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Undergraduate Education Background and Ethical Decision Making

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Dissertation

Undergraduate Education Background and Ethical Decision Making

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Abstract

This research study sought to identify differences in ethical decision making between individuals with a liberal arts educational background and a business educational background. The study surveyed undergraduate degree students from liberal arts and business school programs. The Defining Issues Test, Version 2 (DIT-2) was given to respondents to identify differences of the DIT-2 results among the study participants consisting of undergraduate seniors. The research results yielded significantly higher mean postconventional moral judgment scores by the liberal arts majors compared to the business majors.

Keywords: Cognitive moral development, defining issues test, DIT, DIT-2, ethical decision making, liberal arts, moral development, moral judgment

CHAPTER 1 – INTRODUCTION

“Growth in moral judgment appears to occur through mechanisms that fit nicely in a college or university community, at least when there is a liberal arts focus” (McNeel, 1994, p. 28)

In an increasingly global business environment, organizations are requiring their employees to act in a greater capacity as global agents within the business community (Useem, 1995). Flexibility is a highly desirable characteristic in the fast-paced contemporary workplace (DiConti, 2004; Knotts, 2002; Leonard, 2000). Positive characteristics of communication skills, problem solving, and flexibility are frequently associated with individuals with a liberal arts educational background. Changing perceptions of the nature and performance characteristics of a liberal arts educational background are offering increased opportunities for individuals in a contemporary business environment. The characteristics that are associated with liberal arts majors in higher education have also been positively associated with moral judgment (Nucci & Pascarella, 1987; Terenzini & Pascarella, 1991).

Business organizations and academia are also showing a heightened interest in ethical behavior in the workplace (Berrone, Surroca, & Tribo, 2007; Elm & Weber, 1994; Tirri & Nokelainen, 2012; Trevino, 1992). Unethical conduct by business professionals has led to a number of notable and highly publicized organizational failures (Berrone, et al., 2007; McLean & Elkind, 2004; Patra, 2010). Well-publicized scandals surrounding businesses and other organizations in the late 20th and early 21st centuries have

contributed to a renewed interest in ethical behavior in organizations (Armstrong, Ketz, & Owsen, 2003; Baglione, 2008; Berrone, et al., 2007; Detert, Treviño, & Sweitzer, 2008). Corporate scandals such as those associated with Enron, WorldCom, and Arthur Anderson have contributed to a heightened awareness of the potentially negative consequences of ethical failures within an organization. Such failures of ethical conduct and decision making can have a far reaching impact on associated stakeholders.

Ethical behavior has been positively associated with organizational performance (Akdemir, Erdem, & Polat, 2010; AMA, 2007; IGD, 2010). Studies have suggested that ethical organizational standards and individual organizational member conduct have a positive association with increased organizational performance, when compared to organizations without such associated ethical behavior characteristics. As liberal arts majors are incorporated into organizations, the impact they may have on ethical organizational culture and decision making can be of increasing importance to both business professionals and researchers. If liberal arts majors can be shown to have greater or lesser levels of moral judgment, or cognitive moral development (CMD), compared to other educational backgrounds, then such findings could offer potentially valuable insights into both academic research and business organizations.

Purpose of the Study

The purpose of this study is to examine the relationship between undergraduate educational background and ethical decision-making. Specifically, the study will compare the ethical decision-making characteristics of undergraduate liberal arts study majors (LAS) compared to characteristics of traditional business-oriented majors.

A greater understanding of ethical decision making is important to the development of organizational science (Trevino, 1986). Historical research on this subject area in the twentieth century has not been robust and there has been limited understanding of how business organizations are impacted by ethical or moral demands resulting from changing work environments (Bommer, Gratto, Gravander, & Tuttle, 1987; Crane, 1999). A recent heightened interest in the drivers, characteristics, and implications of ethical behaviors has been associated with both researchers and business professionals (Berrone, et al., 2007; Detert, et al., 2008).

Against this background of lapses of ethical decision making is a growing body of research that links organizational performance to the ethical characteristics of organizational leadership and culture (Akdemir, et al., 2010; AMA, 2007; Boyd & Webb, 2008). This linking of organizational ethical behavior and organizational performance pertains to both corporations and not-for-profit organizations. Organizational culture can also play a significant role in the moral development of organizational members (G. Morgan, 2006; Trevino, 1986). Organizational culture is, in turn, strongly influenced by shared beliefs and norms of individuals. Morgan (2006) suggests that operating norms and rituals can exert a decisive influence on the overall ability of the organization to deal with the challenges it faces.

Research Problem

With the historical and ongoing research of ethical decision-making, organizational performance, and the associated cultural drivers within business organizations, there is a contemporary growing trend of hiring non-traditional business

major graduates into such organizations (Ho, 2006; Jennings, 1993; UofI-LAS, 2012).

The appeal of hiring individuals from a non-technical liberal arts educational background into a business has a number of foundations. Studies have suggested that liberal arts graduates are perceived, compared to business majors, as having greater communication skills, critical thinking, and analytical abilities. These abilities are alleged as not being found in traditional business major graduates (Careers, 2001; Dash, 2000; Hart, 2009; Ho, 2006; Jennings, 1993; Knotts, 2002; Scheetz, 1994).

The importance of ethical decision-making is emphasized as a pertinent area for study and understanding (Berrone, et al., 2007; Leitsch, 2006; Trevino, 1986; Treviño & Brown, 2004). It is important to understand the organizational performance benefits from the ethical characteristics associated with business organizations, and the factors that may influence ethical-decision making within these organizations. The increasing recruitment and hiring of individuals with a liberal arts education background, as opposed to traditional business education backgrounds, may impact the nature of the ethical decision making characteristics of a given organization's workforce, culture, and performance. However, little research exists to identify what differences in the ethical decision making practices or organizational culture may result from the incorporation of these individuals in business organizations.

Research Hypothesis

Liberal arts majors will demonstrate higher developmental levels of moral judgment compared to business majors.

Definitions

Business major. Undergraduate higher education areas of study associated within a school or college of business. These areas of study may include accounting, general business, finance, management, and marketing. Specific categories and listings of majors are shown in Appendix B. For the purpose of this study, the subject of economics is not included in this classification.

Ethics. This term refers to one of two definitions depending on the context. First, in the context of a discipline, it refers to the study of our values and their justification (Solomon, 1984). Second, it refers to the subject matter of the discipline of ethics in terms of the actual values and rules of conduct by which an individual lives. For the purpose of this study, these two meanings merge to the extent that we behave and misbehave according to a “complex and continually changing set of rules, customs, and expectations; consequently we are forced to reflect on our conduct and attitudes, to justify and some times change them” (p. 2).

Ethical decision making. This refers to the assessments made by individuals of what is right and wrong. These are judgments of value, social judgments, and prescriptive judgments of rights and duties (Trevino, 1986). For the purpose of this study, ethical decision making and moral judgment are used synonymously.

Liberal arts major. Undergraduate higher education areas of study associated with a school or college of liberal arts. These areas of study may include English, languages and culture, history, geography, humanities and philosophy, communications, art studies, political science, and sociology. Specific categories and listings of majors are

shown in Appendix B. For the purpose of this study, the subject of economics and criminal justice are not included in this classification.

Moral judgment. This refers to the assessments of what is right and wrong. These are judgments of value, social judgments, and prescriptive judgments of rights and duties. In this document, ethical decision making and moral judgment are used synonymously.

Significance of the Study

The study investigates whether there are correlations between educational background and ethical decision-making. Identifying differences between certain educational backgrounds and ethical behaviors may help organizations more effectively make hiring decisions with the objective of promoting a particular cultural dynamic. A greater understanding of these relationships will assist business leaders in making decisions to develop organizational dynamics that can facilitate desired ethical decision making within their organizations. This understanding may also, in turn, contribute to enhancing organizational performance.

The study may also aid in the development of training and development programs for organizations if there are significant correlations between educational background and ethical decision-making. Organizational leaders may be better able to target specific educational backgrounds with complementary developmental tools that will potentially lead to greater organizational and stakeholder outcomes.

A greater understanding of ethical development and characteristics is important, directly or indirectly, to educators (Hunt & Vitell, 2006; Snarey & Pavkov, 1991).

Contemporary educational institutions are performing a greater role in the moral development of students (Ostrovsky, Parr, & Addison, 1992). Educators are facing ongoing challenges to understand and address moral and ethical education (Heller & Heller, 2011; Lowery, Beadles Ii, & Juan, 2013; Nucci & Turiel, 2009).

There is a level of discussion pertaining to the association of moral development and any relationship to moral or ethical educational contexts (Maeda, Thoma, & Bebeau, 2009; Nucci & Turiel, 2009). However, this issue is outside the immediate scope of this study.

Understanding the nature of ethical decision making is important in both academic and organizational settings (Valentine & Hollingworth, 2012). Identifying factors associated with ethical decision making can assist in the development of prescriptive guidance. Researchers are increasingly investigating the adherence of individuals to ethical principles and associated ethical decision making (Jazani & Ayoobzadeh, 2012).

Any discovered associations between ethical decision making and educational background can also facilitate future research into the underlying variables that manifest such associations. Differences uncovered by the above research question will not immediately offer a definitive causality, but can help to facilitate future research focus in this area.

Summary

Renewed focus on the influences and determinants of ethical decision making leads to the need to explore avenues of understanding in this area of study. The relationship of ethical behavior and organizational performance creates a need to better

understand how individuals within an organization can influence ethical decisions and outcomes, as well as incentive to facilitate and encourage ethical behavior within organizations. The impact of incorporating individuals with liberal arts educational backgrounds into a business organizational setting can be of significant interest to both business professionals and researchers if this study identifies differences in ethical decision making characteristics between individuals with liberal arts and business educational backgrounds.

The outcomes of this study can benefit the business professional by enabling the use of the educational background as a tool to further identify salient characteristics of potential employees. For example, the importance of developing an ethical organizational climate or culture may aid the hiring manager in deciding the appropriate hiring choice based on differences that may be identified in this study. Additionally, the results of this study may facilitate a greater understanding of CMD relationships to educational background.

CHAPTER 2 – LITERATURE REVIEW

Three main components of historical literature and studies come together to form a comprehensive approach to establishing the significance and relevance of undergraduate educational background and ethical decision making. The first component establishes the importance of ethics in terms of organizational performance. This component is a key to establishing the importance of this study for both research and industry practices. The second component is the change in perception of the contributions and value of characteristics that individuals with liberal arts educational background may offer businesses and other organizations, compared to the perceptions associated with individuals having business educational background. The third component is CMD and the levels of moral judgment, or ethical decision making, associated with different levels and stages of CMD. This literature review examines contemporary and historical research and perspectives in these areas of study.

Ethics and Organizational Performance

Ethical issues in business have garnered increasing attention in recent years (Baglione, 2008; Jalil, Azam, & Rahman, 2010; Lane, 2005). This focus on ethics has been facilitated by a number of well-publicized corporate scandals that have negatively impacted organizations and stakeholders (Armstrong, et al., 2003; Baglione, 2008; Berrone, et al., 2007; Detert, et al., 2008). There is also additional evidence to suggest

that there are significant performance benefits resulting from a strong ethical business perspective within an organization (Akdemir, et al., 2010; AMA, 2007; IGD, 2010).

Historical Concepts of Ethics and Organizational Performance

Dodd (1932) identified and encouraged early twentieth century trends in business behavior toward a perspective of greater social responsibility. Dodd suggested the adoption of a social responsibility to employees, consumers and the general public by those in the business community. This idea differed significantly from traditions that identified the purpose of business organizations to be “the making of profit for its stockholder-members” (p. 1146). Dodd identified changes in public opinion toward the responsibilities of businesses as good citizens. The relationship between social responsibility and organizational performance remained a topic of debate throughout the twentieth century (Preston & O'Bannon, 1997). However, Dodd (1932) identified the need for a development of business ethics that went “beyond the requirements of law and beyond the dictates of enlightened self interest” (p. 1161).

Much of the literature in the years succeeding Dodd's assertions dealt with the nature of business organizational responsibility and function as a societal entity. Within this context was a repeated assertion of the importance of the behavior of the individuals within business organizations. Flanders (1945) questioned whether capitalist competition was in conflict with spiritual concepts of charity and altruism. Personal conscience, according to Flanders, left the individual without sure or clear guidance. The absence of such guidance often led the individual to “follow faultlessly reasoned arguments from imposed premises” (p. 433). Flanders went on to suggest that it was up to individual men

and women to embrace changes in capitalist and social institutions that will allow for the moral and spiritual aspirations of society.

David (1949) asserted that the “effective businessman” (p. 3) had both the ability and the obligation to contribute to general social welfare. David suggested that business leaders often are not articulate and do not apply a needed broader and realistic level of thinking to societal and political orientations. Dempsey (1949) advocated many of the concepts advanced by David and discussed the need for the business leaders to adopt principles to “guide his actions, to channel his natural capacity for contribution, and to give him a formula for achievement” (p. 403).

Barnard (1958) stated that corporations had two responsibilities outside their charters and the law. First, corporations had to address internal responsibilities relating to the organization’s stockholders, creditors, directors and officers, and employees. Second, business organizations had responsibilities to competitors, communities, government, and society in general. According to Barnard, an implied moral responsibility existed, above and beyond legal liability and privilege, that could only be realized by the “concrete action of trustees, officers, and employees” (p. 7).

Learned, Dooley, and Katz (1959) purposed a practical incentive for ethical behavior in business in terms of quid pro quo. Businesses that behaved in an ethical manner were considered as providing an incentive for other businesses to act ethically toward them. In a Christian religious context, the business professional was described as being “judged by more than his product and his performance: his humanity was at stake” (p. 112). Good ethics was equated to good business.

Davis (1960) acknowledged that there were notable changes in the social, political, economic aspects of contemporary culture. The business professional was to re-examine the role and functions of business in society. Decisions and actions of the business professional needed to extend beyond the direct economic and technical interests of the organization. Fitzpatrick (1965) suggested that business professionals that measured success solely in terms of profits “blind themselves from genuine business morality” (p. 23).

Holmes (1976) acknowledged changes in business attitudes toward socially responsible behavior in the latter twentieth century. Surveys of corporate executives suggested that socially responsible behavior might supersede financial performance as a priority (Arlow & Cannon, 1982; Holmes, 1976). Primeaux (1997) suggested that business ethics was an important consideration for every aspect of business, but also acknowledged the importance of profit as of “primary importance” (p. 321) in discussions of business ethics. Burton and Goldsby (2010) asserted that business decisions must have economic elements to them or, fundamentally, they would not be considered business decisions.

Paine (2000) identified a contemporary understanding of the relationship between an organization’s value system and financial performance. The idea that “good ethics is good business” (Burton & Goldsby, 2010, p. 147) is an old axiom that is given contemporary credence. Organizational leaders need to be cognizant of the examples they set in terms of ethical behavior (Jessup, 2011). Some organizational leaders cite high ethical standards as an inherent aspect of corporate excellence, others assign motivations of risk management and cost avoidance (Paine, 2000).

Ethics and High Performance Organizations

Ethical standards and behaviors have been cited as key characteristics of a high performance organization (HPO) (Akdemir, et al., 2010; AMA, 2007). Organizations that have a stronger set of ethics-related values have been shown to have a greater tendency to be identified as HPOs (AMA, 2007). HPOs are associated with having “tangible ethical activities” (Ugoji, Dando, & Moir, 2007, p. 23) rather than superficial affirmations or symbolic representations. In a well-managed business, a commitment to ethics is an integral part of the organization.

Akdemir (2010) purports that young professionals need to be reflective of their work and the approaches they take in their work. This awareness is of increasing importance in a contemporary workforce that is diverse in culture, religion, race, age, education and socioeconomic characteristics. Ethical dilemmas can require interpersonal and negotiation skills, but also may require honesty, integrity and a cooperative understanding of stakeholder relationships. HPOs are organizations that have workers trained in critical thinking and conflict resolution skills needed to deal with ethical decision making (Fischman, Solomon, Greenspan, & Gardner, 2004).

