	**1.3%**	**8.0%**	**6.2%**	**15.5%**	**64.6%**		**6.18**	**1.43**
I expect to void the ticket sales:		**3.6%**	**1.8%**	**2.7%**	**7.7%**	**5.4%**	**11.7%**	**67.1%**		**6.13**	**1.56**
Item (Attitude)										
Do you feel like voiding the ticket sales would be?	**Good**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Bad**		
		0.5%	**1.4%**	**1.4%**	**5.4%**	**7.5%**	**12.2%**	**71.6%**		**6.41**	**1.13**
Do you feel like voiding the ticket sales would be?	**Wise**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Foolish**		
		1.4%	**0.9%**	**2.3%**	**6.0%**	**6.0%**	**13.8%**	**69.6%**		**6.34**	**1.25**
Do you feel like voiding the ticket sales would be?	**Beneficial**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**Harmful**		
		2.3%	**5.0%**	**3.6%**	**7.7%**	**9.1%**	**10.9%**	**61.4%**		**5.94**	**1.64**

(Continued)

Table 4-22 (Continued)

Item (Subjective Norm)										
	Extremely Probable	1	2	3	4	5	6	7	Extremely Improbable	
Most people who are important to me would approve of me voiding the ticket sales.		3.1%	1.8%	3.5%	6.2%	8.8%	14.2%	62.4%		6.07	1.52
	Unlikely	1	2	3	4	5	6	7	Likely		
Most people who are important to me will be disappointed in me if I voided the ticket sales.		4.5%	1.8%	2.7%	6.8%	4.1%	11.3%	68.8%		6.13	1.62
	Disagree	1	2	3	4	5	6	7	Agree		
No one who is important to me thinks it would be OK to void the ticket sales.		10.6%	4.4%	2.2%	14.7%	8.4%	11.5%	48.2%		5.33	2.07
Item (Perceived Behavioral Control)										
	Strongly Agree	1	2	3	4	5	6	7	Strongly Disagree		
For me to void the ticket sales is easy.		8.8%	3.5%	5.3%	7.1%	7.2%	17.7%	50.4%		5.54	1.98
If I want to I could easily void the ticket sales.		21.7%	4.9%	10.2%	10.5%	11.1%	6.6%	35.0%		4.44	2.36
I have complete control of making the decision to void the ticket sales.		44.2%	7.9%	6.2%	6.2%	7.1%	5.8%	22.6%		3.31	2.50

Research Question 2: Differences in Personality Dimensions According to Student Characteristics

Are there differences in personality dimensions according to community college business student characteristics?

Age, gender, marital status, race, ethnicity, education major, education level, and employment status were analyzed for the total sample of community college business students, males students, and female students to see if there were differences in personality dimensions based on those attribute variables.

Personality Dimensions Differences by Age

Extraversion. For the total sample, respondents who were 25 to 30 years old had the highest extraversion scores (M = 10.16, SD = 2.54), while those who were 36 years old or more had the lowest extraversion scores (M = 8.84, SD = 2.88). Higher extraversion scores indicate a greater degree towards the personality dimension, while lower scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for age on extraversion (F = 1.58, p = .19). Results of ANOVA of differences in extraversion among the total sample of community college business students (male and female) according to age are shown in Table 4-23.

Table 4-23

ANOVA of Differences in Extraversion Personality Dimension According to Age: Total Sample (N = 480)

Variable	N	Mean Score	*df*	*F*	*p*
Age Category					
Extraversion			**3**	**1.57**	**.19**
18 to 24	404	9.30			
25 to 30	37	10.16			
31 to 35	14	9.57			
36 and over	25	8.84			

Agreeableness For the total sample, respondents who were 36 years old and over had the highest agreeableness scores (M = 10.44, SD = 2.55), while those who were 18 to 24 years old had the lowest agreeableness scores (M = 9.41, SD = 2.18). The difference indicated there was a significant effect of age on agreeableness (F = 2.65, p = .04). Higher agreeableness scores indicate a greater degree towards the personality dimension, while lower agreeableness scores indicate a lesser degree towards the personality dimension. Results of ANOVA of differences in agreeableness among the total sample of community college business students (male and female) according to age are shown in Table 4-24.

Table 4-24

ANOVA of Differences in Agreeableness Personality Dimension According to Age: Total Sample (N = 483)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Age Category								
Agreeableness				**3**	**2.65**	**.04**		
18 to 24	406	9.41						
25 to 30	38	9.78						
31 to 35	14	10.35						
36 and over	25	10.44						
36 and over > 18 – 24			1.03				.02	ns

Conscientiousness. For the total sample, respondents who were 31 to 35 years old had the highest conscientiousness scores (M = 12.93, SD = 1.54), while those who were 18 to 24 years old or more had the lowest conscientiousness scores (M = 11.41, SD = 2.30). Higher conscientiousness scores indicate a greater degree towards the personality dimension, while lower conscientiousness scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for age on conscientiousness (F = 2.31, p = .07). Results of ANOVA of differences in conscientiousness among the total sample of community college business students (male and female) according to age are shown in Table 4-25.

Table 4-25

ANOVA of Differences in Conscientiousness Personality Dimension According to Age: Total Sample (N = 480)

Variable	N	Mean Score	*df*	*p*
Age Category				
Conscientiousness			**3**	**.07**
18 to 24	402	11.41		
25 to 30	38	11.63		
31 to 35	14	12.92		
36 and over	26	11.92		

Emotional Stability. For the total sample, respondents who were 36 years old or more had the highest emotional stability scores (M = 10.31, SD = 3.02), while those who were 31 to 35 years old had the lowest emotional stability scores (M = 9.93, SD = 2.89). Higher emotional stability scores indicate a greater degree towards the personality dimension, while lower emotional stability scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for age on emotional stability (F = .07, p = .98). Results of ANOVA of differences in emotional stability among the total sample of community college business students (male and female) according to age are shown in Table 4-26.

Table 4-26

ANOVA of Differences in Emotional Stability Personality Dimension According to Age: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Age Category					
Emotional Stability			**3**	**.07**	**.98**
18 to 24	405	10.14			
25 to 30	38	10.13			
31 to 35	14	9.92			
36 and over	26	10.30			

Openness to Experiences. For the total sample, respondents who were 25 to 30 years old had the highest openness to experiences scores (M = 11.58, SD = 2.09), while those who were 31 to 35 years old had the lowest openness to experiences scores (M = 10.86, SD = 2.11). Higher openness to experiences scores indicates a greater degree towards the personality dimension, while lower openness to experiences scores indicates a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for age on open to experiences (F = 0.39, p = .76). Results of ANOVA of differences in openness to experiences among the total sample of community college business students (male and female) according to age are shown in Table 4-27.

Table 4-27

ANOVA of Differences in Openness to Experiences Personality Dimension According to Age: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Age Category					
Openness to Experiences			**3**	**.39**	**.76**
18 to 24	406	11.45			
25 to 30	38	11.57			
31 to 35	14	10.85			
36 and over	25	11.32			

Difference in Personality Dimensions by Gender

Extraversion. Male community college business students had greater extraversion scores (M = 9.44, SD = 2.58) than female community college business students (M = 9.25, SD = 2.67, t (478) = 0.79, $p > .05$), but this difference was not significant. Higher extraversion scores indicate a greater degree towards the personality dimension, while lower scores indicate a lesser degree towards the personality dimension. Comparisons of the extraversion personality dimension according to gender are shown in Table 4-28.

Table 4-28

Comparison of Extraversion Personality Dimension According to Gender (N = 480)

Personality Dimension and Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Gender					
Extraversion					
Male	252	9.44	0.19	0.79	.43
Female	228	9.25			

Agreeableness. Female community college business students had greater agreeableness scores (M = 10.00, SD = 2.04) than male community college business students (M = 9.09, SD = 2.26, t (481) = -4.59, $p > .05$). This difference was not significant. Higher agreeableness scores indicate a greater degree towards the personality dimension, while lower agreeableness scores indicate a lesser degree towards the personality dimension. Comparisons of the agreeableness personality dimension according to gender are shown in Table 4-29.

Table 4-29

Comparison of Agreeableness Personality Dimension According to Gender (N = 483)

Personality Dimension and Variable	**N**	**Mean**	**Mean Difference**	***t*-value**	***p*-value**
Gender					
Agreeableness					
Male	254	9.09	-0.91	-4.59	ns
Female	229	10.00			

Conscientiousness. Female community college business students had higher conscientiousness scores (M = 11.92, SD = 2.11) than male community college business students (M = 11.12, SD = 2.44, t (478) = -3.81, $p > .05$). This difference was not significant. Higher conscientiousness scores indicate a greater degree towards the personality dimension, while lower conscientiousness scores indicate a lesser degree towards the personality dimension. Comparisons of conscientiousness personality dimension according to gender are shown in Table 4-30.

Table 4-30

Comparison of Conscientiousness Personality Dimension According to Gender (N = 480)

Personality Dimension and Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Gender					
Conscientiousness					
Male	251	11.12	-.79	-3.81	.00
Female	229	11.91			

Note. Levine's test was significant so equal variances not assumed.

Emotional Stability. Male community college business students had greater emotional stability scores (M = 10.57, SD = 2.43) than female community college business students (M = 9.69, SD = 2.58, t (481) = 3.85, $p > .05$), but this difference was not significant. Higher emotional stability scores indicate a greater degree towards the personality dimension, while lower emotional stability scores indicate a lesser degree towards the personality dimension. Comparisons of the emotional stability personality dimension according to gender are shown in Table 4-31.

Table 4-31

Comparison of Emotional Stability Personality Dimension According to Gender (N = 483)

Personality Dimension and Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Gender					
Emotional Stability					
Male	253	10.57	0.87	3.85	ns
Female	230	9.69			

Openness to Experience. Female community college business students had greater openness to experience scores (M = 11.59, SD = 2.21) than male community college business students (M = 11.30, SD = 2.26, t (481) = -1.42, p > .05), but this difference was not significant. Higher openness to experience scores indicates a greater degree towards the personality dimension, while lower openness to experience scores indicates a lesser degree towards the personality dimension. Comparisons of the openness to experience personality dimension according to gender are shown in Table 4-32.

Table 4-32

Comparison of Openness to Experience Personality Dimension According to Gender (N = 483)

Personality Dimension and Variable	**N**	**Mean**	**Mean Difference**	***t*-value**	***p*-value**
Gender					
Openness to Experience					
Male	254	11.30	-0.29	-1.42	.15
Female	229	11.59			

Personality Dimensions Differences by Marital Status

Extraversion. For the total sample, respondents who were married had the highest extraversion scores (M = 9.65, SD = 2.86), while those who were divorced or separated had the lowest extraversion scores (M = 9.31, SD = 3.09). Higher extraversion scores indicate a greater degree towards the personality dimension; while lower scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for marital status on extraversion (F = .30, p = .74). Results of ANOVA of differences in extraversion

among the total sample of community college business students (male and female) according to marital status are shown in Table 4-33.

Table 4-33

ANOVA of Differences in Extraversion Personality Dimension According to Marital Status: Total Sample (N = 480)

Variable	N	Mean Score	*df*	*F*	*p*
Marital Status					
Extraversion			**2**	**.30**	**.74**
Married	43	9.65			
Single, Never Married	424	9.33			
Divorced or Separated	13	9.31			

Agreeableness For the total sample, respondents who were divorced or separated had the highest agreeableness scores (M = 10.46, SD = 2.03), while those who were single, never married had the lowest agreeableness scores (M = 9.45, SD = 2.19). Higher agreeableness scores indicate a greater degree towards the personality dimension, while lower agreeableness scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect of age on agreeableness (F = 2.48, p = .09). Results of ANOVA of differences in agreeableness among the total sample of community college business students (male and female) according to marital status are shown in Table 4-34.

Table 4-34

ANOVA of Differences in Agreeableness Personality Dimension According to Marital Status: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Marital Status					
Agreeableness			**2**	**2.48**	**.09**
Married	44	10.00			
Single, Never Married	426	9.45			
Divorced or Separated	13	10.46			

Conscientiousness. For the total sample, respondents who were divorced or separated had the highest conscientiousness scores (M = 12.69, SD = 1.80), while those who were single, never married had the lowest conscientiousness scores (M = 11.44, SD = 2.27). Higher conscientiousness scores indicate a greater degree towards the personality dimension, while lower conscientiousness scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for marital status on conscientiousness (F = 1.98, p = .14). Results of ANOVA of differences in conscientiousness among the total sample of community college business students (male and female) according to marital status are shown in Table 4-35.

Table 4-35

ANOVA of Differences in Conscientiousness Personality Dimension According to Marital Status: Total Sample (N = 480)

Variable	N	Mean Score	*df*	*F*	*p*
Marital Status					
Conscientiousness			**2**	**1.98**	**.14**
Married	44	11.68			
Single, Never Married	423	11.44			
Divorced or Separated	13	12.69			

Emotional Stability. For the total sample, respondents who were single, never married had the highest emotional stability scores (M = 10.16, SD = 2.50), while those who were divorced or separated had the lowest emotional stability scores (M = 9.92, SD = 2.66). Higher emotional stability scores indicate a greater degree towards the personality dimension, while lower emotional stability scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for marital status on emotional stability (F = .08, p = .92). Results of ANOVA of differences in emotional stability among the total sample of community college business students (male and female) according to marital status are shown in Table 4-36.

Table 4-36

ANOVA of Differences in Emotional Stability Personality Dimension According to Marital Status: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Marital Status					
Emotional Stability			**2**	**.08**	**.92**
Married	44	10.07			
Single, Never Married	426	10.16			
Divorced or Separated	13	9.92			

Openness to Experiences. For the total sample, respondents who were divorced or separated had the highest openness to experiences scores (M = 11.46, SD = 2.57), while those who were married had the lowest openness to experiences scores (M = 11.37, SD = 2.32). Higher openness to experiences scores indicates a greater degree towards the personality dimension, while lower openness to experiences scores indicates a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for marital status on openness to experiences (F = .02, p = .98). Results of ANOVA of differences in openness to experiences among the total sample of community college business students (male and female) according to marital status are shown in Table 4-37.

Table 4-37

ANOVA of Differences in Openness to Experiences Personality Dimension According to Marital Status: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Marital Status					
Openness to Experiences			**2**	**.02**	**.98**
Married	43	11.37			
Single, Never Married	427	11.44			
Divorced or Separated	13	11.46			

Personality Dimensions Differences by Race

Extraversion. For the total sample, respondents who were white had the highest extraversion scores (M = 9.60, SD = 2.56), while those who were Native Hawaiian or Pacific Islander had the lowest extraversion scores (M = 8.40, SD = 1.14). Higher extraversion scores indicate a greater degree towards the personality dimension, while lower scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for race on extraversion (F = 1.00, p = .41). Results of ANOVA of differences in extraversion among the total sample of community college business students (male and female) according to race are shown in Table 4-38.

Table 4-38

ANOVA of Differences in Extraversion Personality Dimension According to Race: Total Sample (N = 434)

Variable	N	Mean Score	*df*	*F*	*p*
Race					
Extraversion			**4**	**1.00**	**.41**
White	292	9.60			
Black or African American	96	9.21			
American Indian or Alaskan Native	7	9.14			
Asian	34	8.91			
Native Hawaiian or Pacific Islander	5	8.40			

Agreeableness. For the total sample, respondents who were American Indian or Alaskan Native had the highest agreeableness scores (M = 10.29, SD = 1.89), while those who were Native Hawaiian or Pacific Islander had the lowest agreeableness scores (M = 8.60, SD = 2.88). Higher agreeableness scores indicate a greater degree towards the personality dimension, while lower agreeableness scores indicate a lesser degree towards the personality dimension. Levene's test indicated that the assumption of homogeneity of variance had been violated (F (431, 4) = 3.01, $p < .05$). Results indicated there was not a significant effect for race on agreeableness (Welch F = .94, p = .46). Results of ANOVA of differences in agreeableness among the total sample of community college business students (male and female) according to race are shown in Table 4-39.

Table 4-39

ANOVA of Differences in Agreeableness Personality Dimension According to Race: Total Sample (N = 436)

Variable	N	Mean Score	*df*	Welch *F*	*F*	*p*
Race						
Agreeableness			**4**	**.94**	**1.25**	**.29**
White	292	9.45				
Black or African American	98	9.90				
American Indian or Alaskan Native	7	10.29				
Asian	34	9.38				
Native Hawaiian or Pacific Islander	5	8.60				

Note. Levine's test was significant so equal variances not assumed.

Conscientiousness. For the total sample, respondents who were Black or African American had the highest conscientiousness scores (M = 11.61, SD = 2.28), while those who were Native Hawaiian or Pacific Islander had the lowest conscientiousness scores (M = 10.60, SD = 4.22). Higher conscientiousness scores indicate a greater degree towards the personality dimension, while lower conscientiousness scores indicate a lesser degree towards the personality dimension. Levene's test indicated that the assumption of homogeneity of variance had been violated (F (427, 4) = 2.71, $p < .05$). Results indicated there was not a significant effect for race on conscientiousness (Welch F = .49, p = .74). Results of ANOVA of differences in conscientiousness among the total sample of community college business students (male and female) according to race are shown in Table 4-40.

Table 4-40

ANOVA of Differences in Conscientiousness Dimension According to Race: Total Sample (N = 432)

Variable	N	Mean Score	*df*	Welch *F*	*F*	*p*
Race						
Conscientiousness			**4**	**.49**	**.48**	**.75**
White	291	11.53				
Black or African American	97	11.61				
American Indian or Alaskan Native	7	10.71				
Asian	32	11.41				
Native Hawaiian or Pacific Islander	5	10.60				

Note. Levine's test was significant so equal variances not assumed.

Emotional Stability. For the total sample, respondents who were Black or African American had the highest emotional stability scores (M = 10.45, SD = 2.83), while those who were Native Hawaiian or Pacific Islander had the lowest emotional stability scores (M = 8.60, SD = 3.13). Higher emotional stability scores indicate a greater degree towards the personality dimension, while lower emotional stability scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for race on emotional stability (F = 1.80, p = .13). Results of ANOVA of differences in emotional stability among the total sample of community college business students (male and female) according to race are shown in Table 4-41.

Table 4-41

ANOVA of Differences in Emotional Stability Personality Dimension According to Race: Total Sample (N = 436)

Variable	N	Mean Score	*df*	*F*	*p*
Race					
Emotional Stability			**4**	**1.80**	**.13**
White	292	10.09			
Black or African American	98	10.45			
American Indian or Alaskan Native	7	9.57			
Asian	34	9.32			
Native Hawaiian or Pacific Islander	5	8.60			

Openness to Experiences. For the total sample, respondents who were American Indian or Alaskan Native had the highest openness to experiences scores (M = 11.86, SD = 2.12), while those who were Native Hawaiian or Pacific Islander had the lowest openness to experiences scores (M = 10.00, SD = 2.55). Higher openness to experiences scores indicates a greater degree towards the personality dimension, while lower openness to experiences scores indicates a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for race on openness to experiences (F = .97, p = .42). Results of ANOVA of differences in openness to experiences among the total sample of community college business students (male and female) according to race are shown in Table 4-42.

Table 4-42

ANOVA of Differences in Openness to Experiences Personality Dimension According to Race: Total Sample (N = 436)

Variable	N	Mean Score	*df*	*F*	*p*
Race					
Openness to Experiences			**4**	**.97**	**.42**
White	292	11.50			
Black or African American	98	11.67			
American Indian or Alaskan Native	7	11.86			
Asian	34	11.18			
Native Hawaiian or Pacific Islander	5	10.00			

Difference in Personality Dimensions by Ethnicity

Extraversion. Community college business students who were not Hispanic or Latino had higher extraversion scores (M = 9.40, SD = 2.68) than Hispanic or Latino community college business students (M = 9.30, SD = 2.55, t (463) = .39, $p > .05$), but this difference was not significant. Higher extraversion scores indicate a greater degree of towards the personality dimension, while lower extraversion scores indicate a lesser degree towards the personality dimension. Comparisons of the extraversion personality dimension according to ethnicity are shown in Table 4-43.

Table 4-43

Comparison of Extraversion Personality Dimension According to Ethnicity: Total Sample (N = 465)

Personality Dimension and Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Ethnicity					
Extraversion					
Not Hispanic or Latino	299	9.40	0.10	.39	.69
Hispanic or Latino	166	9.30			

Agreeableness. Community college business students who were not Hispanic or Latino had greater agreeableness scores (M = 9.62, SD = 2.36) than Hispanic or Latino community college business students (M = 9.31, SD = 1.91, t (466) = 1.57, $p > .05$), but this difference was not significant. Higher agreeableness scores indicate a greater degree towards the personality dimension, while lower agreeableness scores indicate a lesser degree towards the personality dimension. Comparisons of the agreeableness personality dimension according to ethnicity are shown in Table 4-44.

Table 4-44

Comparison of Agreeableness Personality Dimension According to Ethnicity: Total Sample (N = 468)

Personality Dimension and Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Ethnicity					
Agreeableness					
Not Hispanic or Latino	301	9.62	.32	1.57	.12
Hispanic or Latino	167	9.31			

Note. Levine's test was significant so equal variances not assumed.

Conscientiousness. Community college business students who were not Hispanic or Latino had greater conscientiousness scores (M = 11.57, SD = 2.27) than Hispanic or Latino community college business students (M = 11.31, SD = 2.44, t (463) = 1.15, $p >$ .05), but this difference was not significant. Higher conscientiousness scores indicate a greater degree towards the personality dimension, while lower conscientiousness scores indicate a lesser degree towards the personality dimension. Comparisons of the conscientiousness personality dimension according to ethnicity are shown in Table 4-45.

Table 4-45

Comparison of Conscientiousness Personality Dimension According to Ethnicity: Total Sample (N = 465)

Personality Dimension and Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Ethnicity					
Conscientiousness					
Not Hispanic or Latino	298	11.57	.26	1.15	.25
Hispanic or Latino	167	11.91			

Emotional Stability. Hispanic or Latino community college business students had greater emotional stability scores (M = 10.36, SD = 2.43) than community college business students who were not Hispanic or Latino (M = 10.04, SD = 2.58, t (466) = -1.31, $p >$ .05), but this difference was not significant. Higher emotional stability scores indicate a greater degree towards the personality dimension, while lower emotional stability scores indicate a lesser degree towards the personality dimension. Comparisons of the emotional stability personality dimension according to ethnicity are shown in Table 4-46.

Table 4-46

Comparison of Emotional Stability Personality Dimension According to Ethnicity: Total Sample (N = 468)

Personality Dimension and Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Ethnicity					
Emotional Stability					
Not Hispanic or Latino	301	10.04	-.32	-1.31	.19
Hispanic or Latino	167	10.36			

Openness to Experience. Community college business students who were not Hispanic or Latino had higher openness to experience scores ($M = 11.49$, $SD = 2.12$) than Hispanic or Latino community college business students ($M = 11.30$, $SD = 2.49$, $t\ (466) = .91$, $p > .05$), but this difference was not significant. Higher openness to experience scores indicates a greater degree towards the personality dimension, while lower openness to experience scores indicates a lesser degree towards the personality dimension. Comparisons of the openness to experience personality dimension according to ethnicity are shown in Table 4-47.

Table 4-47

Comparison of Openness to Experiences Personality Dimension According to Ethnicity: Total Sample (N = 468)

Personality Dimension and Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Ethnicity					
Openness to Experience					
Not Hispanic or Latino	301	11.49	.19	.91	.36
Hispanic or Latino	167	11.30			

Personality Dimensions Differences by Major

Extraversion. For the total sample, respondents who were Business Management majors had the highest extraversion scores (M = 9.90, SD = 2.32), while those who were Computer Science majors had the lowest extraversion scores (M = 6.92, SD = 3.40). Higher extraversion scores indicate a greater degree towards the personality dimension, while lower scores indicate a lesser degree towards the personality dimension. Results indicated there was a significant effect by major on extraversion (F = 2.33, p = .03). Results of ANOVA of differences in extraversion among the total sample of community college business students (male and female) according to major are shown in Table 4-48.

Table 4-48

ANOVA of Differences in Extraversion Personality Dimension According to Major: Total Sample (N = 480)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Major								
Extraversion				**6**	**2.33**	**.03**		
Business Administration	167	9.41						
Business Management	67	9.90						
Accounting	100	9.30						
Computer Science	12	6.92						
Healthcare	32	9.47						
Economics	8	9.00						
Other	94	9.22						
Bus Mgmt > Computer			2.98				.00	.04
Bus Admin > Computer			2.50				.00	.00
Accounting > Computer			2.38				.00	ns
Healthcare > Computer			2.55				.00	ns
Other > Computer Science			2.31				.00	ns

Agreeableness. For the total sample, respondents who were Healthcare majors had the highest agreeableness scores (M = 9.81, SD = 1.63), while those who were Economics majors had the lowest agreeableness scores (M = 9.13, SD = 2.30). Higher agreeableness scores indicate a greater degree towards the personality dimension, while lower agreeableness scores indicate a lesser degree towards the personality dimension. Results indicated there was not a significant effect by major on agreeableness (F = .21, p = .97). Results of ANOVA of differences in agreeableness among the total sample of community college business students (male and female) according to major are shown in Table 4-49.

Table 4-49

ANOVA of Differences in Agreeableness Personality Dimension According to Major: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Major					
Agreeableness			**6**	**.21**	**.97**
Business Administration	168	9.47			
Business Management	68	9.51			
Accounting	102	9.63			
Computer Science	12	9.33			
Healthcare	32	9.81			
Economics	8	9.13			
Other	93	9.47			

Conscientiousness. For the total sample, respondents who were Healthcare majors had the highest conscientiousness scores (M = 12.09, SD = 2.08), while those who were Economics majors had the lowest conscientiousness scores (M = 10.38, SD = 3.50). Higher conscientiousness scores indicate a greater degree towards the personality

dimension, while lower scores indicate a lesser degree towards the personality dimension. Results indicated there was a significant effect by major on conscientiousness ($F = 3.21$, $p = .004$). Results of ANOVA of differences in conscientiousness among the total sample of community college business students (male and female) according to major are shown in Table 4-50.

Table 4-50

ANOVA of Differences in Conscientiousness Personality Dimension According to Major: Total Sample (N = 480)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Major								
Conscientiousness				**6**	**3.21**	**.00**		
Business Administration	165	10.98						
Business Management	68	11.88						
Accounting	102	11.87						
Computer Science	12	10.75						
Healthcare	32	12.09						
Economics	8	10.38						
Other	93	11.72						
Bus Mgmt > Bus Admin.			.90				.00	ns
Accounting > Bus Admin.			.89				.00	ns
Healthcare > Bus Admin.			1.11				.01	ns
Other > Bus. Admin.			.74				.01	ns

Emotional Stability. For the total sample, respondents who were Computer Science majors had the highest emotional stability scores ($M = 10.75$, $SD = 1.91$), while those who were Business Management majors had the lowest emotional stability scores ($M = 9.85$, $SD = 1.98$). Higher emotional stability scores indicate a greater degree towards the personality dimension, while lower emotional stability scores indicate a

lesser degree towards the personality dimension. Levene's test indicated that the assumption of homogeneity of variance had been violated (F (6, 476) = 2.74, $p < .05$). Results indicated, however there was no significant effect by major on emotional stability (Welch $F = .51$, $p = .80$). Results of ANOVA of differences in emotional stability among the total sample of community college business students (male and female) according to race are shown in Table 4-51.

Table 4-51

ANOVA of Differences in Emotional Stability Personality Dimension According to Major: Total Sample (N = 483)

Variable	N	Mean Score	*df*	Welch *F*	*F*	*p*
Major						
Emotional Stability			**6**	**.51**	**.36**	**.90**
Business Administration	168	10.09				
Business Management	68	9.85				
Accounting	101	10.29				
Computer Science	12	10.75				
Healthcare	32	10.16				
Economics	8	10.50				
Other	94	10.20				

Note. Levine's test was significant so equal variances not assumed.

Openness to Experiences. For the total sample, respondents who were Business Management majors had the highest openness to experiences scores (M = 11.79, SD = 2.07), while those who were Economics majors had the lowest openness to experiences (M = 10.63, SD = 3.07). Higher openness to experiences scores indicates a greater degree towards the personality dimension, while lower openness to experiences scores indicates a lesser degree towards the personality dimension. Results indicated there was not a significant effect by major on openness to experiences (F = 1.06, p = .39). Results of

ANOVA of differences in openness to experiences among the total sample of community college business students (male and female) according to major are shown in Table 4-52.

Table 4-52

ANOVA of Differences in Openness to Experiences Personality Dimension According to Major: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Major					
Openness to Experiences			**6**	**1.06**	**.39**
Business Administration	168	11.21			
Business Management	68	11.79			
Accounting	101	11.44			
Computer Science	12	10.92			
Healthcare	32	11.72			
Economics	8	10.63			
Other	94	11.63			

Personality Dimensions Differences by Education Level

Extraversion. For the total sample, respondents who were four-year college graduates had the highest extraversion scores (M = 9.71, SD = 2.65), while those who were high school graduates had the lowest extraversion scores (M = 9.05, SD = 2.39). Higher extraversion scores indicate a greater degree towards the personality dimension, while lower scores indicate a lesser degree towards the personality dimension. However, these differences were not significant. Results indicated there was not a significant effect for education level on extraversion (F = 1.37, p = .25). Results of ANOVA of differences in extraversion among the total sample of community college business students (male and female) according to education level are shown in Table 4-53.

Table 4-53

ANOVA of Differences in Extraversion Personality Dimension According to Education Level: Total Sample (N = 480)

Variable	N	Mean Score	*df*	*F*	*p*
Education Level					
Extraversion			**2**	**1.37**	**.25**
Four-year college graduate	21	9.71			
One to three years of college	326	9.46			
High school graduate	133	9.05			

Agreeableness. For the total sample, respondents who were four-year college graduates had the highest agreeableness scores (M = 9.95, SD = 1.91), while those who were high school graduates had the lowest agreeableness scores (M = 9.34, SD = 2.26). Higher agreeableness scores indicate a greater degree towards the personality dimension, while lower agreeableness scores indicate a lesser degree towards the personality dimension. Results indicated there was not a significant effect by major on agreeableness (F = .94, p = .39). Results of ANOVA of differences in agreeableness among the total sample of community college business students (male and female) according to education level are shown in Table 4-54.

Table 4-54

ANOVA of Differences in Agreeableness Personality Dimension According to Education Level: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Education Level					
Agreeableness			**2**	**.94**	**.39**
Four-year college graduate	21	9.95			
One to three years of college	327	9.57			
High school graduate	135	9.34			

Conscientiousness. For the total sample, respondents who were four-year college graduates had the highest conscientiousness scores (M = 11.68, SD = 3.00), while those who were high school graduates had the lowest conscientiousness scores (M = 11.27, SD = 2.53). Higher conscientiousness scores indicate a greater degree towards the personality dimension, while lower scores indicate a lesser degree towards the personality dimension. Results indicated there was not a significant effect by major on conscientiousness (F = .91, p = .41). Results of ANOVA of differences in conscientiousness among the total sample of community college business students (male and female) according to education level are shown in Table 4-55.

Table 4-55

ANOVA of Differences in Conscientiousness Personality Dimension According to Education Level: Total Sample (N = 480)

Variable	N	Mean Score	*df*	*F*	*p*
Education Level					
Conscientiousness			**2**	**.91**	**.41**
Four-year college graduate	19	11.68			
One to three years of college	326	11.58			
High school graduate	135	11.27			

Emotional Stability. For the total sample, respondents who reported one to three years of college had the highest emotional stability scores (M = 10.27, SD = 2.46), while those who were high school graduates had the lowest emotional stability scores (M = 9.84, SD = 2.70). Higher emotional stability scores indicate a greater degree towards the personality dimension, while lower emotional stability scores indicate a lesser degree towards the personality dimension. Results indicated there was not a significant effect by major on emotional stability (F = 1.40, p = .25). Results of ANOVA of differences in emotional stability among the total sample of community college business students (male and female) according to education level are shown in Table 4-56.

Table 4-56

ANOVA of Differences in Emotional Stability Personality Dimension According to Education Level: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Education Level					
Emotional Stability			**2**	**1.40**	**.25**
Four-year college graduate	21	10.19			
One to three years of college	328	10.27			
High school graduate	134	9.84			

Openness to Experiences. For the total sample, respondents who reported one to three years of college had the highest openness to experiences scores (M = 11.64, SD = 2.15), while those who were high school graduates had the lowest openness to experiences (M = 11.01, SD = 2.32). Higher openness to experiences scores indicates a greater degree towards the personality dimension, while lower openness to experiences scores indicates a lesser degree towards the personality dimension. Results indicated there was a significant effect by education level on openness to experiences (F = 4.14, p = .02). Results of ANOVA of differences in openness to experiences among the total sample of community college business students (male and female) according to education level major are shown in Table 4-57.

Table 4-57

ANOVA of Differences in Openness to Experiences Personality Dimension According to Education Level: Total Sample (N = 483)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Education Level								
Openness to Experiences				**2**	**4.14**	**.02**		
Four-year college graduate	21	11.05						
One to three years of college	328	11.64						
High school graduate	134	11.01						
One to three years > High School			.63				.01	.02

Personality Dimensions Differences by Employment Status

Extraversion. For the total sample, respondents who were homemakers had the highest extraversion scores (M = 9.91, SD = 1.58), while those who were retired had the lowest extraversion scores (M = 7.67, SD = 1.53). Higher extraversion scores indicate a greater degree towards the personality dimension, while lower scores indicate a lesser degree towards the personality dimension. Results indicated there was a significant effect for employment status for those who reported currently employed (M = 9.51) compared to those who were seeking employment (M = 8.51) with extraversion personality dimension (F = 2.42, p = .05). Results of ANOVA of differences in extraversion among the total sample of community college business students (male and female) according to employment status are shown in Table 4-58.

Table 4-58

ANOVA of Differences in Extraversion Personality Dimension According to Employment Status: Total Sample (N = 480)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Employment Status								
Extraversion				**4**	**2.12**	**.05**		
Currently Employed	363	9.51						
Retired	3	7.67						
Seeking Employment	61	8.51						
Disabled or Not Working	42	9.19						
Homemaker	11	9.91						
Currently Employed > Seeking			1.00				.01	ns

Agreeableness. For the total sample, respondents who were homemakers had the highest agreeableness scores (M = 10.18, SD = 2.44), while those who were retired had the lowest agreeableness scores (M = 7.67, SD = 2.08). Higher agreeableness scores indicate a greater degree towards the personality dimension, while lower agreeableness scores indicate a lesser degree towards the personality dimension. Results indicated there was not a significant effect by employment status on agreeableness (F = .86, p = .49). Results of ANOVA of differences in agreeableness among the total sample of community college business students (male and female) according to employment status are shown in Table 4-59.

Table 4-59

ANOVA of Differences in Agreeableness Personality Dimension According to Employment Status: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Employment Status					
Agreeableness			**4**	**.86**	**.49**
Currently Employed	366	9.52			
Retired	3	7.67			
Seeking Employment	61	9.64			
Disabled or Not Working	42	9.38			
Homemaker	11	10.18			

Conscientiousness. For the total sample, respondents who were homemakers had the highest conscientiousness scores (M = 12.64, SD = 1.57), while those who were retired had the lowest conscientiousness scores (M = 7.67, SD = 2.52). Higher conscientiousness scores indicate a greater degree towards the personality dimension, while lower scores indicate a lesser degree towards the personality dimension. Results indicated there was a significant effect by employment status on conscientiousness (F = 3.37, p = .01). Results of ANOVA of differences in conscientiousness among the total sample of community college business students (male and female) according to employment status are shown in Table 4-60.

Table 4-60

ANOVA of Differences in Conscientiousness Personality Dimension According to Employment Status: Total Sample (N = 480)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Employment Status								
Conscientiousness				**4**	**3.37**	**.01**		
Currently Employed	363	11.55						
Retired	3	7.67						
Seeking Employment	61	11.08						
Disabled or Not Working	42	11.69						
Homemaker	11	12.64						
Homemaker > Retired			4.97				ns	.03
Currently Employed > Retired			3.88				.00	ns
Seeking Employment > Retired			3.42				.01	ns
Disabled or Not Working > Retired			4.02				.01	ns
Homemaker > Seeking Employment			1.55				.04	ns

Emotional Stability. For the total sample, respondents who were seeking employment had the highest emotional stability scores (M = 10.40, SD = 2.27), while those who were retired had the lowest emotional stability scores (M = 7.33, SD = 1.15). Higher emotional stability scores indicate a greater degree towards the personality dimension, while lower emotional stability scores indicate a lesser degree towards the personality dimension. Results indicated there was not a significant effect by employment status on emotional stability (F = 2.17, p = .07). Results of ANOVA of differences in emotional stability among the total sample of community college business students (male and female) according to employment status are shown in Table 4-61.

Table 4-61

ANOVA of Differences in Emotional Stability Personality Dimension According to Employment Status: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Employment Status					
Emotional Stability			**4**	**2.17**	**.07**
Currently Employed	365	10.22			
Retired	3	7.33			
Seeking Employment	62	10.40			
Disabled or Not Working	42	9.55			
Homemaker	11	9.18			

Openness to Experiences. For the total sample, respondents who were currently employed had the highest openness to experiences scores (M = 11.56, SD = 2.22), while those who were retired had the lowest openness to experiences (M = 9.67, SD = 1.53). Higher openness to experiences scores indicates a greater degree towards the personality dimension, while lower openness to experiences scores indicates a lesser degree towards the personality dimension. Results indicated there was not a significant effect by education level on openness to experiences (F = 1.67, p = .16). Results of ANOVA of differences in openness to experiences among the total sample of community college business students (male and female) according to education level major are shown in Table 4-62.

Table 4-62

ANOVA of Differences in Openness to Experiences Personality Dimension According to Employment Status: Total Sample (N = 483)

Variable	N	Mean Score	*df*	*F*	*p*
Employment Status					
Openness to Experiences			**4**	**1.67**	**.16**
Currently Employed	365	11.56			
Retired	3	9.66			
Seeking Employment	62	10.93			
Disabled or Not Working	42	11.40			
Homemaker	11	10.90			

Research Question 3: Differences in Attitude, Subjective Norm, Perceived Behavioral Control and Intention According to Student Characteristics

Are there differences in attitude, subjective norm, and perceived behavioral control toward the behavior, and behavioral intention to fraudulently report financial information, according to community college business student characteristics?

Age, gender, marital status, race, ethnicity, education major, education level, and employment status were analyzed for the total sample of community college business students to see if there were differences in the *Theory of Planned Behavior* (intent, attitude, subjective norm, and perceived behavioral control) based on those attribute variables.

Theory of Planned Behavior Differences by Age

Intent. For the total sample, respondents who were 31 to 35 years old had the highest intent scores (M = 18.93, SD = 3.60), while those who were 18 to 24 years old had the lowest intent scores (M = 17.65, SD = 4.61). Higher intention scores indicate a more ethical behavior; lower intention scores indicate a less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for age on intent (F = .618, p = .604). Results of ANOVA of differences in intent among the total sample of community college business students (male and female) according to age are shown in Table 4-63.

Table 4-63

ANOVA of Differences in Intent According to Age: Total Sample (N = 471)

Variable	N	Mean Score	*df*	*F*	*p*
Age					
Intent			**3**	**.618**	**.604**
18 to 24	394	17.65			
25 to 30	38	17.76			
31 to 35	14	18.93			
36 and over	25	18.56			

Attitude. For the total sample, respondents who were 36 years old and older had the highest attitude scores (M = 19.43, SD = 3.91), while those who were 25 to 30 years old had the lowest attitude scores (M = 16.78, SD = 5.15). Higher attitude scores indicate a more ethical behavior; lower attitude scores indicate a less ethical behavior. Levene's test indicated that the assumption of homogeneity of variance had been violated (F (3, 455) = 2.956, $p < .05$). Results indicated there was not a significant effect for age on attitude (Welch F = 2.12, p = .116). Results of ANOVA of differences in attitude among the total sample of community college business students (male and female) according to age are shown in Table 4-64.

Table 4-64

ANOVA of Differences in Attitude According to Age: Total Sample (N = 459)

Variable	N	Mean Score	*df*	Welch *F*	*F*	*p*
Age						
Attitude			**3**	**.116**	**2.083**	**.102**
18 to 24	386	17.55				
25 to 30	37	16.78				
31 to 35	13	18.54				
36 and over	23	19.43				

Note. Levine's test was significant so equal variances not assumed.

Subjective Norm. For the total sample, respondents who were 31 to 35 years old had the highest subjective norm scores (M = 19.31, SD = 2.09), while those who were 25 to 30 years old had the lowest attitude scores (M = 16.21, SD = 4.31). Higher subjective norm scores indicate more ethical behavior, while lower subjective norm scores indicate less ethical behavior. Levene's test indicated that the assumption of homogeneity of variance had been violated (F (3, 468) = 3.897, $p < .05$). Results indicated there was a significant effect for age on subjective norm (Welch F = 9.201, p = .000). Results of ANOVA of differences in subjective norm among the total sample of community college business students (male and female) according to age are shown in Table 4-65.

Table 4-65

ANOVA of Differences in Subjective Norm According to Age: Total Sample (N = 472)

Variable	N	Mean Score	*df*	Welch *F*	*F*	*p*
Age						
Subjective Norm			**3**	**.000**	**3.829**	**.010**
18 to 24	396	16.57				
25 to 30	38	16.21				
31 to 35	13	19.31				
36 and over	25	18.60				

Note. Levine's test was significant so equal variances not assumed.