Financial Performance and Ethical Organizational Behavior

Organizational ethics and ethical behavior have also been positively associated with financial performance (Axline, 1990; IGD, 2010; Primeaux, 1997; Ugoji, et al., 2007; Verschoor, 2003; Webley & More, 2003). A number of different factors have been examined to determine relationships between performance and ethics.

A study of business organizations that had developed strong ethical principals found that over a 30-year period, in terms of growth and profitability, the businesses had greater performance compared to Fortune 500 companies (Axline, 1990). The study concluded that there was a long-term financial benefit from ethical management and culture within an organization.

Verschoor (1999) studied the relationship between corporate performance, both financial and non-financial, and a public commitment to a code of ethical corporate conduct. The study looked at 300 business organizations and compared the market value added (MVA) of those with a public ethical commitment to those without such a commitment. Verschoor found the MVA of the business organizations with the demonstrated ethical commitment to be almost three times that of those that did not have the ethical commitment. Evidence in the form of public surveys also showed significantly greater reputational ratings associated with the organizations demonstrating public ethical commitments.

In a study by the Institute of Business Ethics (IBE) financial statistics consisting of MVA, economic value added (EVA), price-earnings ratio (P/E), and return on capital employed (ROCE) were utilized to evaluate the relationship between ethics, corporate responsibility, and financial performance (Webley & More, 2003). Between 1997 and 2001 the study found that business organizations with a stated code of ethics, and demonstrated commitment to that code, had outperformed organizations that did not reflect similar ethical commitments in EVA, MVA, and P/E. Over the same time period, ROCE had identified no discernible difference among the study participants; however,

during a 1999-2001 time frame, a significant performance increase in ROCE was found among those business organizations with an implemented set of ethical codes.

A study sponsored by the IBE (Ugoji, et al., 2007) covering the period 2001-2005 looked at ROCE, return on assets (ROA), total return (TR), and MVA. This study differentiated between organizations it identified as having corporate applied ethics (CAE) and corporate revealed ethics (CRE). An organization classified as CAE had a formal code of ethics and demonstrated a significant commitment through policy and training, while a CRE organization might have a stated code of ethics but demonstrated less commitment to reinforcing policies or training. In each of the measured statistics the CAE organizations outperformed the CRE organizations.

Berrone et al. (2007) studied the relationship between financial performance and what the researchers termed the corporate ethical identity (CEI) in over five hundred business organizations in twenty-six countries. CEI is defined as “the set of behaviors, communications, and stances that are representative of an organization’s ethical attitudes and beliefs” (p. 36) and incorporates both concepts of CRE and CAE. Utilizing financial information of both MVA and ROA, the study found positive relationships with CEI and financial performance, and also related stakeholder satisfaction as a pertinent influence. Stakeholder satisfaction mediated the influence of corporate financial performance. The study found that greater CEI led to high stakeholder satisfaction that, in turn, resulted in higher financial performance.

Organizational Motivations for Ethical Conduct and Standards

Motivations of organizational or corporate excellence stem from factors resulting from ethical behavior and positive standards within organizations (Baglione, 2008; IGD, 2010; Jessup, 2011; Paine, 2000). Ethics reflected in positive values and beliefs are associated with positive organizational climates (Baglione, 2008; IGD, 2010). Employee engagement and creativity are linked with the establishment of a high-trust work environment (Paine, 2000). An ethical atmosphere in an organization is considered “good for efficiency and the bottom line” (AMA, 2007, p. 14).

Recognized organizational ethical behavior also helps to attract and retain employees (AMA, 2007; Jessup, 2011; Verschoor, 2006). In turn, employees who regularly demonstrate positive ethical practices are strengthened and energized by such actions (Baglione, 2008; IGD, 2010; Ugoji, et al., 2007; Webley & More, 2003). A positive organizational reputation can also be pertinent in the selection of a potential employer by individuals (AMA, 2007; Jessup, 2011; Paine, 2000). A reputation as an ethical organization can “serve as a magnet for top talent” (AMA, 2007, p. 14).

An ethical reputation can also generate external benefits for an organization (Burton & Goldsby, 2010; Dodd, 1932; Paine, 2000). The existence and recognized implementation of ethical practices are an important factor in organizational goodwill (Jalil, et al., 2010; Jessup, 2011). A positive ethical reputation may facilitate decisions to invest in the organization or to select the organization as vendor or supplier (Jessup, 2011). An organization’s reputation is a key factor in developing a modern brand marketing strategy (Kotler, Kartajaya, & Setiawan, 2010). Ethical reputation is

increasingly involved in the development of an organizational brand (Jessup, 2011). Burton and Goldsby (2010) suggest that a “tendency toward unethical behavior may be enough to steer customers away” (p. 150). Ethical values can offer the opportunity to build trust and customer loyalty (IGD, 2010).

Social and political pressures are another form of external benefit that can be reduced through the implementation of ethical practices and an associated ethical reputation (Paine, 2000). Studies have suggested that corporate codes of ethics are often influenced by regulations and sentencing codes resulting from societal concerns or influences (Canary & Jennings, 2008).

Critics of Organizational Performance and its Relationship to Ethics

The idea of a positive relationship between organizational ethics and organizational performance is not without critics. Donaldson (2008) suggests that the education in ethical philosophies can lead to indecision in managers. High profile business failures are cited as being due to “poor managerial business judgments” (p. 301) rather than failures in ethics.

A study of United Kingdom consumers suggested that consumers did not demonstrate consistent “ethical or green purchasing behaviors” (Doane, 2005, p. 26). Other research suggests that environmental initiatives can be costly endeavors that can have a negative impact on financial performance (Makni, Francoeur, & Bellavance, 2009). However, these studies deal primarily with the impact of corporate social performance (CSP) and corporate social responsibility (CSR), rather than ethical conduct or behaviors. Furthermore, Griffin and Mahon (1997) purport that even in the case of

CSP studies, the largest proportion of researchers have found a positive relationship with organizational performance.

The literature supporting the benefits from adopting and fostering ethical conduct and organizational climates is considerable. In this context, it becomes a considerable motivation for organizations to recruit and retain individuals that will facilitate ethical organizational climates and performance. A changing attitude in hiring practices, pertaining to liberal arts majors, for example, is an example of the need to understand the potential impact that such practices may have on ethic organizational environments and practices.

Trends in Hiring Liberal Arts Majors

Historical Goals in Liberal Arts Education

Institutions of higher education in the United States were founded with the idea that moral education was a salient goal as part of the education experience (Lickona, 1993; McNeel, 1994; Rest & Narváez, 1994). Curriculum and educational environments were intended to “develop sensitivity to moral responsibilities, to teach ethical thought and action, and to develop students’ character” (McNeel, 1994, p. 27). Higher education originally emphasized a whole person approach to learning and development. This educational emphasis supported early associations of education with increased levels of moral judgment (Rest & Narváez, 1994).

Within the above historical context, higher education was viewed as playing a crucial role in the development of certain skills in students such as critical thinking, problem solving, and communication skills (Terenzini & Pascarella, 1991). Each of these skill development areas are credited with contributing to the desired student outcomes

within the greater educational context of moral development (Nucci & Pascarella, 1987; Terenzini & Pascarella, 1991).

The late 19th and early 20th century saw an increase in the specialization of educational disciplines (Nucci & Pascarella, 1987). This change in the focus of higher education is credited with leading to more fragmented knowledge and less emphasis on values and morality. This change in focus is attributed to the growth in state supported public institutions resulting from the 18th century Morrill Act, the rise in research universities, and a resulting “fragmentation of knowledge which accompanied the evaluation of academic disciplines [that] contributed to major structural and curricular changes in American higher education” (Nucci & Pascarella, pp. 271-272). This trend paralleled increasing emphasis on positivism and greater distinction between facts and values in education (Lickona, 1993).

The changes in vocational areas of study within higher education have impacted the perceived level of accomplishment of traditional higher education goals (McNeel, 1994). Technical competence in a narrow field has been associated with “less concern about broader questions of human values and morality” (p. 29). Vocational and professional studies within schools and colleges of business have been identified as specific areas of concern within a context of traditional higher education goals of moral education and a whole person perspective (Sims & Sims, 1991).

Contemporary Characteristics Associated with Liberal Arts Majors

The liberal arts field of study is often associated with the development of a number of key skills and characteristics that can be considered of significant value in the

business community (Allen, 1999; DiConti, 2004; Leonard, 2000; Nell, 2003). Identified among these skills and talents are communication, teamwork, and critical thinking. The contemporary association of these skill sets with a liberal arts education has developed in parallel with concerns that traditional pre-professional higher education programs, such as undergraduate business school programs, do not provide an adequate foundation in these areas (Mahin, 2008; Paris & Council of Independent Colleges, 2007; Seiler & Kowalsky, 2011).

In the 1970s workplace characteristics associated with liberal arts graduates were not considered to be generally positive (Lutz, 1979). Issues such as mobility, prestige, income, and working conditions were elements of concern.

McCall (1987) purported the value of communications related characteristics of liberal arts majors in regard to media related careers. Liberally educated communicators were considered to be at an advantage within media oriented careers. However, Weitzel (1989) found that liberal arts majors were not being advantageously sought in the private sector compared to professional major orientations. This situation occurred despite some acknowledgement in the business community that individuals with a liberal arts background had better communication and learning skills compared to their business background counterparts.

Practicing business professionals, such as accountants, are encouraged to develop the very skills discussed above, associated with a liberal arts education, in order to maintain a contemporary competitive skill set (Bawaneh, 2011; Nimalathan & Valeriu, 2010). However, there are a number of concerns pertaining to the effectiveness of instilling these characteristics in accounting majors within educational settings (Ponemon

& Glazer, 1990; Rest & Narváez, 1994). A study of international marketing courses (Manton, English, & Kernek, 2008) found that critical thinking was neither emphasized nor evaluated. This factor is cited as a potential impediment in the ability of marketing professionals to function advantageously in a global environment.

Changing Attitudes Regarding Liberal Arts Majors

The status of the undergraduate liberal arts major within the business community has undergone a noticeable change in recent decades. Weitzel (1989) described the relatively poor stature of the liberal arts major within the employer community in the 1980s. Weitzel acknowledged that graduating from liberal arts programs did endow students with advantageous abilities – such as communication and decision-making skills - but these skill sets were not readily recognized by the business community in hiring decisions compared to individuals with business education backgrounds. Despite a number of studies identifying successful liberal arts graduates in the business community, Weitzel asserted that these graduates were simply not being sought by employers.

Literature from the 1970s and 1980s often laments the ongoing difficulties of finding viable employment in the business community for liberal arts majors (Lutz, 1979; McCall, 1987; Weitzel, 1989). Liberal arts graduates were often considered to have a very limited scope of applicable fields for employment, such as media or other communication oriented occupations (McCall, 1987).

Despite negative perceptions associated with liberal arts majors there is some evidence to suggest that over time there is greater earning potential compared to professional and pre-professional educational backgrounds (Snider, 2014; Supiano,

2014). Individuals with professional degrees such as business or accounting often have greater initial earning potential immediately after college, but liberal arts majors tend to have greater earning potential during peak earning years over their career. However, there is some evidence to suggest that this earnings difference may be due to a greater propensity for liberal arts majors to attain graduate degrees compared to their professional degree counterparts (Adams, 2014).

Perceptions concerning the employability of liberal arts graduates showed signs of change in the last decade of the 20th century (Allen, 1999; Useem, 1995). The rise of the knowledge base economy, combined with new organizational dynamics from increased globalization, opened up new attitudes and opportunities for those earning liberal arts degrees. Research has suggested that the demand for liberal arts majors will increase (Ho, 2006; Knotts, 2002; Leonard, 2000).

As organizations expand their business operations around the globe, the business profession is facing a greater set of challenges that require an increasingly dynamic skill set (Useem, 1995). These challenges include the need to be adaptable to different cultures and business settings, dealing with new communication requirements of governments and other foreign organizations and individuals, as well as a changing labor force.

Communications skills, the ability to learn and assimilate a broad range of perspectives, and critical thinking are becoming increasingly important characteristics of individuals in modern business environments (Allen, 1999; Ho, 2006; UofI-LAS, 2012; Useem, 1995).

The new economy and the associated increase in computers and information technology have heightened the need for individuals that can relate different modeling scenarios to real-world situations, who can work effectively with both organizational

teams and clients, and who can speak and write effectively (Allen, 1999). Training for a specific vocation with specific skills or information is often considered too limiting in contemporary work environments (Allen, 1999; DiConti, 2004). DiConti suggests that “it is the liberal arts mind that seeks creativity and improves upon past performance or experience in order to give new meaning to the present” (2004, p. 170). DiConti purports that the best preparation for the modern workforce remains the liberal arts.

Even in the most technical fields, employers are turning to liberal arts graduates to fill needed vacancies (Leonard, 2000). In the mid-1990s when only a small percentage of students were graduating with information technology (IT) degrees, employers in IT fields began to turn to liberal arts graduates in recruiting practices. The ability of liberal arts graduates to resolve complex processes, shift to different work assignments, and work within rapidly changing workflows has led many employers to realize that “liberal arts graduates are what they have been searching for all along” (Leonard, p. 184). A 2000 survey found that the majority of IT professionals had degrees in other than the computer sciences, with the majority of those surveys coming from other than business, mathematics, or engineering backgrounds (Dash, 2000).

A survey conducted for the Association of American Colleges and Universities (AACU) found that a majority of employers placed a significant emphasis on the skills developed through a liberal arts education (Hart, 2009). The survey identified that 89% of employers placed a significant value on the ability to communicate effectively, both orally and in writing. The survey also found that 81% of the employers valued critical thinking and analytical reasoning, while 75% placed emphasis on the ability to analyze and solve complex problems.

The desire for potential employees with the skill sets identified with a liberal arts education has contributed to the development of complementary business education concepts for liberal arts graduates (Rafter, 2004). Many organizations are offering basic business training and orientation to liberal arts graduates in order to incorporate individuals more easily into a business environment, and thereby reap benefits of the talents associated with a liberal arts education (Ho, 2006; Uoff-LAS, 2012). Dartmouth College's Tuck School of business has operated a "business boot camp" (p. 20) since 1997 designed specifically to infuse liberal arts majors with business concepts. Similar programs have been instituted at the University of California Berkley, Stanford University, and New York University.

The growing need for the critical skill sets associated with a liberal arts education will continue to impact business organizations. The contemporary recognition of the value of the liberal arts major and the associated skills may be expected to have an impact on 21st century organizations in the new global economy.

Despite this renewed interest in liberal arts backgrounds in the business community, there has been a decline nationally in the number of graduates with a LAS focus (DiConti, 2004; Paris & Council of Independent Colleges, 2007). A report from the Council of Independent Colleges suggest that "although employers continue to emphasize the importance of a well-rounded education and broad skill development, students want access to more specific, job-oriented educational programs" (Paris & Council of Independent Colleges, 2007, p. 7).

Liberal arts majors have the potential to have a significant impact on organizational and business environments as their desirability and acceptance grows. In

order to understand the nature and potential impact of liberal arts majors, it is important to understand the historical development, perspectives, and measuring of ethical decision making and moral development.

Moral Development and Ethical Decision-Making

There has been a significant level of attention paid to moral judgment and reasoning in business ethics and associated ethical decision making research in recent years (Elm & Weber, 1994; Tirri & Nokelainen, 2012; Trevino, 1992). Researchers have often turned to moral psychology to identify theories, constructs and measures appropriate to the domain of business ethics (Hunt & Vitell, 2006; Pope, 2005; Rest, Narvaez, & Bebeau, 1999; Tirri & Nokelainen, 2012; Trevino, 1986, 1992).