Perceived Behavioral Control. For the total sample, respondents who were 31 to 35 years old had the highest perceived behavioral control scores (M = 15.00, SD = 4.77), while those who were 18 to 24 years old had the lowest intent scores (M = 11.74, SD = 5.15). Higher perceived behavioral control scores indicate a more ethical behavior, while lower perceived behavioral control scores indicate a lesser degree of ethical behavior. Results indicated there was a significant effect for age on perceived behavioral control (F = 3.967, p = .008). Results of ANOVA of differences in perceived behavioral control among the total sample of community college business students (male and female) according to age are shown in Table 4-66.

Table 4-66

ANOVA of Differences in Perceived Behavioral Control According to Age: Total Sample (N = 477)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Age								
Perceived Behavioral Control				**3**	**3.96**	**.008**		
18 to 24	400	11.74						
25 to 30	38	13.00						
31 to 35	14	15.00						
36 and over	25	14.20						
31 to 35 > 18 to 24			3.25				.01	ns
36 and over > 18 to 24			2.46				.02	ns

Difference in Theory of Planned Behavior by Gender

Intent. Female community college business students had greater intent scores (M = 18.49, SD = 4.19) than male community college business students (M = 17.07, SD = 4.93, t (469) = -3.371, $p > .05$), this difference was significant. Higher intention scores indicate a more ethical behavior; lower intention scores indicate a less ethical behavior. Comparisons of the intention according to gender are shown in Table 4-67.

Table 4-67

Comparison of Intent According to Gender (N = 471)

Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Gender					
Intent					
Male	249	17.07	-1.41	-3.37	.001
Female	222	18.49			

Note. Levine's test was significant so equal variances not assumed.

Attitude. Female community college business students had greater attitude scores (M = 18.69, SD = 3.46) than male community college business students (M = 16.65, SD = 4.71, t (457) = -5.321, p > .05), this difference was significant. Higher attitude scores indicate a more ethical behavior; lower attitude scores indicate a lesser ethical behavior. Comparisons of the attitude according to gender are shown in Table 4-68.

Table 4-68

Comparison of Attitude According to Gender (N = 459)

Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Gender					
Attitude					
Male	243	16.65			
			-2.04	-5.321	.000
Female	216	18.69			

Note. Levine's test was significant so equal variances not assumed.

Subjective Norm. Female community college business students had greater subjective norm scores (M = 17.53, SD = 3.91) than male community college business students (M = 16.02, SD = 4.22, t (470) = -4.00, p > .05), this difference was significant. Higher subjective norm scores indicate more ethical behavior, while lower subjective norm scores indicate less ethical behavior. Comparisons of subjective norm according to gender are shown in Table 4-69.

Table 4-69

Comparison of Subjective Norm According to Gender (N = 472)

Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Gender					
Subjective Norm					
Male	250	16.02			
			-1.50	-4.00	.000
Female	222	17.53			

Perceived Behavioral Control. Female community college business students had greater perceived behavioral control scores (M = 13.30, SD = 5.15) than male community college business students (M = 10.95, SD = 4.88, t (475) = -5.117, $p > .05$), this difference was significant. Higher perceived behavioral control scores indicate a more ethical behavior, while lower perceived behavioral control scores indicate a lesser degree of ethical behavior. Comparisons of perceived behavioral control according to gender are shown in Table 4-70.

Table 4-70

Comparison of Perceived Behavioral Control According to Gender (N = 477)

Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Gender					
Perceived Behavioral Control					
Male	251	10.95			
			-2.35	-5.117	.000
Female	226	13.30			

Theory of Planned Behavior Differences by Marital Status

Intent. For the total sample, respondents who were divorced or separated had the highest intent scores (M =20.00, SD = 3.46), while those who were married had the lowest intent scores (M = 17.67, SD = 5.28). Higher intention scores indicate a more ethical behavior; lower intention scores indicate a less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for marital status on intent (F = 1.456, p = .234). Results of ANOVA of differences in intent among the total sample of community college business students (male and female) according to marital status are shown in Table 4-71.

Table 4-71

ANOVA of Differences in Intent According to Marital Status: Total Sample (N = 471)

Variable	N	Mean Score	*df*	*F*	*p*
Marital Status					
Intent			**2**	**1.456**	**.234**
Married	43	17.67			
Single, Never Married	416	17.68			
Divorced or Separated	12	20.00			

Attitude. For the total sample, respondents who were divorced or separated had the highest intent scores (M =19.83, SD = 4.04), while those who were single, never married had the lowest intent scores (M = 17.51, SD = 4.28). Higher attitude scores indicate a more ethical behavior; lower attitude scores indicate a less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for marital status on attitude (F = 1.919, p = .148). Results of ANOVA

of differences in attitude among the total sample of community college business students (male and female) according to marital status are shown in Table 4-72.

Table 4-72

ANOVA of Differences in Attitude According to Marital Status: Total Sample (N = 459)

Variable	N	Mean Score	*df*	*F*	*p*
Marital Status Attitude			**2**	**1.919**	**.148**
Married	40	18.03			
Single, Never Married	407	17.51			
Divorced or Separated	12	19.83			

Subjective Norm. For the total sample, respondents who were divorced or separated had the highest subjective norm scores (M = 18.38, SD = 3.07), while those who were single, never married had the lowest subjective norm scores (M = 16.53, SD = 4.21). Higher subjective norm scores indicate more ethical behavior, while lower subjective norm scores indicate less ethical behavior. Levene's test indicated that the assumption of homogeneity of variance had been violated (F (2, 469) = 4.008, $p < .05$). Results indicated there was a significant effect for marital status on subjective norm (Welch F = 6.249, p = .006). Results of ANOVA of differences in subjective norm among the total sample of community college business students (male and female) according to marital status are shown in Table 4-73.

Table 4-73

ANOVA of Differences in Subjective Norm According to Marital Status: Total Sample (N = 472)

Variable	N	Mean Score	*df*	Welch *F*	*F*	*P*
Marital Status						
Subjective Norm			**2**	**6.249**	**4.094**	**.017**
Married	42	18.17				
Single, Never Married	417	16.53				
Divorced or Separated	13	18.38				

Note. Levine's test was significant so equal variances not assumed.

Perceived Behavioral Control. For the total sample, respondents who were divorced or separated had the highest perceived behavioral control scores (M = 14.54, SD = 5.69), while those who were single, never married had the lowest intent scores (M = 11.79, SD = 5.05). Higher perceived behavioral control scores indicate a more ethical behavior, while lower perceived behavioral control scores indicate a lesser degree of ethical behavior. Results indicated there was a significant effect for marital status on perceived behavioral control (F = 5.306, p = .005). Results of ANOVA of differences in perceived behavioral control among the total sample of community college business students (male and female) according to marital status are shown in Table 4-74.

Table 4-74

ANOVA of Differences in Perceived Behavioral Control According to Marital Status: Total Sample (N = 477)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Marital Status								
Perceived Behavioral Control				**2**	**5.306**	**.005**		
Married	43	14.02						
Single, Never Married	421	11.79						
Divorced or Separated	13	14.54						
Married > Single, Never Married			2.23				.006	.025

Theory of Planned Behavior Differences by Race

Intent. For the total sample, respondents who were American Indian or Alaskan Native had the highest intent scores (M =18.83, SD = 3.25), while those who were Asian had the lowest intent scores (M = 16.94, SD = 5.49). Higher intention scores indicate a more ethical behavior; lower intention scores indicate a less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for race on intent (F = .463, p = .763). Results of ANOVA of differences in intent among the total sample of community college business students (male and female) according to race are shown in Table 4-75.

Table 4-75

ANOVA of Differences in Intent According to Race: Total Sample (N = 425)

Variable	N	Mean Score	*df*	*F*	*p*
Race					
Intent			**4**	**.463**	**.763**
White	284	17.80			
Black or African American	96	17.49			
American Indian or Alaskan Native	6	18.83			
Asian	34	16.94			
Native Hawaiian or Pacific Islander	5	18.80			

Attitude. For the total sample, respondents who were Native Hawaiian or Pacific Islander had the highest attitude scores (M =18.20, SD = 2.77), while those who were Asian had the lowest attitude scores (M = 16.76, SD = 4.67). Higher attitude scores indicate a more ethical behavior; lower attitude scores indicate a less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for race on attitude (F = .368, p = .831). Results of ANOVA of differences in attitude among the total sample of community college business students (male and female) according to race are shown in Table 4-76.

Table 4-76

ANOVA of Differences in Attitude According to Race: Total Sample (N = 417)

Variable	N	Mean Score	*df*	*F*	*p*
Race					
Attitude			**4**	**.368**	**.831**
White	280	17.60			
Black or African American	94	17.77			
American Indian or Alaskan Native	5	17.40			
Asian	33	16.76			
Native Hawaiian or Pacific Islander	5	18.20			

Subjective Norm. For the total sample, respondents who were Native Hawaiian or Pacific Islander had the highest subjective norm scores (M =18.00, SD = 3.67), while those who were American Indian or Alaskan Native had the lowest subjective norm scores (M = 14.50, SD = 6.25). Higher subjective norm scores indicate more ethical behavior, while lower subjective norm scores indicate less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for race on subjective norm (F = .662, p = .619). Results of ANOVA of differences in subjective norm among the total sample of community college business students (male and female) according to race are shown in Table 4-77.

Table 4-77

ANOVA of Differences in Subjective Norm According to Race: Total Sample (N = 427)

Variable	N	Mean Score	*df*	*F*	*p*
Race					
Subjective Norm			**4**	**.662**	**.619**
White	285	16.77			
Black or African American	98	16.56			
American Indian or Alaskan Native	6	14.50			
Asian	33	17.06			
Native Hawaiian or Pacific Islander	5	18.00			

Perceived Behavioral Control. For the total sample, respondents who were Native Hawaiian or Pacific Islander had the highest perceived behavioral control scores (M =18.20, SD = 4.09), while those who were Asian had the lowest perceived behavioral control scores (M = 11.29, SD = 5.68). Higher perceived behavioral control scores indicate a more ethical behavior, while lower perceived behavioral control scores indicate a lesser degree of ethical behavior. Results indicated there was a significant effect for race on perceived behavioral control (F = 2.77, p = .027). Results of ANOVA of differences in perceived behavioral control among the total sample of community college business students (male and female) according to race are shown in Table 4-78.

Table 4-78

ANOVA of Differences in Perceived Behavioral Control According to Race: Total Sample (N = 431)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Race								
Perceived Behavioral Control				**4**	**2.76**	**.027**		
White	288	11.67						
Black or African American	98	12.66						
American Indian or Alaskan Native	6	13.17						
Asian	34	11.29						
Native Hawaiian or Pacific Islander	5	18.20						
Native Hawaiian or Pacific Islander > White			6.53				.005	ns
Native Hawaiian or Pacific Islander > Black			5.54				.019	ns
Native Hawaiian or Pacific Islander > Asian			6.91				.005	ns

Difference in Theory of Planned Behavior by Ethnicity

Intent. Hispanic or Latino community college business students had greater intent scores (M = 18.38, SD = 4.27) than community college business students who were not Hispanic or Latino (M = 17.35, SD = 4.88, t (454) = -2.341, $p > .05$), this difference was significant. Higher intention scores indicate a more ethical behavior; lower intention scores indicate a less ethical behavior. Comparisons of the intention according to ethnicity are shown in Table 4-79.

Table 4-79

Comparison of Intent According to Ethnicity: Total Sample (N = 456)

Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Ethnicity					
Intent					
Not Hispanic or Latino	294	17.35	-1.03	-2.341	.020
Hispanic or Latino	162	18.38			

Note. Levine's test was significant so equal variances not assumed.

Attitude. Hispanic or Latino community college business students had greater attitude scores (M = 17.95, SD = 4.13) than community college business students who were not Hispanic or Latino (M = 17.43, SD = 4.37, t (442) = -1.223, $p > .05$), this difference was not significant. Higher attitude scores indicate a more ethical behavior; lower attitude scores indicate a less ethical behavior. Comparisons of the attitude according to ethnicity are shown in Table 4-80.

Table 4-80

Comparison of Attitude According to Ethnicity: Total Sample (N = 444)

Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Ethnicity					
Attitude					
Not Hispanic or Latino	288	17.43	-.522	-1.223	.222
Hispanic or Latino	156	17.95			

Subjective Norm. Community college business students who were not Hispanic or Latino had greater subjective norm scores (M = 16.80, SD = 3.92) than Hispanic or Latino community college business students (M = 16.56, SD = 4.45, t (456) = .586, $p > .05$), this difference was not significant. Higher subjective norm scores indicate more

ethical behavior, while lower subjective norm scores indicate less ethical behavior. Comparisons of subjective norm according to ethnicity are shown in Table 4-81.

Table 4-81

Comparison of Subjective Norm According to Ethnicity: Total Sample (N = 458)

Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Ethnicity					
Subjective Norm					
Not Hispanic or Latino	295	16.80	-.522	.586	.558
Hispanic or Latino	163	16.56			

Perceived Behavioral Control. Hispanic or Latino community college business students had greater perceived behavioral control scores (M = 12.53, SD = 5.14) than community college business students who were not Hispanic or Latino (M = 11.89, SD = 5.16, t (460) = -1.288, $p > .05$), this difference was not significant. Higher perceived behavioral control scores indicate a more ethical behavior, while lower perceived behavioral control scores indicate a lesser degree of ethical behavior. Comparisons of perceived behavioral control according to ethnicity are shown in Table 4-82.

Table 4-82

Comparison of Perceived Behavioral Control According to Ethnicity: Total Sample (N = 462)

Variable	N	Mean	Mean Difference	*t*-value	*p*-value
Ethnicity					
Perceived Behavioral Control					
Not Hispanic or Latino	297	11.89	-.644	-1.288	.198
Hispanic or Latino	165	12.53			

Theory of Planned Behavior Differences by Major

Intent. For the total sample, respondents who were Accounting majors had the highest intent scores (M =18.08, SD = 4.65), while those who were Health Sciences/Healthcare Administration majors had the lowest intent scores (M = 17.07, SD = 5.15. Higher intention scores indicate a more ethical behavior; lower intention scores indicate a less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for major on intent (F = .452, p = .844). Results of ANOVA of differences in intent among the total sample of community college business students (male and female) according to major are shown in Table 4-83.

Table 4-83

ANOVA of Differences in Intent According to Major: Total Sample (N = 471)

Variable	N	Mean Score	*df*	*F*	*P*
Major					
Intent			**6**	**.452**	**.844**
Business Administration	162	17.94			
Business Management	67	17.10			
Accounting	99	18.08			
Computer Science	12	17.67			
Health Sciences/Healthcare Administration	30	17.07			
Economics	8	17.50			
Other	93	17.74			

Attitude. For the total sample, respondents who were Accounting majors had the highest attitude scores (M = 18.09, SD = 3.92), while those who were Computer Science majors had the lowest attitude scores (M = 16.75, SD = 6.06). Higher attitude scores indicate a more ethical behavior; lower attitude scores indicate a less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for major on attitude (F = .454, p = .842). Results of ANOVA of differences in attitude among the total sample of community college business students (male and female) according to major are shown in Table 4-84.

Table 4-84

ANOVA of Differences in Attitude According to Major: Total Sample (N = 459)

Variable	N	Mean Score	*df*	*F*	*p*
Major					
Attitude			**6**	**.454**	**.842**
Business Administration	157	17.62			
Business Management	65	17.29			
Accounting	96	18.09			
Computer Science	12	16.75			
Health Sciences/Healthcare Administration	30	18.00			
Economics	8	17.00			
Other	91	17.37			

Subjective Norm. For the total sample, respondents who were Health Sciences/Healthcare Administration majors had the highest subjective norm scores (M = 17.45, SD = 4.04), while those who were Business Management majors had the lowest subjective norm scores (M = 15.34, SD = 4.47). Higher subjective norm scores indicate more ethical behavior, while lower subjective norm scores indicate less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for major on subjective norm (F = 1.831, p = .091). Results of ANOVA of differences in subjective norm among the total sample of community college business students (male and female) according to major are shown in Table 4-85.

Table 4-85

ANOVA of Differences in Subjective Norm According to Major: Total Sample (N = 472)

Variable	N	Mean Score	*df*	*F*	*p*
Major					
Subjective Norm			**6**	**1.831**	**.091**
Business Administration	163	16.89			
Business Management	67	15.34			
Accounting	99	17.11			
Computer Science	12	15.50			
Health Sciences/Healthcare Administration	31	17.45			
Economics	8	16.75			
Other	92	16.96			

Perceived Behavioral Control. For the total sample, respondents who were Health Sciences/Healthcare Administration majors had the highest perceived behavioral control scores (M = 14.29, SD = 4.99), while those who were Economics majors had the lowest perceived behavioral control scores (M = 11.00, SD = 4.72). Higher perceived behavioral control scores indicate a more ethical behavior, while lower perceived behavioral control scores indicate a lesser degree of ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for major on perceived behavioral control (F = 1.425, p = .203). Results of ANOVA of differences in perceived behavioral control among the total sample of community college business students (male and female) according to major are shown in Table 4-86.

Table 4-86

ANOVA of Differences in Perceived Behavioral Control According to Major: Total Sample (N = 477)

Variable	N	Mean Score	*df*	*F*	*p*
Major					
Perceived Behavioral Control			**6**	**1.425**	**.203**
Business Administration	164	11.99			
Business Management	68	11.37			
Accounting	100	12.43			
Computer Science	12	11.25			
Health Sciences/Healthcare Administration	31	14.29			
Economics	8	11.00			
Other	94	11.79			

Theory of Planned Behavior Differences by Education Level

Intent. For the total sample, respondents who were four-year college graduates had the highest intent scores (M =18.95, SD = 3.51), while those who were high school graduates had the lowest intent scores (M = 17.19, SD = 4.97). Higher intention scores indicate a more ethical behavior; lower intention scores indicate a less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for education level on intent (F = 1.76, p = .173). Results of ANOVA of differences in intent among the total sample of community college business students (male and female) according to education level are shown in Table 4-87.

Table 4-87

ANOVA of Differences in Intent According to Education Level: Total Sample (N = 471)

Variable	N	Mean Score	*df*	*F*	*P*
Education Level					
Intent			**2**	**1.760**	**.173**
Four-year College Graduate	21	18.95			
One to Three Years of College	319	17.88			
High School Graduate	131	17.19			

Attitude. For the total sample, respondents who had one to three years of college had the highest attitude scores (M =17.70, SD = 4.29), while those who were high school graduates had the lowest attitude scores (M = 17.39, SD = 4.27). Higher attitude scores indicate a more ethical behavior; lower attitude scores indicate a less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for education level on attitude (F = .241, p = .786). Results of ANOVA of differences in attitude among the total sample of community college business students (male and female) according to education level are shown in Table 4-88.

Table 4-88

ANOVA of Differences in Attitude According to Education Level: Total Sample (N = 459)

Variable	N	Mean Score	*df*	*F*	*P*
Education Level					
Attitude			**2**	**.241**	**.786**
Four-year College Graduate	18	17.61			
One to Three Years of College	317	17.70			
High School Graduate	124	17.39			

Subjective Norm. For the total sample, respondents who were four-year college graduates had the highest subjective norm scores (M =17.83, SD = 3.38), while those who were high school graduates had the lowest subjective norm scores (M = 16.49, SD = 4.43). Higher subjective norm scores indicate more ethical behavior, while lower subjective norm scores indicate less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for education level on subjective norm (F = .873, p = .419). Results of ANOVA of differences in subjective norm among the total sample of community college business students (male and female) according to education level are shown in Table 4-89.

Table 4-89

ANOVA of Differences in Subjective Norm According to Education Level: Total Sample (N = 472)

Variable	N	Mean Score	*df*	*F*	*P*
Education Level					
Subjective Norm			**2**	**.873**	**.419**
Four-year College Graduate	18	17.83			
One to Three Years of College	323	16.76			
High School Graduate	131	16.49			

Perceived Behavioral Control. For the total sample, respondents who were four-year college graduates had the highest perceived behavioral control scores (M =14.67, SD = 5.13), while those who were high school graduates had the lowest perceived behavioral control scores (M = 11.78, SD = 5.09). Higher perceived behavioral control scores indicate a more ethical behavior, while lower perceived behavioral control scores indicate a lesser degree of ethical behavior. However, these differences were not significant.

Results indicated there was not a significant effect for education level on perceived behavioral control ($F = 2.924$, $p = .055$). Results of ANOVA of differences in perceived behavioral control among the total sample of community college business students (male and female) according to education level are shown in Table 4-90.

Table 4-90

ANOVA of Differences in Perceived Behavioral Control According to Education Level: Total Sample (N = 477)

Variable	N	Mean Score	*df*	*F*	*P*
Education Level					
Perceived Behavioral Control			**2**	**2.924**	**.055**
Four-year College Graduate	21	14.67			
One to Three Years of College	324	12.02			
High School Graduate	132	11.78			

Theory of Planned Behavior Differences by Employment Status

Intent. For the total sample, respondents who were homemakers had the highest intent scores (M =20.18, SD = 1.47), while those who were retired had the lowest intent scores (M = 6.00, SD = .000). Higher intention scores indicate a more ethical behavior; lower intention scores indicate a less ethical behavior. Levene's test indicated that the assumption of homogeneity of variance had been violated (F (4, 466) = 4.521, $p < .05$). The Welch F could not be calculated for intent because one of the groups (retired) had a zero variance. Results of ANOVA of differences in intent among the total sample of community college business students (male and female) according to employment status are shown in Table 4-91.

Table 4-91

ANOVA of Differences in Intent According to Employment Status: Total Sample (N = 471)

Variable	N	Mean Score	*df*	Welch *F*	*F*	*p*
Employment Status Intent						
Currently Employed	356	17.89				
Retired	3	6.00				
Seeking Employment	60	16.42				
Disabled or Not Working	41	18.61				
Homemaker	11	20.18				

Note. Levine's test was significant so equal variances not assumed. The Welch *F* could not be calculated for intent because one of the groups (retired) had a zero variance.

Attitude. For the total sample, respondents who were homemakers had the highest attitude scores (M =19.30, SD = 3.13), while those who were retired had the lowest attitude scores (M = 9.00, SD = 4.24). Higher attitude scores indicate a more ethical behavior; lower attitude scores indicate a less ethical behavior. Results indicated there was a significant effect for employment status on attitude (F = 2.595, p = .036). Results of ANOVA of differences in attitude among the total sample of community college business students (male and female) according to employment status are shown in Table 4-92.

Table 4-92

ANOVA of Differences in Attitude According to Employment Status: Total Sample (N = 459

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Employment Status Attitude				**4**	**2.595**	**.036**		
Currently Employed	350	17.57						
Retired	2	9.00						
Seeking Employment	56	17.54						
Disabled or Not Working	41	18.12						
Homemaker	10	19.30						
Homemaker > Retired			10.30				.002	.047
Seeking Employment > Retired			8.54				.006	ns
Currently Employed > retired			8.57				.005	ns
Disabled or Not Working > Retired			9.12				.003	ns

Subjective Norm. For the total sample, respondents who were homemakers had the highest subjective norm scores (M =19.00, SD = 3.09), while those who were retired had the lowest subjective norm scores (M = 14.00, SD = 4.58). Higher subjective norm scores indicate more ethical behavior, while lower subjective norm scores indicate less ethical behavior. However, these differences were not significant. Results indicated there was not a significant effect for employment status on subjective norm (F = 1.552, p = .186). Results of ANOVA of differences in subjective norm among the total sample of community college business students (male and female) according to employment status are shown in Table 4-93.

Table 4-93

ANOVA of Differences in Subjective Norm According to Employment Status: Total Sample (N = 472)

Variable	N	Mean Score	*df*	*F*	*P*
Employment Status					
Subjective Norm			**4**	**1.552**	**.186**
Currently Employed	358	16.75			
Retired	3	14.00			
Seeking Employment	61	16.08			
Disabled or Not Working	40	17.13			
Homemaker	10	19.00			

Perceived Behavioral Control. For the total sample, respondents who were homemakers had the highest perceived behavioral control scores (M =15.45, SD = 5.29), while those who were retired had the lowest perceived behavioral control scores (M = 6.67, SD = 2.08). Higher perceived behavioral control scores indicate a more ethical behavior, while lower perceived behavioral control scores indicate a lesser degree of ethical behavior. Results indicated there was a significant effect for employment status on perceived behavioral control (F = 2.539, p = .039). Results of ANOVA of differences in perceived behavioral control among the total sample of community college business students (male and female) according to employment status are shown in Table 4-94.

Table 4-94

ANOVA of Differences in Perceived Behavioral Control According to Employment Status: Total Sample (N = 477)

Variable	N	Mean Score	Mean Difference	*df*	*F*	*p*	Post Hoc Comparisons	
							p LSD	*p* Scheffe
Employment Status								
Perceived Behavioral Control				**4**	**2.539**	**.039**		
Currently Employed	360	11.87						
Retired	3	6.67						
Seeking Employment	61	12.85						
Disabled or Not Working	42	12.11						
Homemaker	11	15.45						
Homemaker > Currently Employed			3.58				1.57	ns
Seeking Employment > Retired			6.19				3.02	ns
Homemaker > Retired			8.79				3.33	ns

Research Hypotheses

Hypothesis 1: Personality Dimensions, Order of Importance, and Intention to Fraudulently Report Financial Information

Of the five personality dimension explanatory variables, the order of importance in explaining intention to fraudulently report financial information among community college business students is as follows: extraversion → conscientiousness → neuroticism → agreeableness → openness to new experiences.

The purpose of this hypothesis was to test whether the hypothesized order of importance of the five personality dimensions in predicting the intention to fraudulently report financial information among community college business students. It was determined that using hierarchical (forward) multiple regression would result in a model where only the significant predictors would be included. For that reason, the enter method was used instead, with each dimension entered hierarchically into a separate block in the hypothesized order.

Using this method produced five models, with additional personality dimensions being added until all five were included in Model 5. All of the models except for Model 1 produced had significant F values, and the t statistic for both was significant for the constant. The R^2 was 0% for Model 1, and 5.8% for Model 5. The adjusted R^2 also gradually increased from Model 1 (-.02%) to Model 5 (4.8%). Model 5 was selected as the best explanatory model for predicting the intention to fraudulently report financial information among community college business students.

Analysis of personality dimensions indicated two of the personality dimensions (conscientiousness and agreeableness) were significant predictors of intent. The

standardized beta coefficient (β) of the five personality dimensions indicated their order of importance in the intention to fraudulently report financial information. The conscientiousness personality dimension (t = 3.025, p = .003, β = .146) was the most important predictor in the model. The agreeableness personality dimension was the second most important predictor (t = 2.948, p = .003, β = .145). Results of the regression analyses showed H1 was partially supported because only conscientiousness and agreeableness personality dimensions were explanatory variables of intent to fraudulently report financial information and extraversion, emotional stability, and openness to new experiences were included in the model but were not significant. The results of the regression analysis for H1 are summarized in Table 4-95.

Table 4-95

Summarized Regression Analysis of the Five Personality Dimensions and Intent (N = 463)

Variable	***F***	***df***	***p***	***B***	***SE/ B***	**β**	***t***	***p***	**R^2**	**Adjusted R^2**
Model 1	.091	1	.762						.000	-.002
Model 2	7.931	2	.000						.033	.029
Model 3	6.087	3	.000						.038	.032
Model 4	6.975	4	.000						.057	.049
Model 5	5.651	5	.000						.058	.048
(Constant)				10.635	1.595					
Extraversion				-0.36	.086	-.021	-.421	.674		
Conscientiousness				.293	.097	.146	3.025	.003		
Neuroticism				.037	.091	.020	.403	.687		
Agreeableness				.308	.104	.145	2.948	.003		
Openness				.067	.107	.032	.626	.531		

Hypothesis 2: Relationship among Attitude, Subjective Norm, and Perceived Behavioral Control, and Behavioral Intention of Reporting Fraudulent Information

There is a significant explanatory relationship among attitude, subjective norm, and perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college students.

The purpose of this hypothesis was to test whether there was a significant explanatory relationship among attitude, subjective norm, and perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college business students. Stepwise regression was carried out for the total sample of community college business students.

For the total sample, results of the stepwise method produced two models. Both models produced had significant F values, and the t statistic for both was significant for the constant. The R^2 increased from 4.35% for Model 1 to 4.68% for Model 2. The adjusted R^2 also gradually increased from 4.34% in Model 1 to 4.66% for Model 2. Model 2 was selected as the best explanatory model for predicting the intention to fraudulently report financial information among community college business students.

Analysis of the individual predictors indicated two of the constructs (attitude and subjective norm) were significant predictors of intent. The standardized beta coefficient (β) of the two predictors and the remaining one predictor indicated their relative importance in explaining the intention to fraudulently report financial information. Attitude (t = 14.69, p = .000, β = *.569*) was the most important predictor in the model. Subjective norm was the second most important predictor (t = 5.227, p = .000, β =.202). Results of the regression analyses showed H2 was partially supported because only

attitude and subjective norm were explanatory variables of intent to report fraudulent financial information. Perceived behavioral control was excluded from the model because it was not significant. The results of the regression analysis for H2 are summarized in Table 4-96.

Table 4-96

Summarized Regression Analysis of the Theory of Planned Behavior and Intent (N = 448)

Variable	***F***	***df***	***p***	***B***	***SE/ B***	**β**	***t***	***p***	R^2	**Adjusted R^2**
Model 1	343.811	1	.000						.435	.434
Model 2	195.708	2	.000						.468	.466
(Constant)				3.083	.786					
Attitude				.619	.042	.569	14.69	.000		
Subjective Norm				.226	.043	.202	5.227	.000		

Hypothesis 3: Relationship among Student Characteristics, Personality Dimensions, Attitude, Subjective Norm, and Perceived Behavioral Control and Intention to Report Fraudulent Financial Information.

There is a significant explanatory relationship among business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control and behavioral intention of fraudulent reporting of financial information by community college business students.

Multiple regression analyses using the hierarchical (forward) method was used to see if business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control were significant explanatory variables of the behavioral intention to of fraudulent financial reporting of financial information by community college business students.

Categorical variables of marital status, race, major, and age category showed no significant *eta* correlations with intent. Gender did have a significant *eta* correlation with intent (h = .152, F = 11.159, p = .001). Ethnicity had a significant *eta* correlation with intent (h = .105, F = 5.077, p = .025). Employment status also had a significant *eta* correlation with intent (h = .248, F = 7.606, p = .000). The results of the *eta* correlations using the means procedure in SPSS are summarized in Table 4-97.

Table 4-97

Eta Correlations of Gender, Marital Status, Race, Ethnicity, Major, Employment Status, and Age Category (N = 471)

Categorical Variables	Eta (*h*)	Eta Squared (h^2)	*F*	*p*
Gender	.152	.023	11.159	.001
Marital Status	.079	.006	1.456	.234
Race	.066	.004	.463	.763
Ethnicity	.105	.011	5.077	.025
Major	.076	.006	.452	.844
Employment Status	.248	.061	7.606	.000
Age Category	.063	.004	.618	.604

Following the results for *eta* correlations, three dummy variables were created for student characteristics (gender, ethnicity, and employment status), and these dummy variables were included in the Pearson *r* correlation analysis with other student characteristics (age and education), personality dimensions, and the *theory of planned behavior* variables.

There were twelve significant or trend Pearson *r* correlations between the variables and intent. Two of the student characteristic variables had trend relationships with intent. Education had a trend relationship (r = -.085, p = .065) with intent, and the dummy variable *homemaker* employment status (r = .081, p = .078) also had a trend relationship with intent. The results of the Pearson *r* correlations of the variables of gender, ethnicity, employment status, age, and education level are shown in Table 4-98.

Table 4-98

Pearson r Correlations of Variables of Gender, Ethnicity, Employment Status, Age, and Education Level with Intent

	Student Characteristics								
					Seeking				
	Gender	**Ethnicity**	**Employed**	**Retired**	**Employment**	**Disabled**	**Homemaker**	**Age**	**Education**
	n = 471	**n = 456**	**n = 471**	**n = 471**	**n = 471**	**n = 471**	**n = 471**	**n = 466**	**n = 471**
Pearson *r*	**.152**	**.105**	**.056**	**-.202**	**-.109**	**.058**	**.081**	**.050**	**-.085**
p	**.001**	**.025**	**.229**	**.000**	**.018**	**.211**	**.078**	**.277**	**.065**

Attitude had the most significant relationship (r = .659, p = .000) with intent, following was subjective norm (r = .446, p = .000), and lastly perceived behavioral control (r = .252, p = .000), all of which are the constructs of the *theory of planned behavior*. The results of the Pearson r correlations of the variables of personality dimensions and the *theory of planned behavior* are shown in Table 4-99.

Table 4-99

Pearson r Correlations of Variables of Personality Dimensions and the Theory of Planned Behavior with Intent

	Personality Dimension					Theory of Planned Behavior		
	Extraversion n = 468	Agreeableness n = 470	Conscientiousness n = 468	Emotional Stability n = 470	Openness to Experiences n = 471	Attitude n = 453	Subjective Norm n = 465	Perceived Behavioral Control n = 470
Pearson *r*	.017	.182	.184	.072	.102	.659	.446	.252
p	.711	.000	.000	.118	.026	.000	.000	.000

To avoid multicollinearity problems, only one of the two classifications for gender (female) and ethnicity (Hispanic or Latino) dummy variables were used in hierarchical regression. Student characteristics, personality dimensions, and theory of planned behavior were entered into a hierarchical regression model in order of significance, from strongest to weakest. Attitude was entered first, followed by subjective norm, and perceived behavioral control (all three constructs of the *theory of planned behavior*), last entered was the personality dimension openness to new experiences. The R^2 was 42.8% for Model 1 and the adjusted R^2 was 42.6%. The R^2 and adjusted R^2 increased with each model except for between Models 6 and 7 where the adjusted R^2 stayed at 46.9% when the female dummy variable was added. Model 9 had the highest R^2 of 49.5% and adjusted R^2 of 48.0%. As such, Model 9 was selected as the best explanatory model for predicting intent to report fraudulent financial information among community college business students. The best explanatory model found was:

Intent = 2.49(Constant) + .60(Attitude) + .21(Subjective Norm) + .01(Perceived Behavioral Control) – 5.44(Retired Employment Status) + .15(Conscientiousness) +.14(Agreeableness) - .44(Female Gender) + .66(Hispanic or Latino Ethnicity) - .08(Openness to New Experiences) – 1.31(Seeking Employment Status) - .42(Education Level) + .42(Homemaker Employment Status) + e

Analysis of individual predictors indicated that there were four significant explanatory variables and two trend explanatory variables of intent. The standardized beta coefficient (β) for each of the six predictors indicated there relative importance of explaining intent. Attitude (t = 13.47, p = .000, β = .546) was the most important predictor in the model. Subjective norm (t = 4.63, p = .000, β = .186) was the second

most important predictor. Seeking employment dummy variable (t = -2.58, p = .010, β = -.091) was third, retired employment status dummy variable (t = -2.24, p = .025, β = -.079) was reported fourth. Hispanic or Latino ethnicity dummy variable (t = 1.93, p = .054, β = .068) was fifth and last was conscientiousness (t = 1.91, p = .057, β = .073). Results of the regression analyses showed H3 was partially supported. The results of the regression analysis for H3 are summarized in Table 4-100.

Table 4-100

Summarized Regression Analysis of Student Characteristics, Personality Dimensions, the Theory of Planned Behavior, and Intent (N = 430)

Variable	*F*	*df*	*p*	*B*	*SE/ B*	β	*t*	*p*	R^2	Adjusted R^2
Model 1	320.579	1	.000						.428	.426
Model 2	183.172	2	.000						.461	.459
Model 3	122.050	3	.000						.462	.458
Model 4	93.895	4	.000						.469	.464
Model 5	76.516	5	.000						.474	.468
Model 6	64.184	6	.000						.476	.469
Model 7	55.293	7	.000						.478	.469
Model 8	49.219	8	.000						.483	.473
Model 9	34.132	12	.000						.495	.480
(Constant)				2.492	1.558		1.600	.110		
Attitude				.601	.045	.546	13.476	.000		
Subjective Norm				.211	.045	.186	4.631	.000		
Perceived Behavioral Control				.014	.035	.015	.391	.696		
Retired Employment Status				-5.440	2.420	-.079	-2.248	.025		
Conscientiousness				.146	.076	.073	1.910	.057		
Agreeableness				.137	.078	.066	1.757	.080		
Female Gender				-.443	.349	-.047	-1.271	.205		
Hispanic or Latino Ethnicity				.663	.343	.068	1.934	.054		
Openness to New Experiences				-.079	.078	-.039	-1.017	.310		
Seeking Employment				-1.310	.507	-.091	-2.583	.010		
Education Level				-.421	.335	-.045	-1.256	.210		
Homemaker Employment Status				.420	1.165	.013	.361	.718		

Summary

This exploratory (comparative) and explanatory (correlational) study using independent t-tests, ANOVA, and multiple regression examined student characteristics, personality dimensions, and variables related to the *theory of planned behavior* among community college business students.

The accessible population was approximately 750 day community college business students. Allowing for absences and actual enrollment, a total of 485 students completed surveys distributed during regular class time. There were 20 unusable surveys, resulting in a response rate of 96%. The average age of respondents was 22.17 years old. Before data analyses related to the exploration of the research questions and testing of the hypotheses were performed, the psychometric characteristics of each instrument were analyzed. The reliability of each instrument was estimated through the calculation of Cronbach's alpha, and exploratory factor analyses provided evidence of the validity of each instrument.

The calculated Cronbach's alphas for the five personality dimensions ranged from .083 to .488 indicating low to moderate reliability (Gosling et al., 2003). TIPI had several corrected item-total correlations below .40 (Baillie, 1997) for the total sample, items included the following increase in the total scale alpha increase if the item was deleted is as follows: 1) two .620; 2) three .585; 3) four .586; 4) six .623; 5) seven .572; 6) eight .592; 7) nine .576; and 8) ten .564. Exploratory factor analysis found two (total sample and male community college business students) to four (female community college business students) factors extracted, with items loading onto separate factors based on personality type, emotional, conventional, stability, outgoing, and

agreeableness. Factor loadings ranged from .467 (female community college business students) to .734 (male community college business students).

The calculated Cronbach's alphas for the four constructs of the TPB ranged from .607 to .942, indicating the scale had good reliability among the current sample (Field, 2005). All corrected-item totals were above .40 (Baillie, 1997), except for item 7, about "no one who is important thinks it would be OK to void the ticket sales," which was still above .30 (Garson, 2007). The *TPB Questionnaire* had no corrected item-total correlation below .40 (Baillie, 1997) for the total sample except for item ten. Item ten, "I have complete control of making the decision to void the ticket sales" would cause the total scale alpha to increase to .861 if deleted.

Exploratory factor analysis found two to three (total sample, male and female community college business students) factors extracted, with items loading onto separate factors based on whether the items pertained to character, subjective norm, and perceived behavioral control. Factor loading ranged from .448 to .794 for the total sample community college business students; .460 to .813 for male community college business students; and .238 to .794 for female community college business students.

The major purpose of this study was to examine relationships related to student characteristics, personality dimensions, and the *Theory of Planned* Behavior among community college business students. There were three research questions and three hypotheses. The first research question was about the descriptive characteristics of the sample, frequency distributions and measures of central tendency were provided about the sample's student characteristics. The second research question looked at differences in personality dimensions according to community college business student

characteristics using *t*-tests and ANOVA. The third research question looked at differences in attitude, subjective norm, and perceived behavioral control, and behavioral intention to fraudulently report financial information according to community college student characteristics using *t*-tests and ANOVA.

Multiple regression (hierarchical forward method) analysis was used to test hypothesis 1, about the order of importance in explaining the intention to fraudulently report financial information among community college business students. Multiple regression (stepwise method) was used to test hypothesis 2, about the explanatory relationship among attitude, subjective norm, perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information. Multiple regression (hierarchical forward method) analysis was used to test hypothesis 3, about the relationship among business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control and behavioral intention of fraudulent financial reporting of financial information by community college business students.

In answering the research questions related to the personality dimensions, findings indicated that there were some significant differences on agreeableness personality dimension as it related to age and race. First, results of the LSD post hoc comparisons found those who were 36 and over had significantly higher agreeableness scores than those who were 18 to 24. There were significant differences from respondents who reported American Indian or Alaskan Native as a race, with the highest agreeableness scores compared to Native Hawaiian or Pacific Islander, who reported the lowest scores.

Conscientiousness personality dimension findings indicated that there were significant differences reported based on gender, race, major, and employment status. Female community college business had higher conscientiousness scores compared to male community college business students. Conscientiousness personality dimension had a significant effect on race, where respondents who were Black or African American had higher scores compared with those who were Native Hawaiian or Pacific Islander with the lowest scores.

Declared major also was found to have differences, where the results found those who were Healthcare majors had significantly higher conscientiousness scores compared to community college business students that declared Economics as a major. Significant effects were also noted with the extraversion and emotional stability personality dimensions. Business Management community college business students were found to have higher extraversion scores compared to Computer Science majors, but significant differences for emotional stability were found with Computer Science declared majors having higher scores compared to the Business Management major community college business students.

Education level was found to have an effect on the openness to experiences or emotional stability personality dimension where respondents who were high school graduates had significantly lower scores compared to those who completed one to three years of college. Employment status had a significant effect on two personality dimensions, extraversion and conscientiousness, where homemakers had higher scores compared to those who reported retired.