Historical Perspective on Cognitive Moral Development

Contemporary approaches to moral development are frequently associated with the cognitive moral development (CMD) theories of Kohlberg (1927-1987). The groundwork for much of Kohlberg's theory of CMD is attributed to the early 20th century work of Piaget (1896-1980) who is recognized for his formative work in studying the moral development of children (Ferrari & Okamoto, 2003; Trevino, 1992). Piaget had challenged contemporary works of Durkheim that attributed social influence as the primary factor in moral development (Cladis, 1995; Trevino, 1992).

In contrast to Durkheim, Piaget (1965) viewed morality in terms of cognitive and developmental concepts. Piaget's developmental stage theory identified two stages of moral development (Cam, Seydoogullari, Cavdar, & Cok, 2012; Ferrari & Okamoto, 2003). The first stage, known as the constraint or heteronomous stage, involves the

association of what is right as being associated with obedience and authority. This initial stage is subsequently replaced by an autonomous stage of “morality of cooperation or autonomy” (Trevino, 1992, p. 446). At this stage, according to Piaget theories, the child begins to differentiate between rules established by authority figures and instead interprets morality as a component of a needed social system. Such a system is viewed as a necessity of mutually beneficial rules. The child at this later stage is more autonomous in their moral behavior and less stringently dependent on externally imposed rules. Piaget’s moral development theory focused on the individual developing universal moral principals rather than receiving conventional social norms through instruction (Snarey & Pavkov, 1991). Piaget is credited with establishing the psychological construct of moral judgment (Rest, 1979). The development of moral judgment is a process whereby the individual constructed increasingly complex and universal reasons for determining a moral course of action. In this manner, Piaget considered CMD to be directly contrasting Durkheim’s social development-based theories.

Kohlberg built on the work of Piaget with studies on American male children and young adults (Trevino, 1992). Kohlberg utilized tools that evaluated open-ended responses to hypothetical moral dilemmas over a twelve year period. According to Kohlberg’s research, moral reasoning resulted from a cognitive disequilibrium that resulted from a contradiction from rationales of different levels of moral development.

Kohlberg’s model purported a number of tenets that have received a significant level of support (Elm & Weber, 1994; Trevino, 1992). First among these tenets is that moral judgment has a cognitive base. Second, the levels or stages described by Kohlberg denote qualitative differences in thinking modes that are associated with integrated

hierarchical systems of thought. Another key tenet of Kohlberg's theory is that individuals develop through a consistent sequence of stages. Finally, individuals within the stages will tend to adopt solutions at the highest level of development available to them.

In contrast to Piaget's two-stage model, Kohlberg developed a six-stage model of moral development (Table 2.1) (Kohlberg, 1973; Rest, Turiel, & Kohlberg, 1969). Each stage identifies reasons why certain actions are deemed morally just or preferred (Cam, et al., 2012; Elm & Weber, 1994; Rest, et al., 1999; Trevino, 1992). Moral rationales at different levels are captured at different stages of moral development. Individuals at a given stage of development are also found to prefer moral sentiments to those of their own level, or levels above their current level, to those sentiments characterized at lower stages of development (Rest, et al., 1969). Kohlberg (1973) identified three primary levels described as the preconventional, conventional, and postconventional.

Table 2.1 – Kohlberg's Stages of Moral Development

Preconventional level

Stage 1: The punishment-and-obedience orientation

Stage 2: The instrumental-relativistic orientation

Conventional level

Stage 3: The interpersonal concordance or "good boy---nice girl" orientation

Stage 4: The "law and order" orientation

Postconventional level

Stage 5: The social-contract legalistic orientation

Stage 6: The universal-ethical-principal orientation

Note: Adapted from Kohlberg, L. (1973). The claim to moral adequacy of highest stage of moral judgment. *Journal of Philosophy*, 70, 630-646.

The preconventional level established a person as having the view that rules are imposed externally to him or herself (Elm & Weber, 1994; Fraedrich, Thorne, & Ferrell, 1994; Trevino, 1992). Within the preconventional level are two stages. Stage one is

identified as punishment-and-obedience orientation and stage two the instrumental-relativist orientation (Kohlberg, 1973). Moral decisions are often justified in terms of reward and punishment. At stage one the individual seeks to avoid punishment and is guided to obedience for its own sake. This stage processes the positive or negative characteristics in terms of the physical consequences that result from the action “regardless of the human meaning or value” (p. 631) of the consequences.

Stage two within the preconventional level begins to develop concepts of reciprocity in terms of the individual’s immediate self-interest (Kohlberg, 1973). Fairness, sharing, or equity is interpreted by the decision-maker in terms of instrumentality and not out of loyalty, gratitude or a concept of justice.

The conventional level sees the maintaining of the expectations of the individual’s family, group, or nation as having value in its own right (Kohlberg, 1973). This value is viewed as beneficial without regard to immediate or obvious consequences. Within this conventional level Kohlberg identifies stage 3 as an interpersonal concordance stage, and stage 4 as the law and order orientation stage. Stage 3, also described as “good boy---nice girl” (p. 631) or the “mutual interpersonal expectations, relationships and interpersonal conformity” (Colby & Kohlberg, 1987, p. 18), is characterized by the idea that good behavior is determined by what pleases or helps others and generates approval by others. Conformity and intentions are elements that lead to approval by others. Stage 4 sees the development of an orientation to authority, rules, and social order. This stage values the fulfilling of duties agreed to within groups, and acknowledges the need to maintain institutional norms or agreements.

The postconventional level of development is characterized by efforts to identify moral values and principles that maintain their validity independently of the authority of groups or persons holding these principles (Kohlberg, 1973). These values are also sought independently of the individual's identity with these authoritative groups. The two stages within the postconventional level are identified as stages 5 and 6 and called the social-contract legalistic orientation and the universal-ethical-principal orientation, respectively.

Stage 5 individuals are characterized as being aware that people hold a variety of values and opinions (Colby & Kohlberg, 1987). Values and rules are relative to the individual's own group. Some non-relative values and rights, such as life and liberty, need to be upheld regardless of majority opinion. Right action tends to be defined in terms of general individual rights and standards that have been critically examined and agreed upon by the whole society (Kohlberg, 1973).

Stage 6, the universal-ethical-principle orientation, is described as the identification of what is right as being a "decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency" (Kohlberg, 1973, p. 632). These principles are associated with universal concepts of justice often associated with Kant (1724-1804) (Colby & Kohlberg, 1987; Kohlberg, 1973; Trevino, 1992). The individual, as a rational person, believes in the validity of a universal set of moral principles and has a cognitive personal commitment to those principles (Colby & Kohlberg, 1987). It is also suggested that few individuals ever actually reach this stage of CMD.

Despite the recognized significance of Kohlberg's CMD theory, it is not without criticism. Gilligan (b. 1936), for example, has criticized Kohlberg's study methodologies such as the inclusion of only male participants in his early research and asserted that Kohlberg did not appropriately account for potential cultural variations (Cam, et al., 2012; Rest, et al., 1999). Other criticism has questioned the relationship between the moral reasoning outline by Kohlberg and moral behavior (Elm & Weber, 1994).

Rest (1979) expanded on Kohlberg's concepts of CMD utilizing a somewhat different concept of the morality of justice within the stages of CMD. Rest identifies a concept of justice at each stage of moral development. Rest states that concepts of fairness and justice are "essentially notions about the balancing of individual interests and the benefits of cooperation" (p. 20). Moral judgment is concerned with the distribution of the benefits and burdens of social cooperation. Kohlberg differs from Rest in the level at which justice exists within the individual. Rest identifies social justice as being derived from the "balancing of different interests and assigning rights and responsibilities to provide cooperation" (Elm & Weber, 1994, p. 345).

Rest et al. (1999) identified a neo-Kohlbergian approach to studies in moral development with a greater emphasis on schemas rather than stages, and address individuals at the age of at least twelve years or more. Schemas in the context of CMD are identified as "general knowledge structures residing in long term memory" (p. 297). Rest, et al., attribute greater similarities between the two approaches than differences (Rest, et al., 1999; Rest, Narvaez, & Thoma, 2000). To conceptualize moral judgment, the neo-Kohlbergians begin with a starting point of cognition. Second, both approaches highlight the personal construction of epistemological categories such as rights, duties,

justice, social order, and reciprocity. Third, changes over time are portrayed in terms of development. This development may be discussed in terms of different moral orientations and in terms of cognitive advancement. Higher cognitive development is considered positive in a “philosophical, normative-ethical sense” (Rest, et al., 2000, p. 383). Finally, both approaches describe the developmental change of adolescents and adults in terms of a shift from conventional to postconventional moral thinking.

The neo-Kohlbergian approach utilizes schemas to identify differences in Kohlberg’s moral stages. Rest et al. (1999) identify three key schemas as the personal interest schema, the maintaining norms schema, and the postconventional schema (Table 2.2). The personal interest schema is associated with stages 2 and 3 from Kohlberg’s stages of CMD which are labeled as S23. This schema is developed in early childhood and is considered no longer a central tenet in the thinking of the older individuals associated with neo-Kohlberg. The maintaining norms schema is associated with stage 4 of Kohlberg’s stages and is referred to as S4. Finally, the postconventional schema is associated with the stages 5 and 6 from Kohlberg, referred to as S56.

Table 2.2 – Neo-Kohlbergian Schema

<u>Schema Identification</u>	<u>Kohlberg Stage of CMD</u>
The Personal Interest Schema	S23
The Maintaining Norms Schema	S4
Postconventional Schema	S56

Note: Adapted from Rest, J., Narvaez, D., & Bebeau, M. J. (1999). A neo-Kohlbergian approach: The DIT and schema theory. *Educational Psychology Review*, 11(4), 291-324.

Another difference in the approach of Rest (1979) from the classic Kohlbergians is the concept of soft stages of cognitive structures. Rest purports that moral reasoning is a composite of thinking types that may be represented by adjacent stages that will impact the nature of a moral judgment. This differs from Kohlberg who suggests that reasoning

structures at a particular stage will be consistent across all situations. Elm and Weber (1994) state Kohlberg's stages are discrete or hard, and that "no stage mixtures regarding a response to a particular moral question are possible unless it is a short transition phase as an individual passes onto the next stage" (p. 346).

Cognitive Moral Development's Role in Ethical Decision Making Models

CMD studies have been a key foundation for the study of ethical decision-making (Fraedrich, et al., 1994; Trevino, 1986). Trevino (1992) purports that CMD is a valuable means to understand how employees reason about ethical dilemmas in the workplace. Fraedrich et al. (1994) have purported that the majority of ethical decision making models utilize Kohlberg's work on CMD as a basis for understanding these processes.

A number of ethical decision making models to describe behavior have been developed utilizing CMD theory (Fraedrich, et al., 1994). Rest developed a four-component model for individual ethical decision making (Armstrong, et al., 2003; Jones, 1991). Rest's model purported that a moral agent must first possess moral sensitivity, whereby the agent recognizes the moral issue. Second, the agent must make a moral judgment of the situation. Third, the agent must have a moral motivation or have a moral intent. Lastly, the agent must have moral character, whereby they will act on the moral concern.

Trevino (1986) suggests a person-situation interactionist model that utilizes components of Kohlberg's stages of CMD. Trevino purports that the recognition of the existence of an ethical dilemma is impacted by the CMD stage and is subsequently moderated by individual and situational factors. Trevino states that "the individual's

cognitive moral development stage determines how an individual thinks about ethical dilemmas, his or her process of deciding what is right or wrong in a situation” (p. 602).

In 1993, Hunt and Vitell (2006) developed a later-revised process model of ethical decision-making in which they draw on deontological and teleological traditions of moral philosophy. In this model environmental factors and personal experiences interact to affect the perception of ethical problems. Deontological and teleological evaluations may combine to impact ethical judgments. Situational constraints may, in turn, impact the behavior of the individual within an ethical dilemma.

Ferrell and Gresham (1985) proposed a contingency framework model for ethical decisions within organizations that does not specifically build on the concepts of Kohlberg or Rest discussed above. In this model it is suggested that decisions about what is ethical or unethical is moderated by “individual factors, significant others within the organizational setting, and opportunity for action” (p. 87). Individual factors may be determined by knowledge, values, attitudes, and intentions. Determination of significant others within the organization may stem from the interactions of groups within the organization, and the associated roles that are developed within those groups and interactions. Opportunity for ethical intent may be comprised of rewards or punishments that may be associated with actions.

Cognitive Moral Development and Behavior

The relationship of CMD and associated behavior has received a great deal of attention (Blasi, 1980; Hull, Wurm-Schaar, James-Valutis, & Triggles, 1994; Jones, 1991; Nucci & Turiel, 2009; Robin, Gordon, Jordan, & Reidenbach, 1996; Trevino, 1986).

Jones (1991) states that “a decision about what is morally correct, a moral judgment, is not the same as a decision to act on that judgment, that is, to establish moral intent” (p. 386). Blasi (1980) conducted a review of existing literature and concluded that CMD was an essential component to facilitate moral action, and that there was a moderately supported association that would conclude moral reasoning directly led to moral action. Robin et al. (1996) caution about deriving direct relationships between CMD and behavioral intent. However, Blasi (1980) concluded that individuals at higher stages of CMD would be more likely to resist pressures of conformance to others. Trevino (1986), in discussing the person-situation interactionist model, posits “a relationship between cognition and action” (p. 615). Lieitsch (2006) conducted a study of accounting students and found a significant relationship between moral judgment and moral intent. Barnett (2001) also found positive association between ethical decision-making and moral intensity.

Measuring of Cognitive Moral Development

Significant attention has been paid to the methodologies and tools utilized to measure CMD (Elm & Weber, 1994; Trevino, 1986). Different instruments have been developed using either in-depth interviews or objective survey methodologies.

Standard issue scoring (Colby & Kohlberg, 1987) was developed to assess the stages associated with Kohlbergian levels of CMD in interview subjects. This scoring assesses the results from in-depth interviews using a moral judgment interview process (MJI). The MJI consists of a series of hypothetical moral dilemmas. For example, the Heinz dilemma presents the scenario where an individual, named Heinz, is faced with the

need to steal a critical life-saving drug for his wife from a druggist asking a high price that Heinz cannot afford to pay (Colby & Kohlberg, 1987; Elm & Weber, 1994). This dilemma presents a conflict between the value of upholding the law and the value of preserving life. Interview subjects are presented with the dilemmas then asked a series of open-ended probing questions to “elicit justifications, elaborations, and clarifications of the subject’s moral judgments” (Colby & Kohlberg, 1987, p. 41). The questions are designed to elicit normative judgments about what an individual should do, rather than predictive judgments about what an individual would do. Standard issue scoring codes the subject’s responses into established categories that are then utilized to assess the subject’s stage of development.

The MJI has been criticized for the length of time to administer the test and the complexity of the scoring methodologies (Elm & Weber, 1994; Gibbs, Widaman, & Colby, 1982; Nichols & Day, 1982). Subjects are given free significant leeway to construct moral rationale to resolve dilemmas. This can present challenges for the researcher (Elm & Weber, 1994). Concerns have been raised concerning the dependence upon the interviewer to assess the responses rather than objective criteria. However, despite these concerns, the MJI is to be considered a reliable instrument (Elm & Weber, 1994; Gibbs, et al., 1982; Trevino, 1986).

The social reflection measure (SRM) and the associated questionnaire was developed to simplify that nature of the scoring mechanisms utilized by the MJI (Gibbs, et al., 1982; Trevino, 1986). The SRM builds on the Kohlbergian CMD concepts of moral judgment. The social concept of the SRM acknowledges the Kohlbergian emphasis on social interaction as a context for determinations of right and wrong, while the reflection

component pertains to the thoughtful consideration of reasons for the subject arriving at decisions and values.

The SRM is also purported to be much easier to administer compared to the significant training required to administer the MJI (Gibbs, et al., 1982; Trevino, 1986). The proper administration of the SRM may be self-taught through associated manuals and training materials. Validation of the SRM has been considered comparable to the MJI, however the SRM instrument has not been as widely utilized as the MJI or other measures.