In answering research question three related to the *theory of planned behavior* (attitude, subjective norm, and perceived behavioral control), and the behavioral intention to fraudulently report financial information (void the ticket sales), findings indicated there were significant effects of age, marital status, race, and employment status, and significant differences with gender and ethnicity. Results of the LSD post hoc comparisons for intent to void the ticket sales, found that females had significantly higher intent scores compared to males. Results of the LSD post hoc comparisons found that Hispanic or Latino community college business students had significantly higher intent scores compared to students who were not Hispanic or Latino students. Employment status had a significant effect on intent, where homemakers had higher scores compared to those who reported retired as the employment status. Higher intent scores reflect more ethical behavior.

The attitude construct of the *theory of planned behavior* was found to have an effect on age and gender. Community college business students who were 25 to 30 had significantly lower scores than those who were 36 and over. Significant differences were noted for gender, where males had lower attitude scores compared to females. Lower scores for the attitude construct of the *theory of planned behavior* reflect less ethical behavior.

The subjective norm construct of the *theory of planned behavior* had significant effects of age and marital status related to community college business students. Higher subjective norm scores were found for students who were 31 to 35 compared to those who were 25 to 30. Those who were divorced or separated had higher subjective norm scores compared to those who were single. Higher scores reflect more ethical behavior.

Perceived behavioral control, the last construct of the *theory of planned behavior*, had a significant effect on age, with those community college business students who were 18 to 24 had lower scores than those who were 31 to 35. Those who were divorced or separated had significantly higher perceived behavioral control scores compared to those who were single. There was also a significant effect on race, where Native Hawaiian or Pacific Islander students had higher scores than Asian community college business students. Higher perceived behavioral control scores are reflective of more ethical behavior.

In testing H1, about the order of importance of the personality dimensions in explaining intention to fraudulently report financial information, conscientiousness and agreeableness were significant predictors of intention. The other three personality dimensions, extraversion, emotional stability, and openness to experiences were included in HI but were not significant. This indicated H1 was partially supported.

In testing H2, about the relationship among attitude, subjective norm, and perceived behavioral control and the intention to fraudulently report financial information, two constructs – attitude and subjective norm were significant predictors of intent. This indicated H2 was partially supported as perceived behavioral control was included, but not a significant explanatory variable of intent to fraudulently report financial information.

In testing H3, about the relationships among business student characteristics, personality dimensions, and the constructs of the *theory of planned behavior*, and the behavioral intention to fraudulently report financial information by community college business students, this hypothesis was partially supported. Nine models were generated,

all of which were significant, and Model 9 had the highest R^2 of 49.5% and adjusted R^2 of 48.0%. Attitude, subjective norm, seeking employment, and retired were four significant explanatory variables. Ethnicity – Hispanic or Latino and conscientiousness personality dimension were both trend explanatory variables.

Chapter IV presented descriptive statistics of the sample, discussed the psychometric characteristics of the instrumentation used in the study, and reported the results of the examination of research questions and hypothesis testing. Additional analyses related to the research questions and hypotheses were also reported. Chapter V will present a discussion of the interpretations, limitations, practical implications, conclusions, and recommendations pertaining to this study, based on the literature and findings related to student characteristics, personality dimensions, the *theory of planned behavior*, and the behavioral intention of fraudulent reporting of financial information by community college business students.

CHAPTER V

DISCUSSION

Chapter V presents a discussion of the results reported in Chapter IV about findings related to student characteristics, personality dimensions, the *theory of planned behavior*, and the behavioral intention of fraudulent reporting of financial information by community college business students. Descriptive results and results of the exploration of the research questions and testing of the hypotheses are interpreted in light of the review of literature. Results of the analyses of the psychometric characteristics of the instruments used in the study are compared to studies reviewed during the initial assessment of the instrumentation. Study limitations, practical implications, conclusions, and recommendations for future study are also presented in this chapter.

Interpretations

Psychometric Findings Related to the Instruments

Reliability and Validity of the Ten-Item Personality Inventory (TIPI) and Theory of Planned Behavior (TPB)

Findings related to the psychometric characteristics of the *Ten-Item Personality Inventory* (TIPI), *Theory of Planned Behavior* (TPB) scale are compared to findings reported by the original authors, and other literature, where available. For this study, estimates of reliability for the TIPI tended to be lower than those reported by Gosling et al. (2003), while those for the TPB were in line with estimates reported by Carpenter and Reimers (2005). Factor analysis results did not support the five-factor structure of the TIPI, while the dimensionality of the TPB was partially supported.

Ten-Item Personality Inventory (TIPI). The *Ten-Item Personality Inventory* is a brief measure of the Big-Five personality dimensions. *TIPI* is comprised of a series of ten questions, each containing a set of two words that are either descriptive of one of the five dimensions, or the opposite of the personality dimension. Cronbach's alpha was used as an estimate of the reliability of the TIPI in this study. Calculated Cronbach's alphas for the total sample of community college business students by dimension provided poor estimates of reliability: extraversion (.409); agreeableness (.083); conscientiousness (.415); emotional stability (.488); and openness to new experiences (.456). "The relatively low inter-item correlations in conjunction with the fact that the TIPI scales have only two items result in some unusually low internal consistency estimates: (Gosling et al., 2003, p. 516). Gosling et al. (2003) reported Cronbach's alpha in his study of extraversion (.68); agreeableness (.40); conscientiousness (.50); emotional stability (.73); and openness to new experiences (.45). This finding suggests that the TIPI is less reliable for determining personality dimensions than the multi-item Big Five personality scales such as Myers-Briggs. The emphasis with the TIPI is geared more toward content validity (Gosling et al., 2003).

In terms of gender differences, the Cronbach's alpha for the total ten-item TIPI was .633 for males, and .583 for females. For male students two items—item 2 (.077), "critical, quarrelsome" and item 6 (.133), "reserved, quiet," if deleted, would cause the total scale alphas to increase to .659 and .653, respectively. For female students two items—item 3 (.104), "dependable, self-disciplined," and item 6 (.168), "reserved, quiet," if deleted, would cause the total scale alphas to increase to .589 and .591 respectively.

The calculated Cronbach's alphas by dimension and gender further illustrate the low estimates of reliability found in this study. The reliability estimates by dimension for males were extraversion (.325), agreeableness (.047), conscientiousness (.406), emotional stability (.453), and openness to new experiences (.451). The reliability estimates for females by dimension were extraversion (.517), agreeableness (.062), conscientiousness (.401), emotional stability (.499), and openness to new experiences (.471). The finding shows estimates of the reliability for the TIPI were higher for females in four (extraversion, agreeableness, emotional stability, and openness to new experiences) of the five personality dimensions, with the conscientiousness reliability estimate higher for males. This suggests that the TIPI dimensions may be more reliable at assessing the personality dimensions of females rather than males. This may be because the words used resonate more with females than males.

Principal components analysis using varimax rotation was conducted for the total sample of community college business students, as well as for males and females to test the dimensionality of the *TIPI*. The results were four factors (eigenvalues > 1) explaining 63.9% of the total variance for the total sample, while the scree plot indicated two to four factors. Factor loading for reverse-coded items loaded separately from positive items from the original dimension. The principal components analysis using varimax rotation was conducted for male students to test the unidimensionality of the *TIPI* resulting in (eigenvalues > 1) explaining 65.6% (males) and 62.5% (females) of the total variance, while the scree plot indicated two to four dimensions for both male and female students. Factor loading for reverse-coded items loaded separately from positive items from the original dimension for both male and female students.

Factor loading for female students ranged from .502 to .719, and sub-scales were created based on the most common characteristics shared by the items. Factor 1, outgoing, three of the personality items (one, five, and eight) loaded; factor 2, agreeableness, two items loaded (seven and nine); emotional and stability were factors 3 and 4 (personality items two and four, three and eight, respectively). The agreeableness personality dimension is comprised of two items, number 2, critical, quarrelsome which is reverse coded, and number 7, sympathetic, warm. The Cronbach's alpha in this study for the agreeableness personality dimension for the total sample was .083, which is unusually low. To make certain the data was input correctly into SPSS, several original surveys were compared with the data entered into SPSS. The researcher established that the data for the agreeableness personality dimension item 2 was correctly entered into SPSS and properly recoded, and that item 7 was also entered correctly.

One possible explanation for the unusually low Cronbach's alphas for the agreeableness personality dimension may be related to the terms used to describe the agreeableness personality trait. The terms "critical, quarrelsome" (the reverse coded items) do not appear to contrast directly with the terms "sympathetic, warm." Another possible explanation may be the age of the students. The business students in this study generally fell into the first two years of their college career; more than half the sample of students was between the ages of 18 and 20 years old (male 54.7% and female 56.2%). Gosling et al. (2003) surveyed 1,813 undergraduate students at a university who were enrolled in an introductory psychology course and found reliability for the agreeableness personality dimension was the lowest of all five dimensions. It is not possible to compare the respondents of that study to this sample as the ages in that study were not reported.

Yet another explanation may stem from the lack of homogeneity of the current sample in terms of racial and ethnic differences which may have influenced responses for the *TIPI* terms.

Results of factor analysis for the *TIPI* showed the agreeableness personality dimension items (item 2: critical, quarrelsome and item 7: sympathetic, warm) did not load together on the same factor for any of the samples. However, the items did load onto other factors with factor item loadings of .59 or greater. Across all samples, item 2 "critical, quarrelsome" loaded with item 4 "anxious, easily upset." For the total sample and for males, item 7 "sympathetic, warm" tended to load with several desirable personality traits such as "extraverted, enthusiastic" and "calm, emotionally stable." For females, item 7 "sympathetic, warm" loaded only with item 9 "calm, emotionally stable." These results suggest the agreeableness items and the emotional stability items may measure the same underlying construct.

Theory of Planned Behavior (TPB). The Cronbach's alpha for the total sample of community college business students was .841 for the combined *TPB* items, well above the .7 to .8 needed for a scale to demonstrate good reliability (Field, 2005). There was only one item with an item-total correlation below .40. Item 10, "I have complete control of making the decision to void the ticket sales" would cause the total alpha to increase to .861 if the item were deleted.

In terms of gender differences, the Cronbach's alpha was .839 for male students and .812 for female students for the combined *TPB* items. Results for the male students revealed two items—7 (corrected item-total correlation = .255), "No one who is important to me thinks it would be OK to void the ticket sales," would increase the alpha

to .847, if deleted, and item—10 (corrected item-total correlation = .109), "I have complete control of making the decision to void the ticket sales," would increase the alpha to .860, if deleted. Results for the female students revealed one corrected item-total correlation below .30 for the combined *TPB* items. The item—10 (.178), "I have complete control of making the decision to void the ticket sales," would report .837 alpha, if the item was deleted. Based on item ten's low correlation across the total sample and sub samples, it may be that the addition of the word "control" affected the way respondents answered the question.

The *TPB* survey instrument is comprised of three constructs- attitude, subjective norm, and perceived behavioral control, and the influence they have on behavioral intention. Each construct is measured by three items. For the total sample, the Cronbach's alpha was .942 for intention, .829 for attitude, .607 subjective norm, and .627 for perceived behavioral control. Results for the total sample, by construct, revealed one corrected item-total correlation below .30. Item 7 "No one who is important to me thinks it would be OK to void the ticket sales," had a corrected item-total correlation of .288, and would cause the subjective norm alpha to increase to .729 if that item was deleted. For male community college students, the Cronbach's alpha was .950 for intention, .829 for attitude, .601 subjective norm, and .606 for perceived behavioral control. For females, the Cronbach's alpha was .928 for intention, .799 for attitude, .584 subjective norm, and .609 for perceived behavioral control. For both genders, item 7 would cause the subjective norm alpha to increase if that item was deleted. Additionally, item 10 would cause the perceived behavioral control alpha to increase if that item was deleted. It is possible the low item-total correlations for item 10 may have been influenced by the

use of the word "control." It is also possible that the low item-total correlations across the samples for item 7 resulted from the awkward phrasing of the statement.

The results for this study were slightly below, but consistent with, those reported by Carpenter and Reimers (2005), where the alphas reported were .95 for intention, .90 for attitude, and .70 for perceived behavioral control. Subjective norm was not reported. Three out of the four Cronbach's alpha were more consistent among males than females, but the same for both for perceived behavioral control. Intention was more reliable among males (.950) than females (.929). Attitude was more reliable among males (.829) than females (.799). Subjective norm was also more reliable for males (.601) than females (.584).

Principal components analysis using varimax rotation was conducted for the total sample community college business students, as well as for males and females to test the dimensionality of the *TPB* resulting in three factors (eigenvalues > 1) explaining 64.8% (total sample); 65.7% (males); and 61.8% (females) of the total variance, while the scree plot indicated two to four factors for the total sample, male and female students.

Research Questions

Research Question 1: Student Characteristics, Personality Dimensions, Attitude, Subjective Norm, Perceived Behavioral Control and Intention

Research question 1 explored the sociodemographic student characteristics, personality dimensions, attitude, subjective norm, perceived behavioral control and intention among community college business students using frequency distributions, measures of central tendency, and variability. The following provides the interpretations related to the findings reported in Chapter IV.

Student characteristics. Respondents in the study were business students from the central campus of Broward Community College, a two-year college in South Florida. The data-producing sample of 485 community college business students consisted of more males (52.6%) than females (47.4%). This was consistent with both the central campus business student enrollment (males = 60.0%, females = 40.0%), as well as college-wide business student enrollment (males = 55.0%, females = 45.0%) (Student Information System, Program Enrollment, 2008). The average age for the total sample was 22.17 years old. The sample had the highest percentage of students (83.9%) in the 18 to 24 categories, comprised of 216 male and 191 female business students. In terms of marital status, the majority of respondents (88.2%) were single, never married.

For education level in years, 329 (67.8%) reported one to three years of college, and 135 (27.8%) reported themselves as high school graduates. Most of the students (75.7%) were currently employed. Business Administration majors represented 169 (34.8%) of response, 102 (21.0%) declared Accounting as a major, and 94 (19.4%) reported Other as a response. The majority of respondents were white (67.0%), followed by black (22.4%). The racial composition of the sample did not reflect campus-wide enrollment, where white students represent 38.4% of enrollment, while black students represent 29.8%. The difference in the racial composition of the sample compared to campus-wide enrollment suggests there are a higher number of white students enrolled at the central campus than at the other two campuses. In terms of ethnicity, the majority of students reported being not Hispanic or Latino (64.0%), which was higher than reported enrollment at both the central campus (50.0%) as well as campus-wide (48.5%). This suggests that the central campus has a higher percentage of white students that were not

Hispanic or Latino compared to the other two campuses (www.broward.edu, 2008). Because of these differences, results may have limited generalizability beyond the central campus.

Personality dimension. Personality dimension was measured by students' responses to ten personality inventory questions. Each of the ten items contained a set of two words, separated by a comma, using the common stem, "I see myself as." The two words following were either descriptive or the opposite (reverse coded) of the personality dimension. *TIPI* is a brief measure of the big-five personality dimensions, which is used "When time is limited" (Gosling et al., 2003, p. 504). The five-dimensions include extraversion, agreeableness, conscientiousness, emotional stability, and openness to experiences. Of the responses for the total sample of 485 business students, the mean scores were as follows: extraversion (9.35); agreeableness (9.52); conscientiousness (11.50); emotional stability (10.15); and openness to experiences (11.44). Scores for the current sample were higher across all dimensions when compared to scores from Gosling et al. (2003) and Rammstedt (2007).

In this study, students tended to fall into the conscientiousness personality dimension (M = 11.50, SD = 2.32). This result is consistent with Gosling et al. (2003) where the sample of 1,813 undergraduate students also had slightly higher conscientious scores compared to the other dimensions. This was also consistent with Rammstedt (2007), where the sample of 2,569 German adults also had considerably higher conscientiousness scores. Students in this study were least likely to fall into the extraversion dimension (M = 9.35, SD = 2.62), followed by the agreeableness dimension (M = 9.52, SD = 2.21). This was fairly consistent with Rammstedt (2007) where the

lowest mean score was the agreeableness dimension, followed by the extraversion dimension.

Females tended to fall into the conscientiousness personality dimension (M = 11.92, SD = 2.11), while males had the highest mean scores in the openness personality dimension (M = 11.29, SD = 2.26). These gender differences in personality dimensions are consistent with Gosling et al. (2003). Females scored the lowest in the extraversion personality dimension (M = 9.25, SD = 2.67), while males scored the lowest in the agreeableness personality dimension (M = 9.09, SD = 2.26). The results for females in this study were consistent with both Rammstedt (2007) and Gosling et al. (2003), while results for the males in this study were consistent with Rammstedt only (2007). In Gosling et al. (2003) males scored the lowest in the extraversion dimension.

Theory of planned behavior. In this study, total sample scores were highest for intention (M = 17.74, SD = 4.65), followed by attitude (M = 17.61, SD = 4.29), subjective norm (M = 16.73, SD = 4.14), and perceived behavioral control (M = 12.07, SD = 5.15). While the mean scores from this study were higher than those in Carpenter and Reimers (2005), the order of the scores was consistent between the two studies. The item with the lowest mean was from the perceived behavioral control construct. Item ten, "I have complete control of making the decision to void the ticket sales," had the lowest mean scores for the total sample (M = 3.00, SD = 2.35), for male students (M = 2.72, SD = 2.18), and female students (M = 3.31, SD = 2.50). This may have been affected by the word "control." The item with the highest scores was from the attitude construct. The highest mean scores reported were for item four "Do you feel like voiding the ticket sales

would be," where the total sample was (M = 6.10, SD = 1.48), males students (M = 5.82, SD = 1.68), and female students reported (M = 6.41, SD = 1.13).

Research Question 2: Differences in Personality Dimensions According to Business Student Characteristics

Research question 2 explored differences in student characteristics and personality dimensions among community college business students using independent *t*-tests and ANOVA with LSD and Scheffe post hoc comparisons. The following provides the interpretations related to the findings reported in Chapter IV.

Age. Significant differences based on age were limited to the agreeableness personality dimension. Significant statistical differences were found for agreeableness in comparing students who were 36 and over (more agreeable) and those who were 18 to 24 (less agreeable) (F = 2.65, p = .048). These results are consistent with findings from the Rammstedt (2007) study, where older participants were found to be more agreeable than younger participants (F = 9.23, p < .000).

Race. Race was another student characteristic that had a significant effect on personality dimensions. American Indians had the highest agreeableness score (M = 10.29, SD = 1.89) compared to those who were Native Hawaiian or Alaskan (M = 8.60, SD = 2.88). Black or African American respondents (M = 11.61, SD = 2.28) had the highest conscientiousness scores compared to Native Hawaiian or Alaskan respondents (M = 10.60, SD = 4.22). This result was consistent with Gosling et al. (2003) where black participants had the highest conscientiousness scores, although this difference is based on normative data rather than the result of statistically significant difference.

Major. Declared major had a statistically significant effect for two different personality dimensions. The first was extraversion, where Business Management majors had higher mean scores (M = 9.90, SD = 2.32) compared to those who were Computer Science majors (M = 6.92, SD = 3.40) (F = 2.33, p = .03). The conscientiousness personality dimension also had a statistically significant effect by major, where Healthcare majors (M = 12.09, SD = 2.08) had significantly higher scores than Economics majors (M = 10.38, SD = 3.50) (F = 3.21, p = .004). This suggests that personality may play a role in the college major a student decides to pursue.

Education level. Education level had a statistically significant difference for the openness to experience personality dimension, where community college business students who considered themselves high school graduates (M = 11.64, SD = 2.15) had lower scores compared to those who have completed one to three years of college (M = 11.01, SD = 2.32, p = .02). This difference could be attributed to the difference between first and second year students, where second year students where more openness to new experiences.

Employment status. Finally, employment status had a statistically significant effect for the extraversion and conscientiousness personality dimensions. According to LSD post hoc analysis, students who were currently employed had significantly higher extraversion scores (M = 9.51, SD = 2.54) than those who were seeking employment (M = 8.51, SD = 2.81, p = .006). This may be because college students who are more extraverted are more likely to be hired by employers than those students who are less outgoing. Also, according to Scheffe post hoc analysis, homemakers were significantly more conscientious (M = 12.64, SD = 1.57), compared to those who were retired (M =

7.67, SD = 2.52, p = .028). This may be because females scored highest in the conscientiousness dimension in comparison to males, and the majority of homemakers in this study were female.

Research Questions 3: Attitude, Subjective Norm, Perceived Behavioral Control, and Business Student Characteristics

Research question 3 explored differences in attitude, subjective norm, perceived behavioral control, and the intention to fraudulently report financial information among community college business students according to student characteristics using independent t-tests and ANOVA with LSD and Scheffe post hoc comparisons. The following provides the interpretations related to the findings reported in Chapter IV.