Rest (1979) built on the foundational CMD theories of the Kohlbergians in the development of the defining issues test (DIT) with an emphasis on schema theory. The DIT is an objective recognition test that assesses how different individuals at different stages of moral development select among different statements representing the issue of greatest importance within a moral dilemma. The measurement of moral judgment is purported as the key assessment of the DIT in the context of Rest’s four component model of moral behavior. Rest modeled four processes of moral behavior as moral sensitivity, moral judgment, moral motivation, and moral character, as outlined in Table 2.3 (Rest & Narváez, 1994).

Table 2.3 – The Four Component Model

<u>Component</u>	<u>Description</u>
Moral sensitivity	Interpreting the situation
Moral judgment	Judging which action is morally right/wrong
Moral motivation	Prioritizing moral values relative to other values
Moral character	Having courage, persisting, overcoming distractions, implementing skills

Note: Adapted from Rest, J. R., & Narváez, D. (1994). *Moral development in the professions: Psychology and applied ethics*. Hillsdale, NJ England: Lawrence Erlbaum Associates, Inc.

A key benefit of the DIT is the ease of administration. Subjects are presented with written scenarios and required to rank scenarios and value statements. The researcher can administer the DIT with minimal training (Elm & Weber, 1994; Rest, et al., 2000). The DIT has also been correlated with the MJI producing comparable consistency and reliability (McGraw & Bloomfield, 1987).

Previous Studies in Moral Development of Undergraduate Students

There is limited research specifically comparing ethical decision making between individuals with a liberal arts education background and individuals with business education backgrounds. In addition, there are a limited number of studies on CMD or ethical decision making with comparisons or contrasts among undergraduate educational backgrounds in general. A number of studies examine CMD among occupations or industries, but not with a focus on educational backgrounds prior to establishing a workplace profession.

Rest (1994) identified a number of comparative results of postconventional levels of CMD utilizing the DIT in higher education settings. These results confirmed CMD and moral judgments levels being positively associated with educational levels. The college experience has purported among the highest impacting variables in producing growth in moral judgment McNeel (1994).

King and Mayhew (2002) examined a significant number of studies that utilized the DIT to identify insights in moral development in higher education. The researchers examined 172 previous higher education studies to develop an organizational framework for higher educational contexts. Many significant outcomes were identified.

In examining institutional contexts, liberal arts colleges were found to be “more conducive” (King & Mayhew, 2002, p. 253) to the fostering of moral development and reasoning. Additionally, seniors at Christian liberal arts colleges showed higher levels of postconventional moral reasoning than counterparts at Bible colleges. In general, students at church-affiliated liberal arts colleges exhibited higher moral reasoning scores compared to public research universities, private liberal arts colleges, private universities, and public universities, respectively.

King and Mayhew (2002) found conflicting results in comparing business majors to non-business majors. In addition, in examining the role of ethnicity, the researchers found “no clear pattern of results” (p. 251).

Accounting majors have been the subject of a significant number of ethical studies utilizing the DIT (Rest & Narváez, 1994). In studies of accounting students, the students frequently exhibit lower levels of ethical reasoning compared to other business majors and general populations of college students (Armstrong, 1987; Lampe & Finn, 1992; Ponemon & Gabhart, 1994; Pope, 2005). Pope (2005) suggested this result may be due to accounting students using different ethical constructs compared to other students. Studies have also suggested that these comparative characteristics also pertain to professional accountants compared to other college educated professionals in the workplace (Ponemon & Glazer, 1990; Shaub, 1994).

Professional programs have also been the subject of a number of studies utilizing the DIT. A study of nursing students identified some association with clinical performance and levels of CMD (Ryden & Duckett, 1991). However, the exact causality of the association was inconclusive. Another study found little association with the level

of teaching effectiveness of student teachers and their DIT scores (Cartwright & Simpson, 1990).

A study of United States higher education students utilized DIT-2 scoring to evaluate and understand individual characteristic differences and the relationship to moral judgment development (Maeda, et al., 2009). The study confirmed earlier studies that moral judgment scores generally increased as education level increased. The study also concluded that gender was a notable factor. Female students exhibited higher scores compared to their male counterparts. The study also concluded there was no significant difference on the scoring of individuals attending a religiously affiliated institution compared to students attending a secular institution.

A study of northeastern United States higher education institutions compared differences among religiously affiliated universities and the impact of courses on ethics and religious studies (Comegys, 2010). This study did not specifically address CMD, but rather utilized a survey instrument to assess general attitudes toward business ethics. Respondents included individuals at all levels of undergraduate education. Students from religiously affiliated institutions were found to have “more ethically inclined attitudes about business” (p. 41). Business students who completed an ethics course were found to exhibit a more strict ethical perspective, while non-business students demonstrated no significant difference in ethical business attitudes. Religious studies courses were found to positively impact the ethical attitudes of business majors and non-business majors, although the impact on non-business majors was more pronounced.

Traiser and Eighmy (2011) examined the moral development in higher education undergraduate business students enrolled in public institutions compared to private

institutions. The researchers utilized the DIT-2 survey tool on subjects from seven public and six private institutions located in North Dakota and Minnesota. The study found there to be little significant difference between the two groups of students, but did suggest that business students in general had lower scores compared to general college students from previous studies.

Summary

Contemporary attitudes and perceptions of individuals with liberal arts education backgrounds have the potential to impact professional business organizational environments. The associated positive characteristics of liberal arts majors of critical thinking, communication skills, and problem solving - compared to perceptions of business majors – is creating a potential benefit to organizational leaders who incorporate liberal arts majors into business organizations. While there is little evidence to suggest that business organizations are hiring liberal arts majors specifically for their potential level of ethical decision making, the skills associated with liberal arts majors have also been associated with levels of moral judgment (Nucci & Pascarella, 1987).

The recognized benefits of ethical organizational behavior and culture, identified above, exemplify the need for greater understanding of the drivers and characteristics of individuals that may foster and propagate this ethical behavior and culture. Levels of CMD, as discussed above, have been shown to be an effective measure of ethical decision making, i.e. moral judgment, exhibited by students in higher education bachelor degree programs.

The three key components of increased interest in individuals with a liberal arts background, the positive association of ethical influences with organizational performance, and the relationship of CMD to ethical decision making combine to present a potentially powerful alignment for both academic research and direct business application. The identification of differences or similarities in CMD between individuals with different educational backgrounds will offer significant insight into the potential for future research and applications.

The association of ethical behavior with organizational performance in academic literature offers a salient motivation for professionals and academics to place emphasis on the importance of establishing an ethical organizational culture. Similarly, the increased acceptance and inclusion of individuals with a liberal arts educational background in a business environment presents a growing dynamic that may offer a new organizational tool that can impact the ethical decision making culture within organizations. The combination of desired skill sets, with a potentially greater level of moral judgment, can make the liberal arts major a formidable asset for change and development within organizations.

CHAPTER 3 – METHODOLOGY

This study sought to validate the hypothesis that liberal arts majors will demonstrate higher cognitive moral developmental levels in ethical decision making compared to business majors. This chapter discusses the research design, instrument, sampling procedure, reliability. These different levels of CMD will be identified in terms of CMD levels identified by Kohlberg (1973) and later modified by Rest (1979). The level of CMD is determined by a respondent's answers to five moral dilemmas. Additional demographic information is also collected to account for known variables that may have been determined to influence CMD levels (CFSED, 2013).

Research Approach and Rationale

The research study involved a quantitative methodology to measure ethical decision-making in individuals from different undergraduate areas of study. Specifically, the differences in responses to moral dilemmas will be measured to establish levels of CMD in the research subjects utilizing a pre-existing well vetted survey instrument. The instrument was a web-based survey to collect primary data for this research. Web-based surveys have been shown to be a valid methodology for administering surveys in research studies (Dillman, Tortora, & Bowker, 1999; Manfreda, Bosnjak, Berzelak, Haas, & Vehovar, 2008; Singh, 2011).

The survey instrument rating of each participant served as a dependent variable. The educational background of the participants served as the independent variable in the study.

Sample

The respondents were students enrolled in an undergraduate, or bachelor degree program that were graduating, newly graduated, or enrolled in the capstone class of their program. The sample consisted of primary data from individuals that are enrolled in either a professional business degree program or a liberal arts degree program. The sample was obtaining, or had just obtained their first higher education bachelor-level degree. Individuals having been previously awarded with a bachelor degree from any institution of higher education, or having been previously awarded a higher level degree are not part of the desired sample. Respondents under the age of 18 were not be utilized as part of this study.

Respondents came from a multiple higher education institutions in the United States offering bachelor degree programs in both liberal arts and business degree program areas. The participants needed to be familiar with the operations of personal computing and have access to the internet for the purposes of administering the survey. The participating institutions were forward a cover letter and the survey internet link to currently enrolled students in the associated college or schools that pertain to business or liberal arts majors. Additional survey participation was obtained through direct classroom solicitation as convenience and associated access was obtained.

Access

Access to institutions was sought through a direct appeal to administrative faculty at higher education institutions. The researcher directly, or through intermediaries, contacted individuals within colleges or schools at multiple institutions through referrals, professional relationships, and convenience. Contacts at institutions were developed through personal and professional interaction with the researcher. Formal participation of access institutions followed the study approval by the Human Subjects Review Committee (HSRC). The HSRC was made available, upon request, to potential access institutions and referring individuals.

The survey was distributed between March and August to the accessed institutions. The survey instrument was distributed during the final year of undergraduate attendance, with the exact date depending on individual semester or quarter academic calendar schedules of accessed institutions. All responses were collected from institutions within the continental United States. The majority of the responses were from two higher education institutions, one public and one private, located in the Pacific Northwest. A smaller number of survey responses were collected from two private institutions in California, and a smaller number of respondents from the Midwestern United States.

A drawing for one of six \$100 Apple gift cards was offered as an inducement to participate in the survey. Students who fully completed the survey were eligible for a random drawing following the survey period. To participate in the drawing, students needed to voluntarily enter an email contact address at the end of the survey. The administration of the prize drawing was given to a third party who was supplied with the respondent emails. The researcher did not review or peruse the respondent emails, in

accordance with the HSRC, to protect any potential information that might identify respondents to the researcher. Ultimately, 155 valid senior undergraduate responses were obtained from among the participating institutions.

Instrument

The survey instrument utilized was the study is the proprietary DIT-2 to measure the moral judgment levels of participants. The DIT-2 is based on the original DIT developed by Rest (1979). The DIT-2 offers a number of improvements compared to the original DIT including updated ethical dilemmas, improved algorithms of indexing for the ethical reasoning score, and improved methods for detecting unreliable participant responses (Bailey, 2011; Jagger, 2011; Pope, 2005; Rest, et al., 2000). In addition, the DIT-2 scoring can be fully correlated with the original DIT.

The primary score of the of DIT has been the P-score which measures the level of the individual's principled reasoning at postconventional stages 5 and 6 within Kohlberg's levels of CMD theory and is ranked on a scale of 0-99. The DIT-2 is enhanced with an additional scoring statistic labeled N2. The N2 incorporates more information than the P-score but is largely interpreted the same (Bailey, 2011). In addition to ranking the importance of ethical decision factors as with the P-score, the N2 also takes into consideration the prioritization of ratings that participants have developed en route to stated rankings. A detailed listing of the measured scores from the DIT-2 can be found in Table 3.1. The DIT-2 also has a number of experimental scoring indices that will not be utilized as part of this study.

This instrument has been utilized in hundreds of published and unpublished studies and articles (Bailey, 2011; Rest, et al., 1999). Effective utilization of this instrument has also been documented with respondents consisting of higher education undergraduate students (King & Mayhew, 2002; Maeda, et al., 2009; Traiser & Eighmy, 2011). The DIT has reliably demonstrated Cronbach’s α in the upper .70s and low .80s range (CFSED, 2013; Rest, et al., 1999; J. Rest, Narvaez, Thoma, & Bebeau, 1999). Reliability example findings of previous studies involving undergraduate students can be found in Table 3.2.

Table 3.1 – DIT-2 Measured Scores

The score <i>STAGE23</i> reflects the proportion of questionnaire items you selected that are grounded in Stage 2 and Stage 3 considerations. Higher scores indicate a focus on personal interest, direct advantages to you as an actor, and maintaining the approval of authorities. The range is 0 – 95.
The score <i>STAGE4P</i> represents the proportion of items you selected that are grounded in Stage 4 considerations, such as maintaining the established roles and supporting the legal system and a formal organizational structure. People who base their moral reasoning in Stage 4 have moved towards considering society as a whole when making moral decisions. The range is 0 – 95.
The <i>P SCORE</i> measures your use of the post-conventional schema to guide your moral reasoning. It is the proportion of items you selected that appeal to Stages 5 and 6. (If you rated and ranked a statement designated as Stage 5 or 6, this measure would increase.) The range is 0 – 95.
The <i>N2 SCORE</i> is an alternative to the <i>P SCORE</i> measure. Like the <i>P SCORE</i> , it estimates the degree to which you prioritize statements associated with Stages 5 and 6 in Kohlberg’s theory. Both <i>P SCORE</i> and <i>N2 SCORE</i> indices tend to be in the 30s for high school seniors and in the 40s for college students.
The <i>CONSTRAN</i> score indicates whether your moral reasoning sits primarily in one scheme (“consolidated”) or moves between schemas (“transitional”). When a respondent does not clearly distinguish between schemas, it may represent developmental transition. 1 = transitional profile, 2 = consolidated profile.
The <i>TYPE INDICATOR</i> is another way to explain how you base your moral reasoning. In general, as one ages, one is expected to move from consolidated to transitional profiles, and towards higher stages.
The <i>UTILIZER</i> score reports the extent to which the items you selected as the most important match your action choice for that story. A high Utilizer score denotes consistency between your endorsement of items and your final action choice. A score of 0 represents no match, and a score of 1 represents a perfect match.

Note: Adapted from Duke (2012). Defining Issues Test (DIT-2). Retrieved September 28, 2013, from assessment.aas.duke.edu/documents/AbouttheDIT-2.pdf

In addition to the associated dilemmas that are part of the instrument, general demographic questions were solicited from participants. Age, gender, race, education level, political propensities, as well as the number and gender of siblings were demographic questions included in the survey instrument. These demographic questions were mandatory questions that are incorporated as part of the DIT-2 and required to be included as a condition of the instrument usage (CFSED, 2013).

Table 3.2 – DIT Study Reliability Examples

Study	Sample	Reliability
(Nichols and Day, 1982)	25	t = 3.62 p = 0.001
(Bigel, 2002)	371	t = 3.19 p < 0.01
(Bailey, 2011)	43	t = 5.09 p < 0.001

In addition to the required demographic questions, respondents were also asked to identify their undergraduate educational focus or major as classified in Appendix B. The classification of the respondent's educational institution as either secular or religiously affiliated in nature was a second additional question added by the researcher.

The focus of this research was a comparison of liberal arts and business educational backgrounds in terms of a school or college of liberal arts or business; however, specific majors, as listed in Appendix B, were needed in the identification of educational background to ensure consistency across institutions and to account for previous characteristics identified in the literature. For example, economics was a higher education major that is identified in some institutions as a liberal arts focus, and in others as a business focus. Requiring respondents to identify a specific major allowed for a consistent treatment of educational backgrounds as identified in Appendix B.

The literature reviewed above identified potential intervening variables and characteristics, in addition to the general demographic characteristics in the survey, to be taken into consideration during the data analysis. For example, accounting majors have previously been associated with lower CMD scores on the DIT compared to certain other majors (King & Mayhew, 2002; Lampe & Finn, 1992; Ponemon & Glazer, 1990; Pope, 2005; Rest & Narváez, 1994). The requirement for respondents to identify their education major as accounting rather than a general association with a college or school of business allowed the researcher to identify and account for characteristics associated with prior studies.

Identification of the respondents' higher education institution as either religious or secular was included to help account for potential differences identified in previous studies that have involved comparisons between religious and secular higher education institutions (King & Mayhew, 2002; Terenzini & Pascarella, 1991). For example, some studies discussed above identified potential associations of CMD and the nature of the religious affiliation of a particular higher education institution among liberal arts majors (King & Mayhew, 2002). The inclusion of this data element allowed the researcher to address such implications from previous research studies during the analysis of the data collected.

Procedures

The instrument was administered electronically using the SurveyMonkey® tool. Web surveys have been identified as a valid methodology of collecting survey data (Dillman, et al., 1999; Manfreda, et al., 2008; Singh, 2011). The instrument was

distributed to potential participants through a combination of institutional email list serves, direct classroom solicitation, and other electronic bulletin boards or institutional media sites. Institutions were identified by convenience. Participation in the survey was voluntary; therefore, each participant was ultimately self-selecting in their participation upon receiving an email communication notifying potential respondents of their ability to participate in the survey. The instrument was administered to individuals in the senior year, or the summer following graduation, of their educational program as determined by the answer to the demographic education level question included in the survey.

Scoring of the instrument was conducted by the University of Alabama (UofA), who has proprietary ownership of the instrument. Responses were examined for completeness by the researcher prior to sending to UofA for scoring. Respondents were required to have familiarity and operational capability with personal computer operations and access to email and the internet to take the survey. The desired potential respondents to the survey, i.e., college students enrolled in bachelor degree programs, were expected to have the necessary computer skills and internet access required to participate in the study.

Analysis

The Survey results were examined using a statistical differential approach (Morgan, Leech, Gloeckner, & Barrett, 2011). A statistical validations analysis, such as a t-test, was utilized, as needed and appropriate, to assess if a legitimate differential exists in the distribution of results between the liberal arts students and business students. Additional analysis, such as an ANOVA, was utilized to assess if there are any

statistically significant differences that can be attributed to the potentially intervening demographic characteristics identified and collected during the survey. For example, previous studies have suggested that female respondents can exhibit higher levels of CMD compared to males under certain circumstances (King & Mayhew, 2002). As such, demographic factors, such gender were examined within the survey participants to determine if this could have an impact on the statistical nature of a particular outcome.

Students with double or triple majors were allowed to select more than one major. Students who select multiple majors within the same broad category were treated as a major within that specific category. For example, a student that has a double major of management and marketing was considered to fall into the business major category, as identified in Appendix B. Students that have double or triple majors that fall into different categories were not be utilized as part of the survey sample. For example, a student who identified double major areas as marketing and philosophy was not utilized as part of the survey sample.

DIT-2 Measure Assessments

The N2 score was the primary score for determining the level of influence of postconventional schemas in the two major groups. However, each of the measures listed in Table 3.1 was evaluated for statistical validity and examined for supplemental support or contradiction to the results of the N2 scores. The Stage23 and Stage4P can be of importance in the results since they focus on lower CMD schemas, and help to identify any predominant influences outside the postconventional schemas of the N2 scoring.

The last three DIT-2 indices in Table 3.1 consist of consolidation transition, type indicator, and the Utilizer score. These scores or grouped as developmental and profile indices, and are generally intended to examine impacts of educational interventions (Bebeau & Thoma, 2003). No such interventions were part of this research, but these indices were examined for any consistent or contradictory results compared to the developmental level indices.

Each DIT-2 measure was also examined for demographic factor influences. The literature reviewed for this research had previously identified potential differences in measure scoring based on gender and age, so these factors were examined for each score for potential impact on the measure scores.

CHAPTER 4 – RESULTS

The primary purpose of this research is to evaluate if individuals pursuing undergraduate education in liberal arts will demonstrate higher moral judgment than individuals pursuing business degrees. To accomplish this task, senior level undergraduates were administered the Defining Issues Test, Version 2 (DIT-2) research instrument. The DIT-2 utilizes indices that evaluate individual levels of cognitive moral development.

The DIT-2 was administered between February and August of 2014. The primary method of accessing these students was internal email list serves utilized by individual departments of the participating higher education institutions. A smaller number of respondents were accessed by direct classroom solicitation and utilizing social media sites managed by departments within participating institutions or other related public media sights.

A total of 155 valid senior level respondents completed the survey. Responses were considered invalid if they identified their education level as something other than undergraduate senior, had double-majors that fell into both a business and liberal arts category, had more than two majors selected, or had selected one of the other category majors consisting of criminal justice, economics, engineering, or other professional programs or designations.

The scoring of the DIT-2 was performed by the University of Alabama Center for the Study of Ethical Development (UofA). This scoring included the eliminating of any partially completed surveys, as well as identifying completed surveys that UofA

determined to be invalid due to erroneous or unreliable responses to the survey. The UofA utilizes a number of proprietary techniques that incorporate the survey design structure to determine if otherwise completed survey responses yield invalid responses.

Demographics

Table 4.1 below provides a summary of the general demographic data comprising the 155 valid survey responses. As referenced above, all included responses have an identified education level of undergraduate college seniors.

Table 4.1 – Demographic Summary

	Business	Liberal Arts	Combined
Respondents (n)	24	131	155
Gender			
Male	11	46	57
Female	13	85	98
Age			
Range	21 - 35	20 - 66	20 – 66
Mean	24.29	26.63	26.26
Median	23	24	24
Mode	22	21	21
Institution Type			
Secular	18	115	132
Religiously affiliated	5	15	20
No Answer	1	2	3

The gender demographic showed 46% of the business major respondents were male while 35% of the liberal arts major respondents were male. The age demographic statistics do not yield significant differences between the two major groups. While the high range mark for liberal arts majors was sixty-six compared to thirty-five for business

majors, the liberal arts major group consisted of only one individual over sixty years of age, and three additional individuals over fifty years of age.

A detailed listing of the individual majors is contained in Table 4.2 below. This is largely provided for reference purposes only since the general category of business major and liberal arts major is being explored in this research. In each major the listed totals may include counts selected multiple times by individuals reflecting double-majors. For example, while the number of business respondents is 24, the total number of majors selected in the business classification was 28, indicating 4 double-majors within the business classification.

Table 4.2 – Selected Major Counts

Major	Respondents	Classification
Accounting	9	Business
Finance	2	Business
Marketing	2	Business
General business	2	Business
Management	6	Business
Health Care Management	7	Business
Anthropology	1	Liberal arts
Arts	9	Liberal arts
Mathematics	4	Liberal arts
Biology/Chemistry/Physics and other natural sciences	35	Liberal arts
Cultural and ethnic studies	2	Liberal arts
Communications	6	Liberal arts
English	16	Liberal arts
Languages	26	Liberal arts
Environmental sciences	4	Liberal arts
History	18	Liberal arts
Philosophy	13	Liberal arts
Political science	7	Liberal arts
Psychology	13	Liberal arts
Sociology	5	Liberal arts
Other Liberal Arts Major	4	Liberal arts

DIT-2 Scoring

The DIT-2 measured scores, summarized above in Table 3.1, are grouped into two broad categories, developmental indices and the developmental profiles and phase indices (Bebeau & Thoma, 2003). The developmental indices consist of the Personal Interest Schema Score, or Stage 23, the Maintaining Norms Schema Score, or Stage 4P, and the Postconventional Schema Scores, or the P Score and N2 Score. The developmental profile and phase indices consist of consolidation transition, type indicator, and the Utilizer score. Each of the DIT-2 measures is examined for individual validity and characteristics, if any, for support or rejection of the research hypothesis. As mentioned in Chapter 3, the developmental and profile indices are generally intended to examine impacts of educational interventions that are not part of this research (Bebeau & Thoma, 2003), but are included in the analysis for any potentially complimentary or contradictory results of the developmental indices.

It also should be noted that the detailed results below do not focus on the demographic question of institution type. The literature examined for this research suggested a potential influence of the secular or religiously affiliated institution type. However, this demographic did not exhibit statistical results that could rule out a null hypothesis for the developmental indices. For example, a t-Test comparing the secular and religiously affiliated institution types of the respondents yielded p-values of 0.10 and 0.09 for the P Score and N2, respectively.

Developmental Indices

Personal Interest Schema Score (Stage 23)

In review, the Stage 23 score represents the measure of the considerations that focus on personal interest, direct advantages to the individual as an actor, and the individual maintaining the approval of authorities and institutions. Higher scores in this measure indicate a greater focus on the early level personal interest schemas. Table 4.3 summarizes the survey results for this measure for the business and liberal arts major groups.

Table 4.3 – Personal Interest Schema Scores: Major Classification

	Business	Liberal Arts
n	24	131
Mean	30.83	25.24
Median	31	24
Mode	34	24
Standard Deviation	13.6	13.8
<u>Two-tailed distribution statistics:</u>		
t-Stat	1.8	
t-Critical	2.0	
p-value	0.07	

The mean, median, and mode demonstrate a greater influence of personal interest schemas for the business major group compared to the liberal arts group. This result indicates that there is greater influence of the early stage 2 and 3 schemas for the business

major group compared to the liberal arts major group. However, the p-value of 0.07 does not rule out the null hypothesis.

Maintaining Norms Schema (Stage 4P)

The Stage 4P results represent the level of influence of the maintaining norms schema. These influences include maintaining established roles and supporting the legal systems and organizational structures. Individuals in this schema have moved towards societal considerations when making moral decisions. Table 4.4 lists statistics for the Stage 4P results.

Table 4.4 – Maintaining Norms Schema Scores – Major Classification

	Business	Liberal Arts
n	24	131
Mean	34.08	25.98
Median	32	22
Mode	34	20
Standard Deviation	12.7	15.2
<hr/>		
<u>Two-tailed distribution statistics:</u>		
t-Stat	2.8	
t-Critical	2.0	
p-value	0.01	

The major classification comparison p-value of 0.01 indicates that the null hypothesis can be rejected. Business majors exhibit higher scores as demonstrated by the mean, median, and mode statistics. This scoring suggests a greater influence of the stage 4 schema influences for the business major group.

Table 4.5 displays the distribution of the stage 4P results for the combined groups, business majors, and liberal arts majors. The graphs are not standard normal distributions,

but are consistent with a distribution with skews representative of the differences in scoring results between the two groups.

The Pearson correlation between the Stage 4P and major classification is -0.19 suggesting a lower level negative correlation. The Pearson for both gender and age were calculated and determined to be 0.07 and 0.10, respectively. These latter correlations indicated that the influence of gender and age were not significant.

Table 4.5 Maintaining Norms Schema Score Distributions: Major Classification

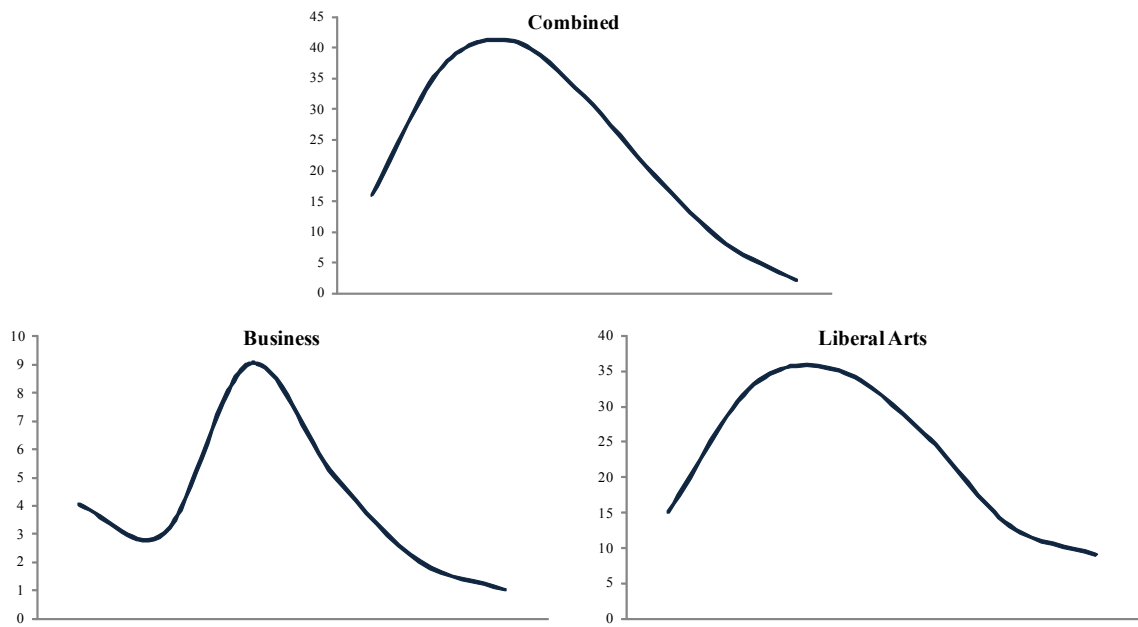


Table 4.6 lists supporting general descriptive statistics for each group and the combined groups.

Table 4.6 Maintaining Norms Schema Descriptive Statistics: Major Classification

	Business	Liberal Arts	Combined
Mean	34.08	25.98	27.24
Standard Error	2.59	1.33	1.21
Median	32	22	24
Mode	44	20	20
Standard Deviation	12.7	15.2	15.1
Sample Variance	161.2	231.4	228.1
Kurtosis	0.6211	1.2704	0.8745
Skewness	0.4025	1.0054	0.8420
Range	56	80	80
Minimum	10	0	0
Maximum	66	80	80

Both major groups exhibit skewness to the right, although a greater level for the liberal arts major group. The descriptive statistics also suggest a tighter grouping of the values for the business major group, as exhibited above in the Table 4.5 graphs. The business major group is showing both a greater influence of the maintaining norms schema and greater consistency within the scoring results.

Postconventional Schema Score (P Score)

The postconventional schema score, or P Score, represents the level to which dilemmas in the survey appeal to stage 5 and stage 6 considerations. The new N2 score is considered the more powerful measure for these stages of development (Bebeau & Thoma, 2003); however, the inclusion of the P Score results are listed to allow for comparison to other research in addition to any implications to the current research project.

Table 4.7 displays statistics for the P Score and major classification. The p-value of 0.00 indicates a rejection of the null hypothesis for comparisons between the two major groups. A Pearson correlation of 0.32 suggests a moderate correlation between the

major classification and the P Score (Laerd, 2014; Newton & Rudestam, 1999). The Pearson for gender and age were 0.01 and 0.06, respectively, indicating no significant influence of these two demographic factors.

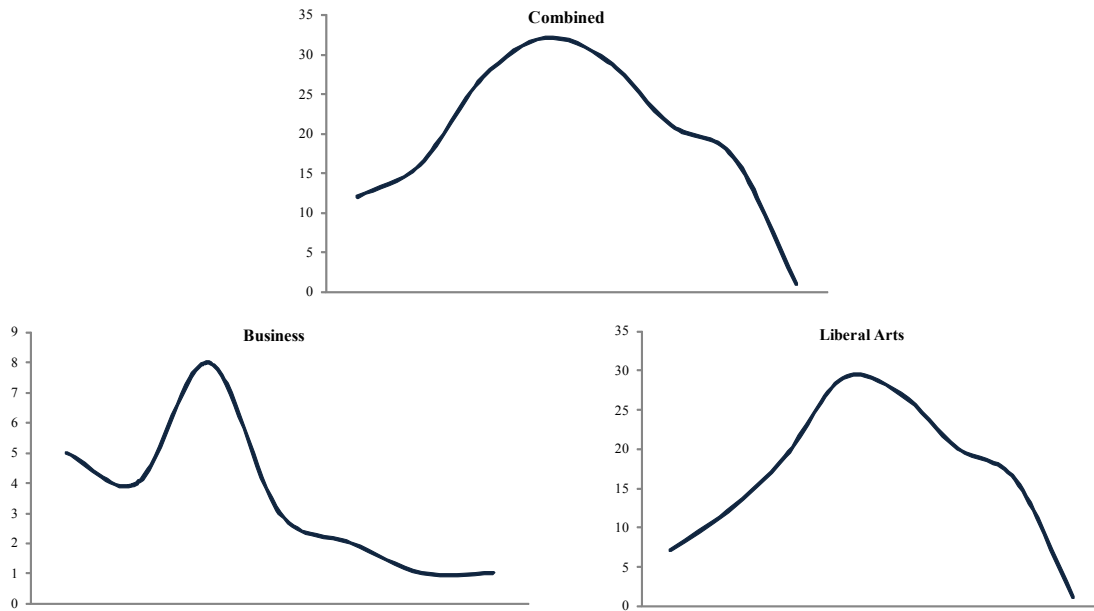
These P Score results suggest significantly greater influences of the later stage postconventional schema influences in the liberal arts major group compared to the business major group. In addition, as asserted above, the demographic factors of age and gender are not significant factors in the scores between the two groups. Based on the P Score results, the liberal arts majors are indicating greater levels of moral judgment compared to the business major group.