Age. This study found significant differences based on age compared to subjective norm and perceived behavioral control. Significant statistical differences were found for subjective norm in comparing students who were 31 to 35 years old (more ethical) and those who were 25 to 30 years old (less ethical) (Welch F = 9.20, p = .000). This difference might be attributable to a change in maturity level, but may also reflect a difference in attitude toward others' opinions. Additionally, there was a significant effect for age on perceived behavioral control (F = 3.97, p = .008). According to LSD post hoc analysis, students who were 31 to 35 years old (M = 15.00, SD = 4.77) had higher perceived behavioral control scores (more ethical) than those who were 18 to 24 years old (M = 11.74, SD = 5.15, p = .01). This difference may be due to older participants feeling more responsible for their own actions.

Gender. Gender differences were found in two areas, intent and attitude. Females (M = 18.49, SD = 4.19) had significantly higher *intent* scores (more ethical) than

males (M = 17.07, SD = 4.93, p = .001), which meant that it was "extremely improbable" that female participants would not perform the behavior of voiding the ticket sales. Female students also had a greater *attitude* toward not performing the behavior (more ethical) (M = 18.69, SD = 3.46) than males (less ethical) (M = 16.65, SD = 4.71, p = .000), which meant that females tended to view the behavior of voiding the ticket sales as "bad, foolish, or harmful."

Marital status. The homogeneity of variance assumption was violated for marital status was violated, but marital status did have a significant effect on subjective norm (Welch F = 6.25, p = .006). There was also a significant effect for perceived behavioral control (F = 5.31, p = .005). Both Scheffe and LSD post hoc analyses showed married students had significantly higher perceived behavioral control scores (more ethical) (M = 14.02, SD = 5.33) than single students (M = 11.79, SD = 5.05, $p < .05$). This may reflect a relationship between age and marital status, such that married students tend to be older, and feel they have more control over their own behavior.

Race. Race had a statistically significant effect only on the perceived behavioral control construct (F = 2.77, p = .027). Results of LSD post hoc analyses showed Native Hawaiian or Pacific Islanders (M = 18.20, SD = 4.09) had significantly higher (more ethical) scores than every other race (white, black, or Asian), except American or Alaska Native. All of the Native Hawaiian or Pacific Islander students were female. This suggests there may be a relationship between culture and gender and perceived behavioral control. Hispanic or Latino students (M = 18.38, SD = 4.27) had higher intent (more ethical) scores than those students who were not Hispanic or Latino (M = 17.38, SD = 4.88, t = -2.34, p = .02).

Employment status. Employment status had a significant effect for perceived behavioral control and attitude. In terms of attitude, the differences suggested that retired participants had a less ethical attitude than any other employment group. Three males selected "retired" as their employment status. Based on the mean scores and statistical results, it is possible that either the males were not actual retirees or that they did not complete the survey questions. LSD post hoc analyses showed homemakers had significantly higher perceived behavioral control scores ($M = 15.45$, $SD = 5.29$) than those students who were currently employed ($M = 11.87$, $SD = 5.04$, $p = .022$). This result makes sense if the homemakers tended to be older, since older students have been shown to have greater perceived behavioral control compared to younger students.

Research Hypotheses

Multiple regression analyses using hierarchical regression were used to examine the importance of the five personality dimensions in explaining the intention to fraudulently report financial information among community college business students (H1), and to examine the relationship among business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control and behavioral intention of fraudulently reporting financial information by community college business students (H3). Stepwise regression analysis was used to examine whether there was a significant explanatory relationship among attitude, subjective norm, and perceived behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college business students (H2). The following provides interpretations related to the findings in Chapter IV.

Hypothesis 1: Personality Dimensions and Order of Importance

Hypothesis 1 examined the order of importance of the personality dimensions in explaining the intention to fraudulently report financial information among community college business students. A hierarchical (enter) regression method was used with each dimension entered hierarchically into a separate block in the hypothesized order: extraversion→ conscientiousness→ neuroticism (emotional stability) → agreeableness → openness to new experiences.

Five models were produced. Model 5 included all of the personality dimensions. Results of the regression analyses and the standardized beta coefficient (β) of the five predictors indicated H1 was partially supported because two of the personality dimensions, conscientiousness (t = 3.025, p = .003, β = .146) and agreeableness (t = 2.948, p = .003, β = .145) followed the hypothesized order of importance. The positive relationship between the traits and intent indicates that the more conscientious or agreeable the participant, the higher their intent to not perform the behavior (more ethical). This is partially consistent with Conner and Abraham's (2001) study using university students, where results suggested the conscientiousness personality trait was consistently related to intention and behavior. The additional three personality dimensions--openness to experiences, emotional stability, and extraversion--were included but were not significant.

Hypothesis 2: Attitude, Subjective Norm, Perceived Behavioral Control, and Behavioral Intent by Community College Students

Hypothesis 2 was partially supported. Hypothesis 2 tested to see if there was a significant explanatory relationship among attitude, subjective norm, perceived

behavioral control, and the behavioral intention of fraudulent reporting of financial information by community college business students. Using the stepwise regression method, two models were produced, and both had significant *F* values. Results of the regression analyses showed H2 was partially supported because only two of the constructs of *TPB*, attitude ($t = 14.69$, $p = .000$, $\beta = .569$) and subjective norm ($t = 5.227$, $p = .000$, $\beta = .202$) were explanatory variables of intent, while perceived behavioral control was included in the model but was not significant. The order of significance of the explanatory variables was consistent with Carpenter and Reimers' (2005) study of MBA students, as well as Randall and Gibson (1991), who studied hospital workers. Attitude and perceived behavioral control were also found to be significant predictors of intent by Connor and Abraham (2001), in a study of factors influencing the protection of one's health among university students. This suggests attitude is closely related to intent across sample types and settings.

Hypothesis 3: Student Characteristics, Personality Dimensions, Attitude, Subjective Norm and Perceived Behavioral Control and Behavioral Intent by Community College Students

Hypothesis 3 was partially supported. Multiple regression analyses using the hierarchical (forward) method was used in Hypothesis 3 to see if there was a significant explanatory relationship among business student characteristics, personality dimensions, attitude, subjective norm, and perceived behavioral control and behavioral intention of fraudulent financial reporting of financial information by community college business students.

Using the hierarchical (forward) method, nine models were produced, and Model 9, which had the highest R^2 of 49.5% and adjusted R^2 of 48.0%, was selected as the best explanatory model for predicting intent to fraudulently report financial information among community college business students. Analysis of individual predictors indicated that there were four significant and three trend explanatory variables of intent. Attitude (t = 13.47, p = .000, β = .546) was the most significant predictor, subjective norm (t = 4.63, p = .000, β = .186) was second, and both had positive relationships to intent, indicating that more ethical attitudes and subjective norm scores were associated with a more ethical intention. The seeking employment dummy variable (t = -2.58, p = .010, β = -.091) was third, and the beta indicated an inverse relationship, where the greater the frequency of those "seeking employment," the lower the intent to not commit the behavior. The last was the dummy variable for employment status – retired (t = -2.24, p = .025, β = -.079). This result suggests retirees were less ethical; however, closer inspection of the sample suggests it is possible the "retiree" status was inaccurate. There were three trend predictors – Hispanic or Latino ethnicity dummy variable (t = 1.93, p = .054, β = .068), and two personality dimensions: conscientiousness (t = 1.91, p = .057, β = .073) and agreeableness (t = 1.75, p = .080, β = .066). Results were consistent with findings from Conner and Abraham (2001), where results suggested that the conscientiousness personality trait was consistently related to intention and behavior, as well as to results from H1. Results related to TBP constructs were consistent with Carpenter and Reimers (2005), Randall and Gibson (1991), and Connor and Abraham (2001).

Limitations

1. One of the instruments used in this study, the TIPI, contained several reverse-coded items. While reverse-coded items are designed to reduce response set bias, if reverse-coded items are not read carefully by respondents, the presence of any response set bias could impact the results.
2. One of the instruments used in this study, the TIPI had limited evidence of construct validity.
3. The final data-producing sample was self-selected, introducing a selection bias, which represents a threat to external validity.
4. This study was limited to community college students enrolled in a business course in South Florida at Broward Community College.

Implications for Theory and Practice

1. This study contributes to scholarly knowledge about personality dimensions, attitude, subjective norm, perceived behavioral control, and the behavioral intention to fraudulently report financial information.
2. The results from this study can assist with understanding the relationship between student personality dimensions and their influence on the behavioral intention to fraudulently report financial information.
3. Knowledge and understanding of personality dimensions can assist with career counseling in terms of providing guidance in the pursuit of a career choice.
4. Considering the current crises unfolding in the corporate world, this study can provide insight in the study of unethical behavior by community college business students and assist business faculty with their teaching strategies in the classroom.

Conclusions

The future business leaders of tomorrow are the students enrolled in the college classroom today. Much of the research focus relates to academic dishonesty, as it may lead to unethical behavior in future employment. Understanding the underlying constructs of intention, attitude, subjective norm, and perceived behavioral control may improve the awareness of the problem and provide a change in the intended behavior. Exposing students to ethical dilemmas in a classroom setting may channel an open, nonthreatening line of communication between students and faculty and provide an opportunity to discuss the options and consequences of a situation, ultimately influencing the outcome.

Ajzen's (1991) *theory of planned behavior* (TPB), an extension of Ajzen and Fishbein's (1980) *theory of reasoned action*, is comprised of three constructs: attitude, subjective norm, and the additional construct of perceived behavioral control. The theory proposes a framework for factors that influence the behavioral intent of individuals. Attitude, according to Ajzen (1991), is the favorable or unfavorable assessment of the stated behavior. The more favorable the attitude is toward the behavior, the more likely the behavior will be executed. Subjective norm consists of the beliefs one has, related to what significant others would feel if they were to act on the behavior in question (Randall & Gibson, 1991). Perceived behavioral control is the effort one would put forth in order to perform the intended behavior (Carpenter & Reimers, 2005). The above constructs would predict the behavioral intent to act upon the stated behavior. For the total sample in this study scores were highest for intention and attitude, suggesting a more favorable attitude and intent toward acting ethically. The female student response to the subjective

norm was greater than the male respondents, suggesting females tended to be more concerned with what significant others would think about acting unethically. These findings were consistent with prior research related to gender differences and the tolerance of unethical acts (Fisher, Fullerton, & Woodbine, 1999; Cagle & Baucus, 2006).

The student characteristics for the present sample were compared to the target population. In this study, the data producing sample of 485 community college business students consisted of 52.6% males and 47.4% females, which is consistent with the central campus and college-wide business student enrollment. Most students (83.9%) were in the 18 to 24 years old category with the average age of 22.17 years old, and 88.2% reported being single or never married. The findings suggest that the central campus has a higher composition of white business students that were not Hispanic or Latino compared to college-wide characteristics, therefore findings could not be generalized college-wide for business students.

Personality dimensions were measured using the *Ten-Item Personality Inventory* (*TIPI*) developed by Gosling et al. (2003) as a brief measure of the Big-Five personality dimensions--extraversion, agreeableness, conscientiousness, emotional stability, and openness to experiences. The instrument consists of ten items, containing a set of two words (two for each dimension) that are either descriptive or the opposite of the personality dimension. Five of the items were positively coded and the remaining five were reverse coded. The psychometric properties of the *TIPI* tend to be lower than the multi-item personality measures, although studies suggest the *TIPI* provides an adequate level of personality assessment (Rammstedt & John, 2006). In this study the individual

dimensions were more reliable for females than for males, which may have been the result of the females relating more to the terms used. Additionally, the agreeableness items appear to measure the emotional stability of respondents. The negative agreeableness item "critical, quarrelsome" loaded strongly across samples with the negative emotional stability item "anxious, easily upset." Conversely the positive agreeableness item "sympathetic, warm" tended to load strongly with the positive emotional stability item "calm, emotionally stable."

In this study, female students tended to fall into the conscientiousness personality dimension whereas male students had a greater tendency to fall into the openness to new experiences personality dimension. The least likely personality dimension for female students was extraversion, and males scored the lowest in the agreeableness personality dimension, which is consistent with Gosling et al. (2003). Results comparing student characteristics with personality dimensions in this study found that older students (36 and over) appeared to be more agreeable than younger students (18 to 24). Students who reported their race as American Indian were more agreeable and Black or African Americans were more conscientious. Students who were Business Management majors were more extraverted and Healthcare majors were more conscientious. Students who reported one to three years of college as their education level were more openness to experiences than those who considered themselves high school graduates. The extraversion personality dimension was more evident with those students who were currently employed and students who reported homemaker (mostly females) were more conscientious.

Results of this study found differences in attitude, subjective norm, perceived behavioral control and the intention to fraudulently report financial information according to business student characteristics – including age, gender, marital status, race, and employment status. This study found significant differences with respondents who were more ethical in the 31 to 35 age category compared to those respondents who were 25 to 30 in the subjective norm construct and 18 to 24 in the perceived behavioral control construct. Female students also had more ethical responses than males in two of the *TPB* constructs, intent and attitude. Based on the results, female students demonstrated a greater attitude toward not voiding the ticket sales in turn their intent was less likely that they would void the ticket sales. Although Carpenter and Reimers (2005) experimental analysis found no significant differences between gender, much of the literature has found females are less likely to accept unethical behavior (Fisher, Fullerton, & Woodbine, 1999; Cagle & Baucus, 2006).

Married students who tend to be older, had a significant effect on both subjective norm and perceived behavioral control constructs. Married students appear to be concerned about what others may think as well as the amount of control they may have toward performing the intended behavior. Hispanic or Latino students significantly differed in their intent to not act (more ethical) on voiding the ticket sales compared to students who were not Hispanic or Latino students.

The predictive order of importance of the personality dimensions in explaining the intention to fraudulently report financial information among community college business students was extraversion→ conscientiousness→ neuroticism (emotional stability) → agreeableness → openness to new experiences. Results of the hierarchical

(forward) method multiple regression depicted that only conscientiousness and agreeableness personality dimensions were explanatory variables in intent, while openness to experiences, extraversion, and emotional stability were included in the model but not significant.

In this study, results of the stepwise regression found only attitude and subjective norm were significant explanatory variables of the behavioral intention of fraudulently reporting financial information; perceived behavioral control was included in the model but was not significant. The results of this study were consistent with the findings by both Carpenter and Reimers (2005) and Randall and Gibson (1991). Results of this study indicated four significant explanatory variables of intent to fraudulent report financial information. Attitude towards the behavior was the most significant explanatory variable followed by subjective norm. Both significant explanatory variables and their order are consistent with the studies of Carpenter and Reimers (2005), Randall and Gibson (1991), and Connor and Abraham (2001). The close link between attitude and intention suggests that the prevention of future unethical behavior in the corporate world may be mitigated through the continuous exposure of students to business ethics throughout their academic career. Total sample scores for this study indicated the community college business students may have above average ethical attitudes and behavioral intentions, which may lead to ethical behavior in the future.

Recommendations for Future Study

The purpose of this study was to explore the factors influencing fraudulent financial reporting by community college business students.

1. This study was limited to one campus at a community college located in Broward County, FL. To improve the generalizeability of future findings, future studies could expand to include a national sample.
2. Replicate this study using a more extensive personality inventory survey instrument (such as Myers-Briggs).
3. Replication of this study after five years to determine changes in intention related to unethical behavior among community college business students.
4. Conduct the study to include the south, north and downtown campuses of Broward Community College to compare with the existing central campus study.
5. Future studies should examine the relationship between personality dimensions and choice of college major.

Chapter V discussed the results of analyses related to answering the research questions and testing the hypotheses that flowed from the research purposes of this study. Findings were interpreted in light of the review of literature and review of instrumentation. Implications for theory and practice as well as the conclusions drawn from interpretations were also discussed. The limitations of the study and recommendations for future study were addressed.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

Ajzen, I. (2005). Laws of human behavior: Symmetry, compatibility, and attitude-behavior correspondence. In A. Beauducel, B. Biehl, M. Bosniak, W. Conrad, G. Schönberger, & D. Wagener (Eds.), *Multivariate Research Strategies* (pp. 3-19). Aachen, Germany: Shaker Verlag.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior* (1st ed.). New Jersey: Prentice-Hall.

Allen, C. L. (2004). Business students' perception of the image of accounting. *Managerial Auditing Journal, 19*(2), 235-258.

Allmon, D. E., Page, D., & Roberts, R. (2000). Determinants of perceptions of cheating: ethical orientation, personality and demographics. *Journal of Business Ethics, 23*(4), 411-422.

American Institute of Certified Public Accountants (AICPA). (1997). *Statement of Accounting Standards No. 82: consideration of fraud in a financial statements audit.* AICPA, New York, NY.

Angell, L. R. (2006). The relationship of impulsiveness, personal efficacy, and academic motivation to college cheating. *College Student Journal, 40*(1), 118-131.

Arbona, C. (2000). Practice and research in career counseling and development –1999. *The Career Development Quarterly, 49*(2), 98-135.

Bailey, A. A. (2006). Retail employee theft: a theory of planned behavior perspective. *International Journal of Retail & Distribution Management, 30*(11), 802-816.

Bass, K., & Tomkiewicz, J. (2002). Belief in a just world and ethical judgments in business. *International Journal of Management, 19*(2), 171-177.

Beck, L., & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality, 25*, 285-301.

Borkowski, S. C., & Ugras, Y. J. (1992). The ethical attitudes of Students as a function of age, sex and experience. *Journal of Business Ethics, 11*(12), 961-979.

Bowling, A. (2002). *Research methods in health: Investigating health and health services*, (2nd ed.). Buckingham: Open University Press.

Brief, A. P., Dukerich, J. M., Brown, P. R., & Brett, J. F. (1996). What's wrong with the Treadway Commission report? Experimental analyses of the effects of personal values and codes of conduct on fraudulent financial reporting. *Journal of Business Ethics, 15*(2), 183-198.

Buchan, H. F. (2005). Ethical decision making in the public accounting profession: an extension of Ajzen's theory of planned behavior. *Journal of Business Ethics, 61*(2), 165-181.

Bureau of Labor Statistics, State and County QuickFacts (2007). Retrieved January 20, 2007 from: http://quickfacts.census.gov/qfd/states/12000.html

Bushnell, D. (2002, October 20). Forensic accountants shine light on corporate fraud. *Boston Globe,* p. 12.

Cagle, J. A. B., & Baucus, M. S. (2006). Case studies of ethics scandals: effects on ethical perceptions of finance students. *Journal of Business Ethics, 64*(3), 213-229.

Carpenter, D. D., Harding, T. S., Finelli, C. J., & Montgomery, S. M. (2006). Engineering students' perceptions of and attitudes towards cheating. *Journal of Engineering Educations*, *95*(3), 181-194.

Carpenter, T. D., & Reimers, J. L. (2005). Unethical and fraudulent financial reporting: applying the theory of planned behavior. *Journal of Business Ethics, 60*, 115-129.

Carroll, A. B. (2003). Business ethics in the current environment of fraud and corruption, will our moral compass fail? *Vital Speeches of the Day, 69*(17), 529.

Casabona, P. A., & Grego, M. J. (2003). SAS 99 – Consideration of fraud in a financial statement audit: a revision of Statement on Auditing Standards 82. *Review of Business,* Spring, 16-20.

Chan, C. Y. S., & Leung, P. (2006). The effects of accounting students' ethical reasoning and personal factors on their ethical sensitivity. *Managerial Auditing Journal, 21*(4), 436-457.

Chang, M. K. (1998). Predicting unethical behavior: a comparison of the theory of reasoned action and the theory of planned behavior. *Journal of Business Ethics, 17*(16), 1825-1834.

Chen, Y. J., & Tang, T. L. P. (2006). Attitude toward and propensity to engage in unethical behavior: measurement invariance across major among university students. *Journal of Business Ethics*, *69*(1), 77-93.

Cherington, J. O., & Cherington, D. J. (1992). A menu of moral issues: one week in the life of the Wall Street Journal. *Journal of Business Ethics, 11*(4), 255-265.

Chih-Chung, C., & Chang, S.U. (2005). Discussion on the behavior intention model of consumer online shopping. *Journal of Business and Management, 11,* 41-57.

Chiu, R. K., & Tang, T.L. (2003). Income, money ethic, pay, satisfaction, commitment, and unethical behavior: Is the love of money the root of evil for Hong Kong employees? *Journal of Business Ethics, 46*(1), 13-30.

Coleman, N., & Mahaffey, T. (2000). Business student ethics: selected predictors of attitudes toward cheating. *Teaching Business Ethics*, *4*(2), 121-136.

Collins, J. M., & Schmidt, F. L. (1993). Personality, integrity, and white collar crime: a construct validity study. *Personnel Psychology, 46*, 295-311.

Committee of Sponsoring Organizations of the Treadway Commission (1987, October). *Report of the National Commission on Fraudulent Reporting.* Retrieved February 8, 2006, from http://www.coso.org/Publications/NCFFR.pdf.