Table 4.7 – Postconventional Schema Scores (P Score) – Major Classification

	Business	Liberal Arts
n	24	131
Mean	25.67	42.60
Median	22	42
Mode	22	46
Standard Deviation	18.0	18.4
<hr/>		
<u>Two-tailed distribution statistics:</u>		
t-Stat	4.2	
t-Critical	2.0	
p-value	0.00	

Table 4.8 displays the distribution of the P Score results for the combined groups, business majors, and liberal arts majors. The graphs display skew that is consistent with the results above that differ from a standard normal distribution and supported by the descriptive statistics in Table 4.9.

Table 4.8 Postconventional Schema Score Distributions (P Score): Major Classification



The difference in Kurtosis between the two groups is notable given the magnitude and change in sign for the liberal arts major group compared to the business major group. This statistic suggests a much flatter distribution for the liberal arts major group, while the business major group is more concentrated with its distribution values and around its associated mean. The descriptive statistics also suggest a tighter configuration for the lower scores of the business major group.

Table 4.9 Postconventional Schema Descriptive Statistics (P Score): Major Classification

	Business	Liberal Arts	Combined
Mean	25.67	42.60	39.97
Standard Error	3.67	1.61	1.55
Median	22	42	40
Mode	22	46	22
Standard Deviation	18.0	18.4	19.3
Sample Variance	323.7	339.1	372.3
Kurtosis	0.7393	(0.6829)	(0.8006)
Skewness	0.8023	(0.2123)	(0.1026)
Range	72	78	78
Minimum	0	0	0
Maximum	72	78	78

Postconventional Schema Score (N2)

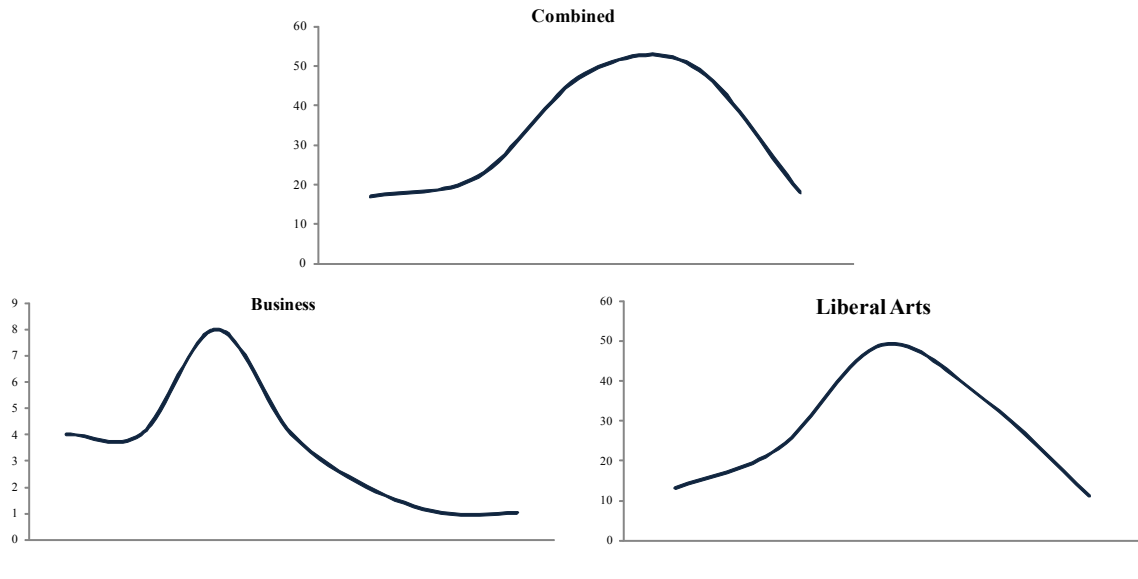
As discussed above, the N2 is considered the more powerful measure of the postconventional schema influences. The validation statistics are displayed below in Table 4.10.

Table 4.10 – Postconventional Schema Scores (N2) – Major Classification

	Business	Liberal Arts
n	24	131
Mean	24.67	40.55
Median	28	42
Mode	N/A	N/A
Standard Deviation	17.8	16.8
<hr/>		
<u>Two-tailed distribution statistics:</u>		
t-Stat	4.1	
t-Critical	2.0	
p-value	0.00	

The p-value of 0.00 indicates a statistically significant comparison between the two major groups. The t Stat is 4.1 with a critical value of 2.0. The null hypothesis is rejected. Additionally, a Pearson correlation of 0.32 suggests a moderately strong correlation between the major classification and the N2 scores, consistent with the P Score results above. The Pearson for age was 0.04 and for gender was 0.02, indicating no significant influence by these two demographic factors. Graphs of the major classification distributions are shown in Table 4.11.

Table 4.11 Postconventional Schema Score Distributions: Major Classification



The general descriptive statistics for the N2 Score are listed below in Table 4.12. The graphs and descriptive statistics mirror the P Score results in that they exhibit a much tighter grouping of the lower N2 Scores of the business major group. The skewness, kurtosis, and range also support a longer right tail shift for the business major group that indicate a small number of business major respondents did exhibit high levels of cognitive moral development, but this is not a valid characteristic representation of this

Table 4.12 Postconventional Schema Descriptive Statistics (N2 Score): Major Classification

	Business	Liberal Arts	Combined
Mean	24.67	40.55	38.09
Standard Error	3.62	1.47	1.43
Median	28	42	39
Mode	N/A	N/A	N/A
Standard Deviation	17.8	16.8	17.9
Sample Variance	315.3	282.4	318.7
Kurtosis	0.2941	(0.4470)	(0.5528)
Skewness	0.4364	(0.3379)	(0.2671)
Range	72.74372831	75.63164125	79.18601323
Minimum	(4)	(1)	(4)
Maximum	68	75	75

major group. The mean and median are a more descriptive representation of this group's scores. The N2 shows much greater levels of the postconventional schema influences within the liberal arts major group compared to the business major group.

Developmental Profile and Phase Indices

Consolidation Transition

This measure indicates whether a subject's moral reasoning is rooted in one scheme or moves between schemas. A transitional profile is indicated by a 1 and a consolidated profile is indicated by a 2. Table 4.13 summarizes the data for the two major groups.

Table 4.13 Consolidation Transition: Major Classifications

	Business	Liberal Arts	Combined
n	24	131	155
Transition	16	62	78
Consolidated	8	69	77

The results show that only a third of the business major group have a consolidated profile compared to over half for the liberal arts major group. However, a t-Test run on the consolidation transition indicator revealed a t Stat of 1.8 with a critical value of 2.0 and p-value of 0.08. The null hypothesis for this data set cannot be rejected.

Type Indicator

The type indicator identifies whether an individual is predominant in a consolidated or transitional profile within a personal interest, maintaining norms, or

postconventional schema (Bebeau & Thoma, 2003). The indicator is identified by a number 1 to 7. Each number represents both schema and transition or consolidation profile. The results are summarized in table 4.14.

Table 4.14 Type Indicator: Major Classifications

	Business	Liberal Arts	Combined
n	24	131	155
1-Personal Interest Schema/Consolidated	2	5	7
2-Personal Interest Schema/Transitional	4	20	24
3-Maintaining Norms Schema/Transitional; Personal Interest Secondary Schema	5	9	14
4-Maintaining Norms Schema/Consolidated	3	9	12
5-Maintaining Norms Schema/transitional; Postconventional Secondary Schema	3	4	7
6-Postconventional Schema/Transitional	4	29	33
7-Postconventional Schema/Consolidated	3	55	58

The Type indicator validation testing reveals a t Stat of 2.8 with a critical value of 2.0, and p=0.01. The null hypothesis is rejected. The validation results are summarized in Table 4.15.

Table 4.15 – Type Indicator – Major Classification

	Business	Liberal Arts
n	24	131
Mean	4.04	5.24
Median	4	6
Mode	3	7
Standard Deviation	1.9	2.0
<u>Two-tailed distribution statistics:</u>		
t-Stat	2.8	
t-Critical	2.0	
p-value	0.01	

Table 4.16 shows the graphs of Type indicator data distributions. The Pearson correlation was 0.21 indicating a low to moderate correlation between the Type indicator

and major classification. The Pearson for gender and age were 0.00 and 0.06, respectively, indicating no significant correlation with these demographic factors. The business major group showed 67% of the respondents were in transition profiles, while the liberal arts major group had 47% in transition profiles. These results are consistent with the Consolidation transition indicator results discussed above.

Table 4.16 - Type Indicator: Major Classification

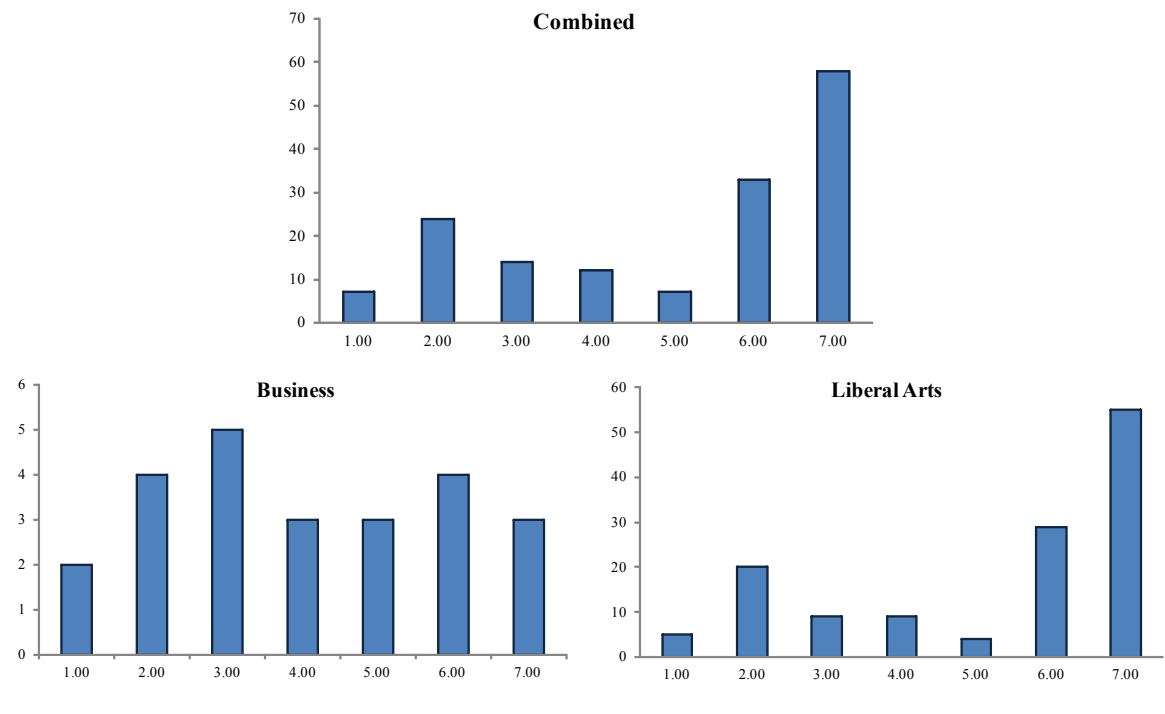


Table 4.17 below gives the general summary statistics for the two major groups and the combined groups. The nature of the scoring for the Type indicator does not lend itself to valuable comparisons to a standard normal distribution, although it does offer insight into developmental stages and influences described above. The mean, median, and mode do suggest higher levels of postconventional types in the liberal arts major group.

Table 4.17 Type Indicator: Major Classification

	Business	Liberal Arts	Combined
Mean	4.04	5.24	5.06
Standard Error	0.39	0.18	0.17
Median	4	6	6
Mode	3	7	7
Standard Deviation	1.9	2.0	2.1
Sample Variance	3.7	4.2	4.3
Kurtosis	(1.2098)	(0.9620)	(1.1821)
Skewness	0.0961	(0.7929)	(0.6207)
Range	6	6	6
Minimum	1	1	1
Maximum	7	7	7

Utilizer Score

The Utilizer Score identifies the importance respondents place on a particular item and the relation to the action chosen by the respondent. This measure attempts to aid in the predictability of behavior associated with moral judgment (Bebeau & Thoma, 2003). Within the data set, 27 responses were not scored by the UofA so a statistical validation was run on the remaining balance of respondent data. Table 4.18 identifies the key validation statistics for this data set.

Table 4.18 – Utilizer Scores – Major Classification

	Business	Liberal Arts
n	22	106
Mean	0.13	0.18
Median	0	0
Mode	N/A	N/A
Standard Deviation	0.2	0.1

Two-tailed distribution statistics:

t-Stat	1.7
t-Critical	2.0
p-value	0.11

The p-value of 0.11, and the associated t-Stat and t-Critical, suggest that the null hypothesis for this data set cannot be rejected.

Hypothesis Evaluation

The purpose of this study was to evaluate whether undergraduate liberal arts majors would exhibit greater levels of ethical decision making than business majors. The DIT-2 was chosen as the instrument to measure the moral judgment of students in the two major classifications. A brief summary of the DIT-2 score examined above is in Table 4.19.

Table 4.19 – DIT-2 Measures Summary

	Null Hypothesis Rejected?	p-value	Major Classification Mean	
			Business	Liberal Arts
<u>Developmental</u>				
Person Interest Schema (Stage 23)	No	0.07	n/a	n/a
Maintaining Norms Schema (Stage 4P)	Yes	0.01	34.08	25.98
Postconventional Schema (P Score)	Yes	0.00	25.67	42.60
Postconventional Schema (N2)	Yes	0.00	24.67	40.55
<u>Developmental Profile and Phase</u>				
Consolidation Transition	No	0.08	n/a	n/a
Type Indicator	Yes	0.01	4.04	5.24
Utilizer Score	No	0.11	n/a	n/a

The P Score and the N2 clearly demonstrate higher levels of the postconventional schema for the liberal arts group. These results are also consistent with the Type indicator results.

Also of significance are the Stage 4 results in the context of the P Score and N2 results. The Stage 4 results clearly indicate a greater level of influence of the maintaining norms schema for the business major group compared to the liberal arts major group. This dynamic suggests that the business major group is not only showing lower levels of postconventional schema influences, but are actually more rooted in the earlier stages of the maintaining norms schema.

In each of these four measures discussed above, the examined demographic factors did not demonstrate significant influence in the results. The levels of cognitive moral development, as determined by the DIT-2, of the liberal arts major group are supporting higher moral judgment levels for this group. These results support the research hypothesis.

Other Findings

The data also offers some potential insight into the indices scored when compared to the general demographic questions. While these factors did not demonstrate a statistically significant influence in the context of the comparison of the two major groups, they are explored in greater detail below.

Age Demographic

In the examination of the survey results above, age did not manifest a significant factor in the differences of the two major groups, as determined by the Pearson value for each developmental measure of the DIT-2. A more detailed examination of the age demographic summarized in Table 4.1 above, does reveal some notable characteristics.

Table 4.20 presents some of the key age characteristics of the Stage 23, or personal interest schema measure, for each major group and the combined respondent population. A regression was run with the dependent variable of Stage 23 scores against the independent variable of age to evaluate the influence of age on the measure scores.