Committee of Sponsoring Organizations of the Treadway Commission (1999, March). *Fraudulent Financial Reporting: 1987-1997 an analysis of U.S. public companies*. Retrieved February 8, 2006, from http://www.coso.org/publications/FFR_1987_1997.PDF.

Conner, M. & Abraham, C. (2001). Conscientiousness and the theory of planned behavior: toward a more complete model of the antecedents of intentions and behavior. *Personality and Social Psychology Bulletin, 27*(11), 1547-1561.

Cordano, M., & Frieze, I. H. (2000). Pollution reduction preferences of U.S. environmental managers: applying Ajzen's theory of planned behavior. *Academy of Management Journal, 43*(4), 627-641.

Cox, R. A. K., & Weirich, T. R. (2002). The stock market reaction to fraudulent financial reporting. *Managerial Auditing Journal, 17*(7), 374-382.

Crumbley, D. L. (2003). What is forensic accounting? Retrieved February 14, 2004, from http://www.edwardspub.com/journals/JFA/students.html.

Daboub, A. J., Rasheed, A M., Priem, R. L., & Gray, D. A. (1995). Top management team characteristics and corporate illegal activity. *The Academy of Management Review, 20*(1), 148-170.

Dellaportas, S. (2006). Making a difference with a discrete course on accounting ethics. *Journal of Business Ethics, 65*(4), 391-404.

Digman, J. M., & Inouye, J. (1986). Further specification of the five robust factors of personality. *Journal of Personality and Social Psychology, 50*, 116-123.

Duizend, J., & McCann, G. K. (1998). Do collegiate business students show a propensity to engage in illegal business practices? *Journal of Business Ethics, 17*(3), 229-238.

Farber, D. B. (2005). Restoring trust after fraud: does corporate governance matter? *The Accounting Review, 80*(2), 539-561.

Farnsworth, J. R., & Kleiner, B. H. (2003). Trends in ethics education at U. S. colleges and universities. *Management Research News, 26*, (2-4), 130-140.

Feeley, D. (2006). Personality, environment, and the causes of white-collar crime. *Law & Psychology Review, 30*, 201-213.

Field, A. (2005). *Discovering Statistics using SPSS,* (2nd ed.). London, Thousand Oaks, New Delhi: Sage Publications, Inc.

Fisher, J., Fullerton, S., & Woodbine, G. (1999). Today's ethical perspective of tomorrow's business leaders. *Irish Marketing Review, 12*(2), 48-54.

Gable, M., & Dangello, F. (1994). Locus of control, Machiavellianism, and managerial job performance. *The Journal of Psychology, 128*(5), 599-608.

Garson, D. (2007). *Reliability analysis.* Retrieved January 20, 2008, from http://www2.chass.ncsu.edu/garson/PA765/reliab.htm

Gay, L. R., & Airasian, P. (2000). *Educational research: Competencies for analysis and application,* (6th Ed.). Upper Saddle River, NJ: Merrill.

Gebler, D. (2006). Creating an ethical culture. *Strategic Finance, 87*(11), 28-34.

Geriesh, L. (2003). Preventing rotten apples. *The CPA Journal, 73*(3), 28-32.

Glover, H. D., & Aono, J. Y. (1995). Changing the model for prevention and detection of fraud. *Managerial Auditing Journal, 10*(5), 3-9.

Gosling, S. D., Rentfrow, P. J., & Swann, William B. (2003). A very brief measure of the big-five personality domains. *Journal of Research in Personality, 37*, 504-528.

Goudy, G. (2003). Name an oxymoron: Business ethics. *Business Credit, 105*(3), 67-70.

Grace, Jr. H. S., & Haupert, J. E. (2003). Financial officers' code of ethics: Help or hindrance? *The CPA Journal, 73*(3), 65-66.

Gray, K. R., & Clark, G. W. (2002). Addressing corporate scandals through business education. *International Journal on World Peace, XIX*, (4), 43-62.

Green, S. B. (1991). How many subjects does it take to do regression analysis? *Multivariate Behavioral Research, 26*, 499-510.

Gregory, I. P., (1993). On the use of personality measures in personnel selection. *Canadian Psychology, 34*(2), 208-212.

Gurley, K., Wood, P., & Nijhawan, I. (2007). The effect of punishment on ethical behavior when personal gain is involved. *Journal of Legal, Ethical and Regulatory Issues, 10*(1), 91-104.

Higgs-Kleyn, N., & Kapelianis, D. (1999). The role of professional codes in regulating ethical conduct. *Journal of Business Ethics, 19*(4), 363-374.

Huck, S. W., Cormier, W. H., & Bounds, W. G. Jr. (1974). *Reading statistics and research.* New York: Harper & Row.

Hume, E. C., & Smith, A. (2006). University student ethics: the differential explanatory effect of locus of control. *Academy of Educational Leadership Journal, 10*(3), 49-58.

Jennings, M. M. (2003). The critical role of ethics. *The Internal Auditor, 60*(6), 46-51.

Karassavidou, E., & Glaveli, N. (2006). Towards the ethical or the unethical side? *International Journal of Educational Management, 20*(5), 348-364.

Kelly, W. E., & Johnson, J. L. (2005). Time use efficiency and the five-factor model of personality. *Education, 125*(3), 511-515.

Klein, H. A., Levenburg, N. M., McKendall, M., & Mothersell, W. (2007). Cheating during the college years: how do business school students compare? *Journal of Business Ethics, 72*(2), 197-206.

Lopez, Y. P., Rechner, P. L., & Olson-Buchanan, J. B. (2005). Shaping ethical perceptions: an empirical assessment of the influence of business education, culture, and demographic factors. *Journal of Business Ethics, 60*(4), 341-358.

Malloy, D. C., & Agarwal, J. (2003). Factors influencing ethical climate in a nonprofit organisation: an empirical investigation. *International Journal of Nonprofit and Voluntary Sector Marketing, 8*(3), 224-250.

McCortney, A. L., & Engels, D. W. (2003). Revisiting the work ethic in America. *The Career Development Quarterly, 52*(2), 132-140.

Miller, D., & Salkind, N. (2002). *Handbook of research design and social measurement,* (6th ed.). Thousand Oaks, CA: Sage Publications, Inc.

Mundfrom, D. J., Shaw, D. G., & Ke, T. L. (2005). Minimum sample size recommendations for conducting factor analyses. *International Journal of Testing, 5*(2), 159-168.

Mustaine, E. E., & Tewksbury, R. (2002). Workplace theft: an analysis of student-employee offenders and job attributes. *American Journal of Criminal Justice, 27*(1), 111-127.

Njite, D., & Parsa, H. G. (2005). Structural equation modeling of factors that influence consumer internet purchase intentions of services. *Journal of Services Research, 5*(1), 43-59.

Okleshen, M., & Hoyt, R. (1996). A cross cultural comparison of ethical perspectives and decision approaches of business students: United States of America versus New Zealand. *Journal of Business Ethics, 15*(5), 537-549.

Passas, N. (2001). False accounts: Why do company statements often offer a true and fair view of virtual reality? *European Journal on Criminal Policy and Research, 9*, 117-135.

Peppas, S. C., & Diskin, B. A. (2001). College courses in ethics: do they really make a difference? *The International Journal of Educational Management, 15*(6/7), 347-353.

Pitre, P.E., Johnson, T. E., & Pitre, C.C. (2006). Understanding predisposition in college choice: toward an integrated model of college choice and theory of reasoned action. *College and University, 81*(2), 35-42.

Premeaux, S. R., (2005). Undergraduate student perceptions regarding cheating: tier 1 versus tier 2 AACSB accredited business schools. *Journal of Business Ethics, 62*(4), 407-418.

Rammstedt, B. (2007). The 10-item big five inventory. *European Journal of Psychological Assessment, 23*(3), 193-201.

Rammstedt, B. & John, O. P. (2006). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality, 41*, 203-212.

Randall, D., & Gibson, A. M. (1991). Ethical decision making in the medical profession: an application of the theory of planned behavior. *Journal of Business Ethics, 10*(2), 111-122.

Rhodes, R. E., & Courneya, K. S. (2003). Relationships between personality, an extended theory of planned behaviour model and exercise behaviour. *British Journal of Health Psychology, 8*, 19-36.

Riahi-Belkaoui, A., & Picur, R. D. (2000). Understanding fraud in the accounting environment. *Managerial Finance, 26*(11), 33-41.

Ridgell, S. D., & Lounsbury, J. W. (2004). Predicting academic success: general intelligence, "Big Five" personality traits, and work drive. *College Student Journal, 38*(4), 607-618.

Roig, M., & Ballew, C. (1994). Attitudes toward cheating of self and others by students and professors. *The Psychological Record, 44*(1), 3-10.

Sankaran, S., & Bui, T. (2003). Ethical attitudes among accounting majors: An empirical study. *Journal of American Academy of Business, Cambridge 3*(1/2), 71-77.

Schwartz, M. S., Dunfee, T. W., & Kline, M. J. (2005). Tone at the top: an ethics code for directors? *Journal of Business Ethics, 58*(1-3), 79-100.

Shafer, W. E. (2002). Effects of materiality, risk, and ethical perceptions on fraudulent reporting by financial executives. *Journal of Business Ethics, 38*(3), 243-262.

Shaftel, J., & Shaftel, T. L. (2005). The influence of effective teaching in accounting on students' attitudes, behavior, and performance. *Issues in Accounting Education, 20*(3), 231-246.

Shannon, C. S. (2006). Parents' messages about the role of extracurricular and unstructured leisure activities: adolescents' perceptions. *Journal of Leisure Research, 38*(3), 398-420.

Shapiro, S. P. (1990). Collaring the crime, not the criminal: reconsidering the concept of white-collar crime. *American Sociological Review, 55*, 346-365.

Smyth, M. L., & Davis, J. R. (2003). An examination of student cheating in the two-year college. *Community College Review, 31*(1), 17-32.

Stevens, J. M., Steensma, H. K., Harrison, D. A., & Cochran, P. L. (2005). Symbolic or substantive document? The influence of ethics codes on financial executives' decisions. *Strategic Management Journal, 26,* 181-195.

Student Information System, Program Enrollment, 2008 {Data File}. Davie, FL: Broward College.

Teng, C. C. (2008). The effects of personality traits and attitudes on student uptake in hospitality employment. *International Journal of Hospitality Management, 27*(1), 76-86.

Terpstra, D. E., Rozell, E. J., & Robinson, R. K. (1993). The influence of personality and demographic variables on ethical decisions related to insider trading. *The Journal of Psychology, 127*(4), 375-389.

Trochim, W. M. K. (2001). *The research methods knowledge base.* Cincinnati, OH: Atomic Dog.

Turpen, R. A., & Messina, F. M. (1997). Fraud prevention and the management accountant. *Management Accounting, 78*(8), 34-37.

Uddin, N., & Gillett, P. R. (2002). The effects of moral reasoning and self-monitoring on CFO intentions to report fraudulently on financial statements. *Journal of Business Ethics, 40*(1), 15-32.

Vanasco, R. R. (1998). Fraud auditing. *Managerial Auditing Journal, 13*(1), 4-71.

VanSandt, C. V., & Neck, C. P. (2003). Bridging ethics and self leadership: overcoming ethical discrepancies between employee and organizational standards. *Journal of Business Ethics, 43*(4), 363-387.

Warren, B. W., & Rosenthal, D. (2006). Teaching business ethics--is it a lost cause? *International Journal of Management, 23*(3), 679-698.

Watson, D. M. (2003). Cultural dynamics of corporate fraud. *Cross Cultural Management. 10*(1), 40-54.

Webber, J., & Gillespie, J. (1998). Differences in ethical beliefs, intentions, and behaviors. *Business and Society. 37*(4), 447-467.

Weinberg, J. A. (2003). Accounting for corporate behavior. *Federal Reserve Bank of Richmond –Economic Quarterly, 89*(3), 1-20.

Wells, J. T. (2001). Follow fraud to the likely perp. *Journal of Accountancy, 191*(3), 91-94.

West, T., Ravenscroft, S. P., & Shrader, C. B. (2004). Cheating and moral judgement in the college classroom: a natural experiment. *Journal of Business Ethics, 54*(2), 173-183.

Whitley, B.E., Nelson, A. B., & Jones, C. J. (1999). Gender differences in cheating attitudes and classroom cheating behavior: a meta-analysis. *Sex Roles, 41*(9/10), 657-680.

Wilson, R. A., La See, A., & Choo, K. (2004). An accountant's defining moments: questionable corporate practices before & after the Sarbanes-Oxley Act of 2002. *Journal of Economic Crime, 2*(2), 1-20.

BIBLIOGRAPHY

Adelman, H. (1991). Morality and ethics in organizational administration. *Journal of Business Ethics, 10*(9), 665-678.

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC.

Auditing Standards Board (ASB). (2002). *Exposure draft: proposed statement on auditing standards, consideration of fraud in a financial statement audit.* New York: AICPA. Issued February 28, 2002.

Breukelen, W.V., Van Der Vlist, R., & Steensma, H. (2004). Voluntary employee turnover: combining variables from the 'traditional' turnover literature with the theory of planned behavior. *Journal of Organizational Behavior, 25*, 893-914.

Buchan, H. F. (2004). Public accountants' ethical intentions: extending the theory of planned behavior. (Doctoral dissertation, Binghamton University State University of New York). *Dissertation Abstracts International.* (UMI No. 3142761)

Carr, A., & Downs, A. (2005). Enron: taking our cue from the world of object relations. *Journal of Critical Postmodern Organization Science, 3*(2), 1-15.

Cohen, J. R., Pant, L. W., & Sharp, D. J. (1993). Culture-based ethical conflicts confronting multinational accounting firms. *Accounting Horizons, 7*(3), 1-13.

Collins, D. (2000). The quest to improve the human condition: The first 1,500 articles published in the Journal of Business Ethics. *Journal of Business Ethics, 26*(1), 1-73.

Dahlin, L.A. (2000). An empirical study of ethical v. unethical decision-making by certified management accountants. (Doctoral dissertation, Nova Southeastern University). *Dissertation Abstracts International.* (UMI No. 9983701)

Eynon, G., Thorley-Hill, N., & Stevens, K. T. (1997). Factors that influence the moral reasoning abilities of accountants: implications for universities and the profession. *Journal of Business Ethics, 16*(12/13), 1297-1309.

Giacalone, R. A., & Jurkiewicz, C. L. (2003). Right from wrong: the influence of spirituality on perceptions of unethical business activities. *Journal of Business Ethics, 46*(1), 85-97.

Harshman, E., Islam, M., Nelson, C. A., & Ordower, H. M. (2002). Micro and macro economic effects: Secreting assets to evade non-business (private) obligations and responsibilities. *Journal of Financial Crime, 10*(2), 166-183.

Keenan, J. P. (2000). Blowing the whistle on less serious forms of fraud: a study of executives and managers. *Employee Responsibilities and Rights Journal, 12*(4), 199-217.

Palanisamy, R. (2001). Empirically testing the relationships between user involvement, information waste, and MIS success. *Journal of Services Research, 1*(1), 70-103.

Peterson, B. K. (2003). Fraud education for accounting students. *Journal of Education for Business, 78*(5), 263-267.

Reinstein, A., & Weirich, T. R. (2002). Accounting issues at Enron. *The CPA Journal 72*(12), 20-25.

Rodgers, W., & Gago, S. (2004). Stakeholder influence on corporate strategies over time. *Journal of Business Ethics, 52*(4), 349-363.

Urban, B. (2006). Entrepreneurship in the rainbow nation: effect of cultural values and ESE on intentions. *Journal of Developmental Entrepreneurship, 11*(3), 171-186.

Walle, G. V. (2002). The collar makes the difference – masculine criminology and its refusal to recognize markets as criminogenic. *Crime, Law, and Social Change, 37*, 277-291.

Appendix A

Survey

Part I: Student Characteristics

Instructions: Please choose the category for each question that best describes you by filling in the blank or checking **one** response.

1. **Age in years:** _____
2. **Gender:** ☐ Male ☐ Female
3. **Marital Status:** ☐ Married ☐ Single, Never Married
   ☐ Divorced or Separated ☐ Widow or Widower
4. **Race:** Select the primary race you consider yourself to be:
   ☐ White ☐ Black or African American ☐ American Indian or Alaska Native
   ☐ Asian ☐ Native Hawaiian or Pacific Islander
5. **Ethnicity:** ☐ Not Hispanic or Latino ☐ Hispanic or Latino
6. **Declared Major:**
   ☐ Business Administration
   ☐ Business Management
   ☐ Accounting
   ☐ Computer Science
   ☐ Health Sciences (including Healthcare Administration)
   ☐ Economics
   ☐ Other
7. **Your Highest Education Level (Check one):**
   ☐ Four-year College graduate (BA, BS, BM, and the like)
   ☐ One to three years college (also business schools)
   ☐ High school graduate
8. **Employment Status:**
   ☐ Currently employed ☐ Retired ☐ Seeking employment
   ☐ Disabled or not working ☐ Homemaker
9. **Your Occupational Level (Check one):**
   ☐ Higher executives of large concerns, proprietors, and major professionals
   ☐ Business managers, proprietors of medium-sized and lesser
   ☐ Administrative personnel, owners of small businesses, and minor professionals
   ☐ Clerical and sales workers, technicians, and owners of little businesses
   ☐ Skilled manual employees
   ☐ Machine operators and semiskilled employees
   ☐ Unskilled employees
   ☐ Other

Part II: Ten-Item Personality Inventory (TIPI) Questionnaire

Instructions: Please read the personality traits (that may or may not apply to you) listed below and check the box next to each statement to indicate the extent to which you agree or disagree with the statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

I see myself as:

		Strongly Disagree	Moderately Disagree	Disagree a little	Neither agree or disagree	Agree a little	Moderately Agree	Strongly Agree
1.	Extraverted, enthusiastic.	☐	☐	☐	☐	☐	☐	☐
2.	Critical, quarrelsome.	☐	☐	☐	☐	☐	☐	☐
3.	Dependable, self-disciplined.	☐	☐	☐	☐	☐	☐	☐
4.	Anxious, easily upset.	☐	☐	☐	☐	☐	☐	☐
5.	Open to new experiences, complex.	☐	☐	☐	☐	☐	☐	☐
6.	Reserved, quiet.	☐	☐	☐	☐	☐	☐	☐
7.	Sympathetic, warm.	☐	☐	☐	☐	☐	☐	☐
8.	Disorganized, careless.	☐	☐	☐	☐	☐	☐	☐
9.	Calm, emotionally stable.	☐	☐	☐	☐	☐	☐	☐
10.	Conventional, uncreative.	☐	☐	☐	☐	☐	☐	☐

Note. From the *Ten-Item Personality Inventory (TIPI)*, by Gosling, Rentfrow, and Swan, 2003, Copyright 2003. Reprinted with permission of copyright holder.

Part III: Survey Instrument

Instructions: Please read the scenario, and select, by marking an **"X"** in the middle of the space on the scale that best describes your belief in the described action. Each question in following section refers to the reporting of financial information in the business arena.

SCENARIO

You have spent most of the summer working at a movie theater. You have just been promoted to night supervisor. It is your job each night to close each register, remove the cash from the register, and prepare the cash for deposit into the bank. The movie theater manager offers a bonus to any supervisor whose registers always balance--that means supervisors can get a bonus if their ticket sales always match the cash in the register drawer.

One night, one of the registers is short $105. You cannot figure out where the missing money is located. It is possible that a mistake was made the previous night by a different supervisor and the money is not really missing. However, to find out, you would need to let the movie theater manager know that you are missing money. On the other hand, you could say nothing and void some of the night's ticket sales so that the sales and money match.

Based on the above information, please answer the following questions.

Following are questions related to the above scenario.

1. I intend to void the ticket sales:

Extremely Probable — Extremely Improbable

_____ : _____ : _____ : _____ : _____ : _____ : _____

1 2 3 4 5 6 7

2. I plan to void the ticket sales:

Extremely Probable — Extremely Improbable

_____ : _____ : _____ : _____ : _____ : _____ : _____

1 2 3 4 5 6 7

3. I expect to void the ticket sales:

Extremely Probable — Extremely Improbable

_____ : _____ : _____ : _____ : _____ : _____ : _____

1 2 3 4 5 6 7

4. Do you feel like voiding the ticket sales would be?

Good — Bad

_____ : _____ : _____ : _____ : _____ : _____ : _____

1 2 3 4 5 6 7

Wise — Foolish

_____ : _____ : _____ : _____ : _____ : _____ : _____

1 2 3 4 5 6 7

Beneficial — Harmful

_____ : _____ : _____ : _____ : _____ : _____ : _____

1 2 3 4 5 6 7

5. Most people who are important to me would approve of me voiding the ticket sales.

Extremely Probable — Extremely Improbable

_____ : _____ : _____ : _____ : _____ : _____ : _____

1 2 3 4 5 6 7

6. Most people who are important to me will be disappointed in me if I voided the ticket sales.

Unlikely — Likely

_____ : _____ : _____ : _____ : _____ : _____ : _____

1 2 3 4 5 6 7

7. No one who is important to me thinks it would be OK to void the ticket sales.

Disagree — Agree

_____ : _____ : _____ : _____ : _____ : _____ : _____

1 2 3 4 5 6 7

8. For me to void the ticket sales is easy.

Strongly Agree — Strongly Disagree

1	2	3	4	5	6	7
_____	_____	_____	_____	_____	_____	_____

9. If I want to I could easily void the ticket sales.

Strongly Agree — Strongly Disagree

1	2	3	4	5	6	7
_____	_____	_____	_____	_____	_____	_____

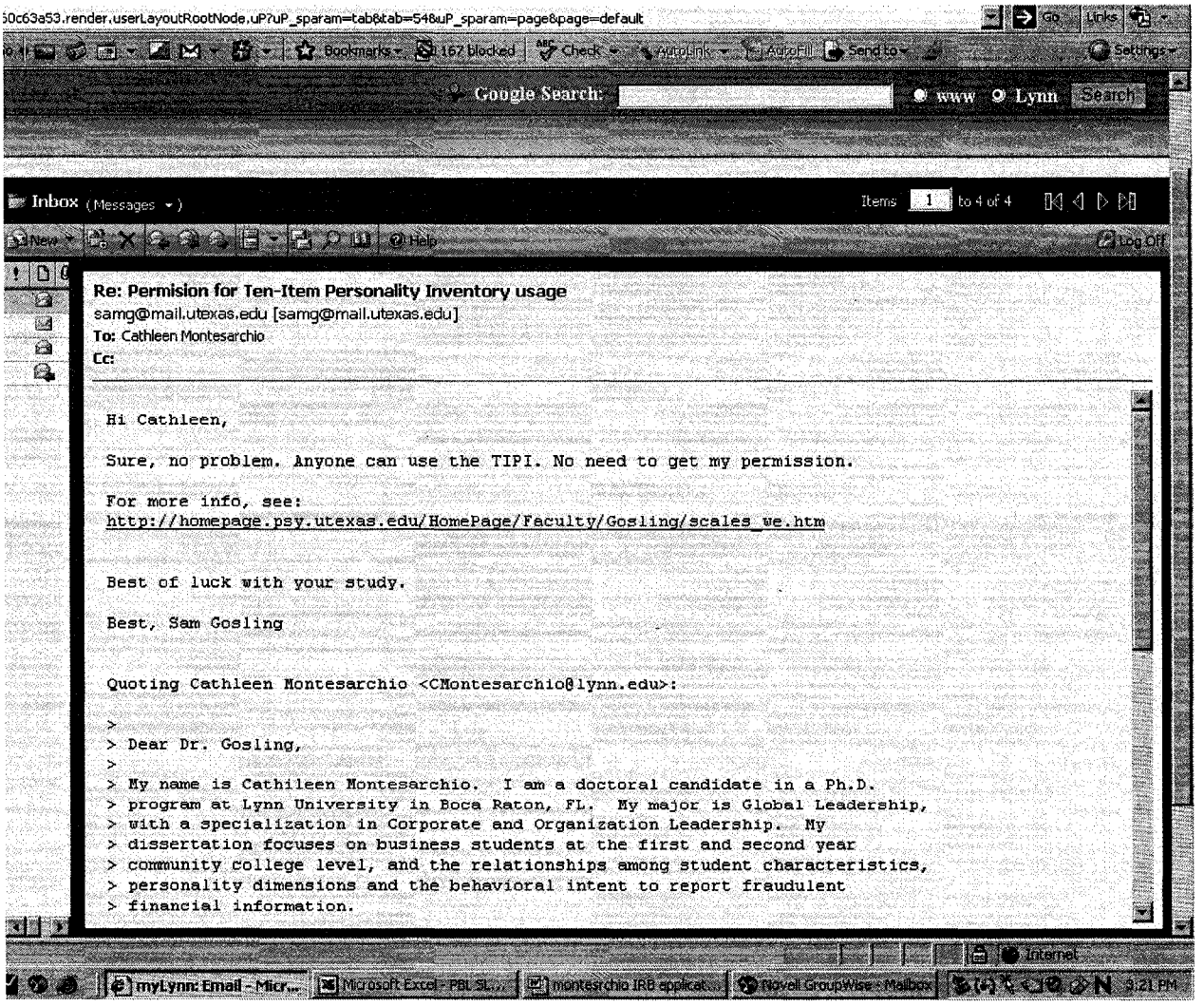
10. I have complete control of making the decision to void the ticket sales.

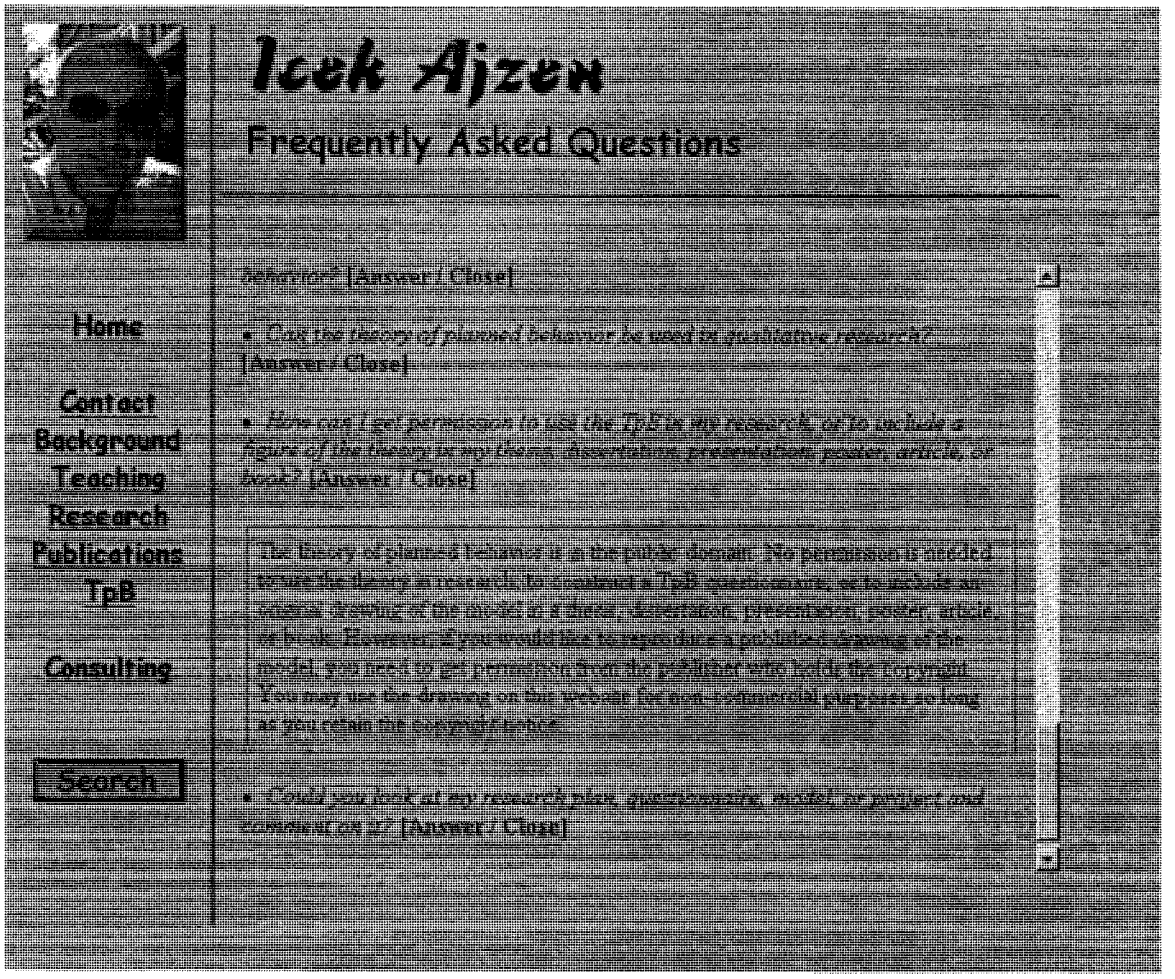
Strongly Agree — Strongly Disagree

1	2	3	4	5	6	7
_____	_____	_____	_____	_____	_____	_____

Appendix B

Permission to Use Instrumentation


Inbox (Messages)
Re: Permision for Ten-Item Personality Inventory usage
samg@mail.utexas.edu [samg@mail.utexas.edu]
To: Cathleen Montesarchio
Cc:
Hi Cathleen,
Sure, no problem. Anyone can use the TIPI. No need to get my permission.
For more info, see:
http://homepage.psy.utexas.edu/HomePage/Faculty/Gosling/scales_we.htm
Best of luck with your study.
Best, Sam Gosling
Quoting Cathleen Montesarchio <CMontesarchio@lynn.edu>:
> Dear Dr. Gosling,
> My name is Cathileen Montesarchio. I am a doctoral candidate in a Ph.D.
> program at Lynn University in Boca Raton, FL. My major is Global Leadership,
> with a specialization in Corporate and Organization Leadership. My
> dissertation focuses on business students at the first and second year
> community college level, and the relationships among student characteristics,
> personality dimensions and the behavioral intent to report fraudulent
> financial information.


Icek Ajzen
Frequently Asked Questions
behavior? [Answer / Close]
Home
Contact
Background
Teaching
Research
Publications
TpB
Consulting
Search
• Can the theory of planned behavior be used in qualitative research? [Answer / Close]
• How can I get permission to use the TpB in my research, or to include a figure of the theory in my thesis, dissertation, presentation, poster, article, or book? [Answer / Close]
The theory of planned behavior is in the public domain. No permission is needed to use the theory in research, to construct a TpB questionnaire, or to publish an original drawing of the model in a thesis, dissertation, presentation, poster, article, or book. However, if you would like to reproduce a published drawing of the model, you need to get permission from the publisher who holds the copyright. You may use the drawing on this website for non-commercial purposes as long as you retain the copyright notice.
• Could you look at my research plan, questionnaire, model, or project and comment on it? [Answer / Close]

Appendix C

Site Permission

BROWARD COMMUNITY COLLEGE

We keep you thinking.

Office of the Vice President for Academic Affairs • Willis Holcombe Center
954-201-7426 • Fax 954-201-7576

WILLIS HOLCOMBE CENTER
111 East Las Olas Blvd.
Fort Lauderdale, FL 33301

INSTITUTE FOR ECONOMIC DEVELOPMENT
111 East Las Olas Blvd.
Fort Lauderdale, FL 33301

A. HUGH ADAMS CENTRAL CAMPUS
3501 S.W. Davie Road
Davie, FL 33314

NORTH CAMPUS
1000 Coconut Creek Blvd.
Coconut Creek, FL 33066

JUDSON A. SAMUELS SOUTH CAMPUS
7200 Hollywood/Pines Blvd.
Pembroke Pines, FL 33024

PINES CENTER
16957 Sheridan St.
Pembroke Pines, FL 33331

WESTON CENTER
4205 Bonaventure Blvd.
Weston, FL 33332

MIRAMAR CENTER
7451 Riviera Blvd.
Miramar, FL 33023

TIGERTAIL LAKE CENTER
580 Gulfstream Way
Dania Beach, FL 33004

February 5, 2008

Cathy Montesarchio
Assistant Professor Business/Office Careers
Broward Community College
3501 SW Davie Road
Davie, Florida 33314

Dear Ms. Montesarchio:

Your request to conduct research at Broward Community College for your doctoral dissertation on "Fraudulent Financial Reporting by Community College Business Students: Applying the Theory of Planned Behavior" from Lynn University has been granted. The conditions of your research are:

- participation is voluntary
- the student's identity will be kept anonymous when you report your results
- access to students in a classroom will not be permitted without faculty permission
- this research cannot have a negative impact on the student

I wish you luck with your research and if I can be of any further assistance please do not hesitate to contact me.

Sincerely,

Kenneth S. Ross
Vice President for Academic Affairs

Appendix D

Authorization for Informed Consent

Lynn University
THIS DOCUMENT SHALL ONLY BE USED TO PROVIDE AUTHORIZATION FOR VOLUNTARY CONSENT

PROJECT TITLE:
Factors Influencing Fraudulent Financial Reporting by Community College Business Students: Applying the Theory of Planned Behavior
Project IRB Number: 2809-011 Lynn University 3601 N. Military Trail Boca Raton, Florida 33431

I Cathileen Montesarchio, am a doctoral student at Lynn University. I am studying Global Leadership, with a specialization in Corporate and Organizational Management. One of my degree requirements is to conduct a research study.

DIRECTIONS FOR THE PARTICIPANT:

You are being asked to participate in my research study. Please read this carefully. This form provides you with information about the study. The Principal Investigator (Cathileen Montesarchio) will answer all of your questions. Ask questions about anything you don't understand before deciding whether or not to participate. You are free to ask questions at any time before, during, or after your participation in this study. Your participation is entirely voluntary and you can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You acknowledge that you are at least 18 years of age, and that you do not have medical problems or language or educational barriers that precludes understanding of explanations contained in this authorization for voluntary consent.

PURPOSE OF THIS RESEARCH STUDY: The study is about personality, attitude, subjective norm, and perceived behavioral control, and intentions of community college business students. There will be approximately 750 first and second year students from your institution invited to participate in this study.

PROCEDURES:
You will be asked to complete a three-part survey. Part I will ask you to answer some demographic characteristic questions. Part II will ask questions pertaining to your personality, Part III will ask you to read a scenario and answer questions related to your intentions related to the scenario. You will be asked to complete the survey. You should complete your survey independently, without comparing answers. The four-part survey should take about 20-30 minutes to complete. Completed surveys should be dropped into the slit box provided by the researcher.

POSSIBLE RISKS OR DISCOMFORT: This study involves minimal risk. You may find that some of the questions are sensitive in nature. In addition, participation in this study requires a minimal amount of your time and effort.

POSSIBLE BENEFITS: There may be no direct benefit to you in participating in this research, but knowledge may be gained which may help add to what is known about students, personality, and behavioral intentions.

FINANCIAL CONSIDERATIONS: There is no financial compensation for your participation in this research. There are no costs to you as a result of your participation in this study.

ANONYMITY: Surveys will be anonymous. You will not be identified and data will be reported as "group" responses. Participation in this survey is voluntary and return of the completed survey will constitute your informed consent to participate.

The results of this study may be published in a dissertation, scientific journals or presented at professional meetings. In addition, your individual privacy will be maintained in all publications or presentations resulting from this study.

All the data gathered during this study, which were previously described, will be kept strictly confidential by the researcher. Data will be stored in locked files and on a password protected computer and destroyed after five years following the completion of the research study. All information will be held in strict confidence and will not be disclosed unless required by law or regulation.

RIGHT TO WITHDRAW: You are free to choose whether or not to participate in this study. There will be no penalty or loss of benefits to which you are otherwise entitled if you choose not to participate.

CONTACTS FOR QUESTIONS/ACCESS TO CONSENT FORM: Any further questions you have about this study or your participation in it, either now or any time in the future, will be answered by Cathileen Montesarchio (Principal Investigator) who may be reached at (954) 201-6710 and Dr. Ralph Norcio, my faculty advisor who may be reached at (561) 237- 7010. For any questions regarding your rights as a research subject, you may call Dr. Farideh Farazmand, Chair of the Lynn University Institutional Review Board for the Protection of Human Subjects, at (561) 237-7847. If any problems arise as a result of your participation in this study, please call the Principal Investigator (Cathileen Montesarchio) and the faculty advisor (Dr. Ralph Norcio) immediately.

Please retain this consent form for your records.

INVESTIGATOR'S AFFIDAVIT: I hereby certify that a written explanation of the nature of the above project has been provided to the person participating in this project. A copy of the written documentation provided is attached hereto. By the person's consent to voluntary participate in this study, the person has represented that he/she is at least 18 years of age, and that he/she does not have a medical problem or language or educational barrier that precludes his/her understanding of my explanation. Therefore, I hereby certify that to the best of my knowledge the person participating in this project understands clearly the nature, demands, benefits, and risks involved in his/her participation.

Signature of Investigator

Date of IRB Approval: 04/07/08

LYNN UNIVERSITY
Valid
one year
from date of
approval

Institutional Review Board for the Protection of Human Subjects
Lynn University
3601 N. Military Trail Boca Raton, Florida 33431

Appendix E

Lynn University IRB Approval Letter

Principal Investigator: Cathleen Montesarchio
Project Title: Factors Influencing Fraudulent Financial Reporting by Community College Business Students: Applying the Theory of Planned Behavior

IRB Project Number: 2008-011 Request for Expedited Review of Application and Research Protocol for a New Project

IRB Action by the IRB Chair or Another Member or Members Designed by the Chair:

Expedited Review of Application and Research Protocol and Request for Expedited Review (FORM 3):
Approved __X__; Approved w/provision(s) ____

COMMENTS
Consent Required: No ____Yes __X__ Not Applicable _____ Written __X__ Signed ____

Consent forms must bear the research protocol expiration date of 04/07/09.
Application to Continue/Renew is due:
(1) For an Expedited IRB Review, one month prior to the due date for renewal __X__
(2) Other:

Name of IRB Chair: Farideh Farazmand

Signature of IRB Chair _____ Date: 04/08/08

Cc: Dr. Norcio

Institutional Review Board for the Protection of Human Subjects
Lynn University
3601 N. Military Trail Boca Raton, FL, 33431

CATHILEEN MONTESARCHIO

910 Southwest 69th Terrace • Plantation, FL 33317
(954) 584-5271
cmontesa@broward.edu

Professional Summary

- 9 years experience teaching college accounting courses
- 17 years business experience in various aspects of accounting
- Licensed CPA in Georgia
- Strong presentation and teaching skills
- Experienced in web-based teaching (WebCT and Blackboard)

Education

Lynn University, Boca Raton, FL

Ph.D. in Global Leadership - Corporate and Organizational Management 2009

Dissertation topic: *Factors Influencing the Unethical Behavioral Intention of College Business Students: Theory of Planned Behavior*

Nova Southeastern University, Davie, FL

Master of Accounting 1999

Bachelor of Science, Accounting 1996

Certification

- Certified Public Accountant, licensed in Georgia

Professional Experience

Teaching Experience

BROWARD COMMUNITY COLLEGE, Davie, FL
Assistant Professor of Accounting, August 1999 to Present
Instructor for Principles of Financial Accounting, Managerial Accounting, and Intermediate Accounting.

NOVA SOUTHEASTERN UNIVERSITY, Fort Lauderdale, FL
Adjunct Professor 2002 to Present
Instructor for graduate courses: Cost Management and Intermediate Accounting.
Undergraduate courses: Principles of Financial Accounting, Managerial Accounting, and Principles of Management.

FLORIDA ATLANTIC UNIVERSITY, Davie, FL
Adjunct Professor, August 2000 to 2002
Instructor for undergraduate Cost Management

Student Services

- Faculty Advisor, Phi Beta Lambda Business Student Organization 2002 to present

Business Experience

LUCANUS DEVELOPMENTAL CENTER, Hollywood, FL

Controller, February 1994 to Present

Establish and implement accounting and control procedures for adult day training program for mentally challenged adults. Accountable for the preparation of all budgets (monthly and annually), monthly compilations and analytical reviews for the five programs served. Work directly with the Executive Director and the Board of Directors of the agency. Responsible for all aspects (financial and operational) of the federal (Medicaid) and state (Agency for Persons with Disabilities) regulated programs. Prepare annually for federally mandated independent audit. Manage the accounting department.

KAUFMAN, ROSSIN & CO., CPA's, Coconut Grove, FL
Auditor, December 1997 to January 2000
Assisted with the audits of diverse corporate and partnership entities including manufacturing, wholesale, and retail. Additional duties in the accounting service area including reviews of financial statements and special engagements. Preparation and knowledge of corporate and individual tax returns.

MILLWARD & COMPANY, CPA's, Fort Lauderdale, FL
Auditor, November 1996 to December 1997
Assisted with the audits of corporate entities comprised of manufacturing, wholesale, retail, time shares, federally assisted housing projects, homeowners' and condominium associations. Responsibilities included evaluation of accounting procedures and internal controls, preparation of financial statements and disclosures.

PEDIATRIC ASSOCIATES, P.A., Hollywood, FL
Accounting Supervisor, February 1989 to February 1994

Accountable for the day-to-day operations of all phases of accounts payable and receivable for a multi-million dollar pediatric practice. Prepared monthly and annual financial compilations.

Professional Organizations

- American Institute of Certified Public Accountants
- Florida Institute of Certified Public Accountants
- American Accounting Association
- Association of Certified Fraud Examiners