Table 4.20 – Stage 23: Age Demographics

	Business	Liberal Arts	Combined
n	24	131	155
Mean	30.83	25.24	26.10
β	0.91	-0.37	-0.34
R Squared	0.06	0.04	0.03
Adjusted R Squared	0.02	0.03	0.03
p-value	0.23	0.02	0.03
Null hypothesis rejected?	No	Yes	Yes

The business major group data cannot reject the null hypothesis. However, even though both the liberal arts and combined groups do indicate a rejection of the null hypothesis, the regression analysis suggests a limited impact of the age demographic on the Stage 23 results. The R Squared and Adjusted R Squared for the liberal arts and combined groups show a very small explanation of the variance in results of the Stage 23 scores. Furthermore, the beta for the trend lines of these two groups show a very nominal impact to the Stage 23 results for incremental changes in age. These latter results are depicted graphically in Table 4.21, including trend lines for the single regression of Stage 23 results and age.

Table 4.21 – Stage 23 Scatter Graph: Age

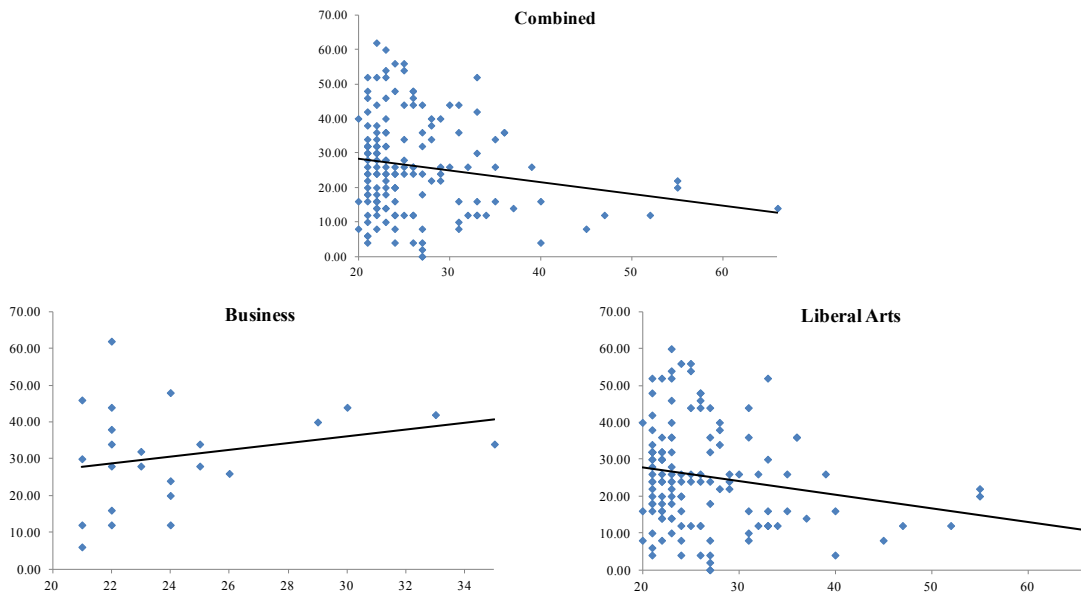


Table 4.22 below displays age demographic statistics for the 4P Scoring from the DIT-2.

Table 4.22 – Stage 4P: Age Demographics

	Business	Liberal Arts	Combined
n	24	131	155
Mean	34.08	25.98	27.24
β	0.16	0.27	0.21
R Squared	0.00	0.02	0.01
Adjusted R Squared	-0.04	0.01	0.00
p-value	0.82	0.13	0.21
Null hypothesis rejected?	No	No	No

With each of the business, liberal arts, and combined major groups the p-value indicated the null hypothesis cannot be rejected. The R Squared and Adjusted R Squared also indicate very little movement of the Stage 4P results can be explained by the

changing values of the age demographic for the three groups. These results suggest that age did not play a statistically significant role in the Stage 4P results of this research.

The age demographic results for the P Score are shown in Table 4.23. In each group category, the p-value is sufficient in size to suggest that the null hypothesis cannot be rejected. Within this context the R Squared and Adjusted R Squared also show that very little of the movement of P Scores can be explained by the changes in the age demographic.

Table 4.23 – P Score: Age Demographics

	Business	Liberal Arts	Combined
n	24	131	155
Mean	25.67	42.60	39.97
β	-1.48	0.13	0.16
R Squared	0.10	0.00	0.00
Adjusted R Squared	0.06	-0.01	0.00
p-value	0.16	0.55	0.47
Null hypothesis rejected?	No	No	No

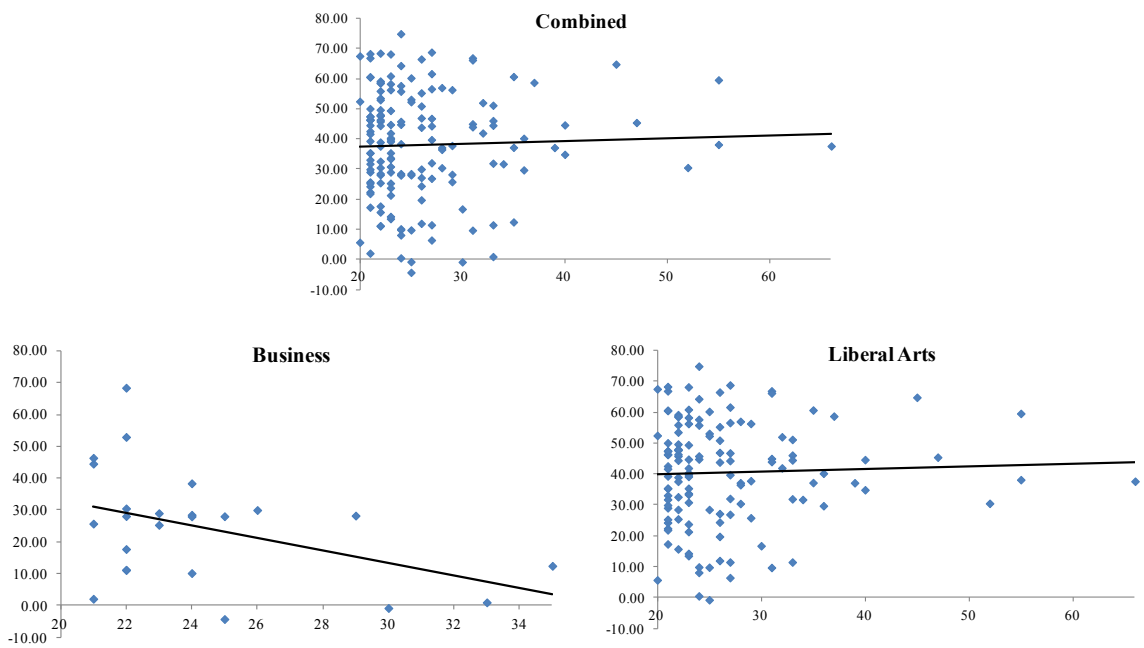
The data for the age demographic and the N2 can be seen in Table 4.24. These statistics present some results contradictory to the P Score.

Table 4.24 – N2: Age Demographics

	Business	Liberal Arts	Combined
n	24	131	155
Mean	24.67	40.55	38.09
β	-1.98	0.08	0.09
R Squared	0.18	0.00	0.00
Adjusted R Squared	0.14	-0.00	-0.00
p-value	0.04	0.66	0.65
Null hypothesis rejected?	Yes	No	No

The business major group p-value rejects the null hypothesis, unlike the liberal arts and combined groups. The R Squared and Adjusted R Squared for the business major group depict a relatively low level of movement of the N2 scores relative to changes in age. The scatter graphs are depicted for all three groups in Table 4.25 below. The liberal arts and combined groups are included for reference even though the p-value for each showed a high probability of random influence in these two groups' results.

Table 4.25 – N2 Scatter Graph: Age



The results above suggest that the age demographic was not a significant factor in the results of the DIT-2 measures. Even in the group measures where the null hypothesis could be rejected, the relative impact of the movement in scores that could be attributed to incremental changes age was small.

Gender Demographic

The significance of gender influences on the results was explored for each of the developmental indices to determine if gender had an impact beyond the low impact demonstrated in the business group and liberal arts groups compared above. The survey respondents were analyzed by the major groups of business, liberal art, and combine major groups, and then examined as subgroups by gender within each of the major category groups.

Table 4.26 displays Stage 23, or personal interest schema, summary results for both the two major groups and the combined group by gender.

Table 4.26 – Stage 23: Gender Demographic

	Business	Liberal Arts	Combined
n	24	131	155
Mean	30.83	25.24	26.10
<u>Gender specific statistics:</u>			
<u>Male:</u>			
n	11	46	57
Mean	26.36	27.22	27.05
Median	28	26	26
Mode	44	26	12
Standard Deviation	13.5	12.4	12.5
<u>Female:</u>			
n	13	85	98
Mean	34.62	24.16	25.55
Median	33	24	24
Mode	28	24	24
Standard Deviation	13.0	14.6	14.7
<u>Two-tailed distribution statistics:</u>			
t-Stat	-1.5	1.3	0.7
t-Critical	2.1	2.0	2.0
p-value	0.14	0.21	0.55

The Stage 23 indicates some inconsistent results across the three groups between the two genders. The means of the male respondents were nominally different across the business, liberal arts, and combined groups, while the female respondents showed a significantly higher mean in the business major group compared to both the liberal arts and combined groups. However, the p-value for all three group gender comparisons cannot rule out a null hypothesis in each comparison.

The Stage 4P age statistics are summarized in Table 4.27 below. These results indicate analogous tendencies indentified in the business and liberal arts group comparisons analyzed above. Both the male and female respondents exhibit greater influences of the maintaining norms schema as measured by the 4P Scores means. The

Table 4.27 – Stage 4P: Gender Demographic

	Business	Liberal Arts	Combined
n	24	131	155
Mean	34.08	25.98	27.24
<u>Gender specific statistics:</u>			
<u>Male:</u>			
n	11	46	57
Mean	33.09	24.04	25.79
Median	30	22	24
Mode	24	20	20
Standard Deviation	14.9	13.1	13.8
<u>Female:</u>			
n	13	85	98
Mean	34.92	27.04	28.08
Median	36	24	25
Mode	42	20	20
Standard Deviation	11.1	16.2	15.8
<u>Two-tailed distribution statistics:</u>			
t-Stat	-0.3	1.3	-0.9
t-Critical	2.1	2.0	2.0
p-value	0.74	0.21	0.35

combined population exhibits an 8.9% higher mean for the female respondents over the male respondents. However, each of the p-values for the business major group, liberal arts major group, and the combined group was of large enough magnitude that the null hypothesis cannot be rejected.

The same comparison analysis for age demographics is presented below for the P Scores in Table 4.28. In each gender subgroup comparison within the major groups, the p-value was of significant magnitude that the null hypothesis could not be ruled out. However, within this context the trend of higher P Scores for liberal arts majors compared to business majors was consistent for both gender subgroups. In addition, the combined group of business and liberal arts majors exhibited only a 0.1% difference between the P Scores of the two genders.

Table 4.28 – P Score: Gender Demographic

	Business	Liberal Arts	Combined
n	24	131	155
Mean	25.67	42.60	39.97
<u>Gender specific statistics:</u>			
<u>Male:</u>			
n	11	46	57
Mean	32.00	42.13	40.18
Median	30	41	38
Mode	36	52	52
Standard Deviation	19.4	17.7	18.3
<u>Female:</u>			
n	13	85	98
Mean	20.31	42.85	39.86
Median	22	44	41
Mode	22	66	22
Standard Deviation	15.4	18.9	19.9
<u>Two-tailed distribution statistics:</u>			
t-Stat	1.6	-0.2	0.1
t-Critical	2.1	2.0	2.0
p-value	0.12	0.83	0.92

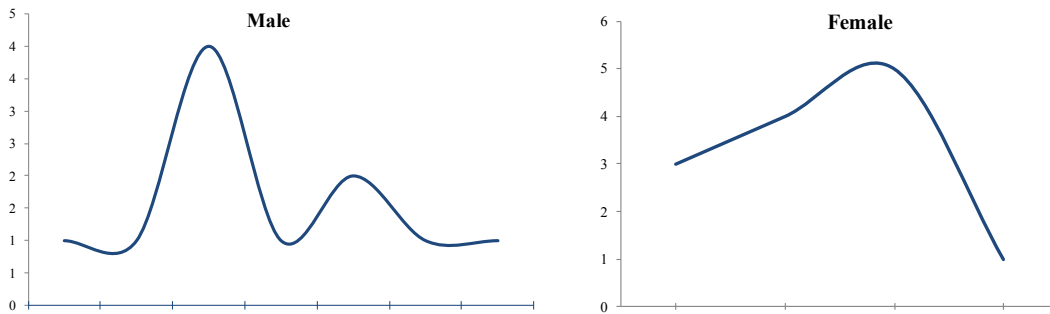
The N2 results, summarized in Table 4.29, offer a result of note for the business major group. Both the liberal art group and combined group p-values do not reject the null hypothesis. The p-value for the business major group of 0.03 suggests a rejection of the null hypothesis, and has a mean for the male respondents of 33.39 compared to 17.29 for the female respondents.

Table 4.29 – N2: Gender Demographic

	Business	Liberal Arts	Combined
n	24	131	155
Mean	24.67	40.55	30.08
<u>Gender specific statistics:</u>			
<u>Male:</u>			
n	11	46	57
Mean	33.39	38.56	37.56
Median	28	40	38
Mode	N/A	N/A	N/A
Standard Deviation	18.7	17.2	17.5
<u>Female:</u>			
n	13	85	98
Mean	17.29	41.63	38.40
Median	12	44	39
Mode	N/A	N/A	N/A
Standard Deviation	13.6	16.6	18.1
<u>Two-tailed distribution statistics:</u>			
t-Stat	2.4	-1.0	-0.3
t-Critical	2.1	2.0	2.0
p-value	0.03	0.33	0.78
Null hypothesis rejected?	Yes	No	No

The graphs of the N2 result distributions can be found in Table 4.30 by gender.

Table 4.30 – N2 Scatter Graph: Gender



Key descriptive statistics for the business major group by gender can be found in Table 4.31. The skewness of the female results indicates a curve shifted to the right of the mean compared to the opposite sign of the skewness for the male results. In addition, the male results show a much greater range than the female results within their minimum and maximum values.

Table 4.31 - N2 Results Business Group: Gender

	Male	Female
Mean	33.39	17.29
Standard Error	5.65	3.76
Median	28	12
Mode	N/A	N/A
Standard Deviation	18.7	13.6
Sample Variance	350.6	183.6
Kurtosis	0.5179	-1.3468
Skewness	0.1643	-0.0908
Range	69.27	42.68
Minimum	-0.85	-4.32
Maximum	68.42	38.37

The differences of the mean in gender results within the business major group, while exhibiting a favorable p-value, may not be definitive given the nature of the

distribution of the scores. The potential limitations for these results will be discussed in Chapter 5.

The generalized results of the analysis of the gender demographic do not support any significant influence upon the results of the DIT-2 scoring. Taking into account the anomalous results of the N2 business major group, the balance of the statistical results for each measure could not reject the null hypothesis.

Institution Type

The literature examined for this research suggested that the secular or non-secular nature of a higher education institution might have an impact on the scoring of the DIT-2 measures. Respondents were asked to self-identify the nature of their institution as either secular or religiously affiliated. This question was optional and three of the analyzed respondents did not choose to classify their responses by one of the two categories. These three responses were not included in the summery statistics below.

Table 4.32 offers key statistics for the Stage 23 measure responses from the DIT-2 for this research. These results are displayed for business major, liberal arts major, and the combined group, and further divided into the secular and religiously affiliated groups.

In each of the two major groups and the combined group the respondents selecting a religiously affiliated orientation for their institution demonstrated greater mean scores for the Stage 23 schema scores, indicating a greater influence of the personal interest stage schemas. The median and modes followed this tendency with either equal or greater scores for the secular subgroups. However, both the liberal arts major and the

combined group demonstrated p-values such that the null hypothesis could not be ruled out for these two groups for this demographic.

Table 4.32 – Stage 23: Institution Type Demographic

	Business	Liberal Arts	Combined
n	23	129	152
Mean	30.70	25.27	26.09
<u>Institution type statistics:</u>			
<u>Secular:</u>			
n	18	114	132
Mean	35.00	25.40	26.71
Median	34	24	26
Mode	28	12	12
Standard Deviation	11.8	14.4	14.4
<u>Religiously Affiliated:</u>			
n	5	15	20
Mean	15.2	24.27	22.0
Median	12	24	21
Mode	12	32	30
Standard Deviation	9.0	10.2	10.5
<u>Two-tailed distribution statistics:</u>			
t-Stat	4.0	0.4	1.8
t-Critical	2.3	2.1	2.0
p-value	0.00	0.70	0.09
Null hypothesis rejected?	Yes	No	No

The Stage 4P results summary for the secular and religiously affiliated criteria can be found in Table 4.33. The influence of the maintaining norms schema yields inconsistent results within the respondent population. However, the high p-values indicates that there is a significant probability of randomness influencing the results, and the null hypothesis cannot be rejected.

Table 4.33 – Stage 4P: Institution Type Demographic

	Business	Liberal Arts	Combined
n	23	129	152
Mean	34.00	25.83	27.07
<u>Institution type statistics:</u>			
<u>Secular:</u>			
n	18	114	132
Mean	33.44	25.95	26.97
Median	32	22	24
Mode	44	20	20
Standard Deviation	10.3	15.4	15.0
<u>Religiously Affiliated:</u>			
n	5	15	20
Mean	36.00	24.93	27.7
Median	32	22	24
Mode	N/A	10	10
Standard Deviation	21.7	14.2	16.5
<u>Two-tailed distribution statistics:</u>			
t-Stat	-0.3	0.3	-0.2
t-Critical	2.6	2.1	2.1
p-value	0.81	0.80	0.85
Null hypothesis rejected?	No	No	No

The P Score results are summarized in Table 4.34. In the business major group, liberal arts major group, and the combined major group the secular subgroup exhibits consistently equal or lower means, medians, and modes. This would indicate a greater level of postconventional schema influences on the religiously affiliated identifying respondents compared to the secular identifying respondents.

The p-value for the business major group is sufficiently small to reject the null hypothesis. However, the liberal arts major group and the combined group cannot reject the null hypothesis. These p-values limit a valuable comparison across or within the major groups or the combined respondents.

Table 4.34 – P Score: Institution Type Demographic

	Business	Liberal Arts	Combined
n	23	129	152
Mean	26.70	42.78	40.34
<u>Institution type statistics:</u>			
<u>Secular:</u>			
n	18	114	132
Mean	21.67	42.33	39.52
Median	22	42	38
Mode	22	46	22
Standard Deviation	13.9	19.0	19.7
<u>Religiously Affiliated:</u>			
n	5	15	20
Mean	44.8	46.13	45.8
Median	44	44	44
Mode	N/A	58	36
Standard Deviation	19.3	13.9	14.9
<u>Two-tailed distribution statistics:</u>			
t-Stat	-2.5	-0.9	-1.7
t-Critical	2.6	2.1	2.0
p-value	0.05	0.35	0.10
Null hypothesis rejected?	Yes	No	No

The N2 scores are summarized below in Table 4.35 for the institution type. In each of the major groups and the combined groups the secular institution type respondents demonstrated lower influences in postconventional influences. However, the p-values in each case were sufficiently large so that the null hypothesis could not be rejected.

Table 4.35 – N2: Institution Type Demographic

	Business	Liberal Arts	Combined
n	23	129	152
Mean	25.93	40.77	38.53
<u>Institution type statistics:</u>			
<u>Secular:</u>			
n	18	114	132
Mean	19.91	40.58	37.76
Median	27	43	39
Mode	N/A	N/A	N/A
Standard Deviation	11.9	17.3	18.1
<u>Religiously Affiliated:</u>			
n	5	15	20
Mean	47.60	42.29	43.61
Median	46	39	45
Mode	N/A	N/A	N/A
Standard Deviation	15.4	12.4	13.0
<u>Two-tailed distribution statistics:</u>			
t-Stat	-3.7	-0.5	-1.8
t-Critical	2.6	2.1	2.0
p-value	0.81	0.64	0.09
Null hypothesis rejected?	No	No	No

Summary

The demographics of age, gender, and institution type offer inconsistent and sometimes contradictory results. The majority of the comparisons within the demographic categories cannot reject the null hypothesis; there are results that do reject the null hypothesis that seem inconsistent. For example, the Stage 23 age demographic offers a sound rejection of the null hypothesis for the liberal arts major and combined groups, but not for the business major group. At the same time, the opposite results are yielded for the N2 age demographic.

These inconsistent statistical comparison results make it difficult to offer definitive trends or comparisons. This concern is discussed in greater length in the limitation section of this research.

However, the demographic comparison results do not present any contradictions to the greater levels of moral judgment found for the liberal arts major group. Furthermore, it may not be unexpected that a demographic such as age does not offer a material impact on the results of this research given the small variation of the mean, median, and mode of the respondents. Similarly, while gender differences have been determined to have an impact in some research projects, this demographic does not always yield significant differences in the DIT-2 results (Bebeau & Thoma, 2003).

CHAPTER 5 – DISCUSSION

Conclusions

This research project was to investigate the relationship between moral judgment and educational background. To this end, the research examined the results from administering the DIT-2 to undergraduate graduating seniors. The results summarized in Table 4.19 demonstrated a significant difference in key indicators from the DIT-2 results, dramatically shown by the N2 and Stage 4P comparisons between the liberal arts and the business major groups. The liberal arts major group clearly exhibited significantly greater levels of moral judgment compared to the business major group.

The N2 measure is perhaps the most frequently examined measurement in the literature pertaining to DIT-2 research studies. The N2 measures levels of postconventional schema influences, the highest schema of ethical decision making measured for the DIT-2. Participants scoring higher in this measure are determined to have a greater level of cognitive moral development than those scoring lower. This research study demonstrated that liberal arts majors had significantly higher N2 scores, and thereby can be said to have exhibited greater levels of moral judgment. The mean N2 score for business majors and liberal arts majors was 24.67 and 40.55, respectively. This mean comparison amounts to a 64% higher level of postconventional schema influences for the liberal arts major group.

These results were further bolstered by the greater levels of the Stage 4P scores for business majors. While the N2 measures the postconventional thinking influences, the

Stage 4P is concerned with the lower level schema of maintaining norms. Those scoring higher in Stage 4P, and therefore influenced by the maintaining norms schema, are considered to have a lower level of cognitive moral development than those scoring lower in this measure. The business major group demonstrated significantly higher levels of the Stage 4P compared to the liberal arts major group. The business major group mean for the Stage 4P was 34.08 compared to the liberal arts major group mean of 25.98. This 31.2% higher mean score suggests that the business major group is much more influenced by the maintaining norms schema.

The business major group consistently demonstrated lower levels of moral judgment compared to the liberal arts major group. Furthermore, the demographic factors of age, gender, and institution type were not found to have any significant impact on the scoring of the two major groups. The major type was the most salient factor associated with the level of moral judgment among this research study's respondents.

The N2 scoring results for the business major group are consistent with previous research results investigating business majors. For example, a 2011 study of over 200 general business majors (Traiser & Eighmy, 2011) found that senior level general business students from public institutions averaged 27.49 while private institutions scores average 29.32. Both the 2011 study and this research project found no significant difference between male and female student scores of the N2. In addition, the 2011 study found that the difference between the public and private school results was not significant.

The slightly lower N2 scores of business majors for the current research project compared to the 2011 study could be explained by the inclusion of accounting students in

the business major group, given the previously identified characteristics of accounting majors in the literature. However, there was not a statistically significant number of accounting majors in the current study to confirm that determination.

The N2 and Stage 4P results from this research suggest a confirmation of the hypothesis that liberal arts majors will exhibit greater levels of moral judgment as measured by the DIT-2. These results may offer insight or influence into the nature of educational programs. There is also potential to influence the hiring or organizational development practices in the public and private sectors when ethical considerations are important to an organization.

The literature examined for this research project has shown a growing trend of hiring liberal arts majors into traditional business roles to take advantage of the perceived greater levels of communication skills, problem solving, and flexibility. This research confirms that a greater level of moral judgment, or ethical decision-making, may also be attributed to liberal arts majors. This added characteristic of greater moral judgment offers an additional tool to organizational managers to develop the needed characteristic for successful high performance organizations.

These results also have implications for higher education institutions. Potentially acute differences in moral judgment among different educational focuses can raise questions as to the nature and efficacy of ethical educational programs across disciplines.

Limitations

The relatively small sample size of the business major group is a potential limitation. While the sample of each major group proved statistically significant for the purposes of this study's comparison of key measures between groups, neither group may be a statistical representation of the general undergraduate senior population despite results consistent with prior research.

The business major group contains nine accounting majors, or 38%, of the business major group respondents. The small sample size of the business major group did not allow for statistically valid individual business major comparisons. Prior research has identified accounting majors and professionals as having lower moral judgment scoring compared to other educational focuses or professions (Jeffrey, 1993; Pope, 2005; Rest & Narváez, 1994). However, comparison to prior research (Traiser & Eighmy, 2011) involving general business majors found results not dissimilar to the current research project.

The self-selection of participation in the study by the respondents across multiple higher education institutions could introduce potential variations within the results. Individual factors that might cause students to be more likely to participate could not be identified within the survey distribution methodology.

Similarly, environmental factors during the completion of the survey instrument by the respondent could not be observed. Different environmental settings that could have the potential to influence participants, if any, could not be identified.

This study does not make evaluations or comparisons among the ethical educational programs of participating institutions. While each solicited institution did assert to have ethical education as part of their overall programs, the specific nature of

this educational component was not examined. Different educational ethical standards among the participating institutions could potentially impact the results of this study. Ideally, differences in the respondents could have been mitigated further if the participation had been limited to a single institution of higher education.

Another limitation for the responses is the institution type of secular or religiously affiliated. This selection was also left to the subjective selection of the respondent and could potentially have varied responses depending on the individual higher education institution and the historical and contemporary status of that institution.

A condition of participation for both participating students and the higher education institutions was anonymity. Therefore, individual responses could not be tied back to specific institutions or specific respondents. The single element of potential individual identification was a voluntarily submitted email for participation in the incentive prize drawing. This information was separated from the other survey results and given to a neutral third party for awarding of the prize drawing and not utilized by the researcher.

Implication for Organizations

This research offers some intriguing insights into the nature of the moral judgment of different educational disciplines. The literature reviewed for this research project suggests organizations and managers are exhibiting a growing interest in the skill sets associated with liberal arts majors that are perceived to be less pronounced in business majors. At the same time, this literature demonstrates a growing interest in organizational ethics and ethical decision making within organizations. Organizational performance is increasingly linked to ethical organizational climates and behaviors.

The results of this research suggest that liberal arts majors offer a resource for facilitating greater ethical decision making and conduct within organizations.

Organizations seeking to augment or implement greater ethical organizational climates or practices can utilize this research to implement such practices. The greater influence of higher level stage schemas demonstrated by this research can offer valuable policy or practice methodologies in the prioritization of employee characteristics within the goal of greater ethical decision making within organizations.

A sustained policy of integrating liberal arts majors into traditional business roles can allow for the controlled and monitored development of ethical practices and cultures. An added advantage of the major category in hiring practices is that it is not considered a protected class for the purposes of employment hiring practices (DOL, 2014).

Demographic categories such as age and gender, identified in the literature as being potential identified characteristics impacting moral judgment levels, are identified as restricted categories that cannot generally be utilized criteria for organizations' hiring practices. Education level and background is a routinely used criterion in hiring practices.

This research can also offer organizations or hiring managers insight into evaluating ongoing organizational ethical performance within organizations or organizational groups. If an organization may be of concern due to identifiable ethical performance considerations, the educational background of individuals within that organization or group is an additional tool available to the organization for possible changes to the organizational education demographics. For example, the introduction of individuals with a liberal arts major background into a group with a heavy business major focus may potentially assist in the change of the organizational climate of that group.

This research does not suggest that liberal arts majors are a panacea for organizations or hiring managers that are trying to maintain or develop ethical climates or ethical decision making practices. However, the research does suggest that liberal arts majors can offer usable criteria that can be utilized in the development of desired organizational cultures and practices. The methodology for the integration of this liberal art major resource is beyond the scope of this research.

Implications for Higher Education Institutions

This research presents a number of concerns and challenges for higher education institutions. Notwithstanding the limitations discussed above, identifying the elements within the control and purview of higher education that might impact or mitigate the differences identified by this research is of key importance.

Higher education institutions may be faced with predisposed characteristics attributed to undergraduate students that can impact the effectiveness of ethical education. This research does not explore causality factors within or outside the coursework of undergraduate education. However, the difference in moral judgment identified between the major groups does suggest that institutions may need to place greater attention to educational programs designed to create or enhance ethical awareness and practices. The traditional emphasis of moral developmental in higher education discussed in the literature above could be reinvigorated given the paralleled interest that business organizations are placing on ethical performance and characteristics.

The growing interest in businesses and other organizations of hiring liberal arts majors for traditional business roles, because of the perception of critical thinking, communication, and problem-solving skills, becomes of greater importance when ethical

decision making is also an associated characteristic. The literature suggests that the level to which business education needs to be supplemental within the liberal arts core education, such as the business boot camps, or should become part of the core education, is a valuable consideration for higher education institutions. Additionally, core business programs may need to place greater emphasis on the nature of ethical development and instruction.

This latter ethical emphasis on the ethical educational aspects of business program curriculum needs a level of serious evaluation within and among institutions. The need to further enhance and develop moral judgment within business program students needs to be a critical function given the historical implications to individuals and society identified in the literature above.

The limitations of this research offer challenges for higher education in a context of causality. For example, if a predisposition exists of certain individuals for moral development levels that also influence the selection of an area of undergraduate study, there may be additional elements that need to be considered in curriculum design that are not fully identified or vetted. Future research will be critical to identify characteristics or potential demographics that will enable an effective application of the implications of the results of this research. The dramatically lower levels of moral judgment levels of business majors revealed by this research could suggest a need for interventional curriculum that could foster higher moral judgment outcomes.

Higher education institutions will also need to place greater attention to the moral development of their business program students if the hiring trends identified in the literature become a greater influence on the marketplace of higher education. If moral

development continues to be of greater importance in the selection of an institution or program, the ability to influence and develop the capacity for moral judgment within program graduates can become of significant importance. Market influences may provide additional incentive for higher education institutions to be able to demonstrate greater moral judgment in their program graduates.

Recommendations for Future Research

This research has offered insight into possible influences or determinants of ethical decision making. The incorporation of individuals with liberal arts educational backgrounds into a business organization needs to be of interest to both business professionals and researchers based on the results of this research project.

The results of this research project show some dramatic differences but do not definitively identify a causal relationship. Future research needs to identify causal relationships that can support or explain the characteristics identified by this study. For example, the data shows a greater level of moral judgment for liberal arts majors compared to business majors, but the extent to which these observations are wholly explained by higher education influences, some other intervening or pre-existing characteristic, or environmental causes remains an area for continued research.

The propensity for acting on the greater levels of moral judgment is also unclear from this research. The Utilizer score for this research was not statistically significant. Whether the greater demonstrated levels of moral judgment will translate into a propensity for action for the liberal arts group at a greater or lesser extent also can be explored in greater detail.

The limitations of this research project offer opportunities to hone the results discussed above. Longitudinal studies across the major group disciplines at individual higher education institutions could enable researchers to mitigate many of the limitations identified above. Such a study will enable researchers to establish beginning norms and track changes in cognitive moral development within specific educational programs over time.

Summary

The trends in hiring liberal arts majors into organizational roles traditionally held by individuals with business backgrounds, combined with an increased focus on the importance of ethics in high performance organizations, make the results of this research project important to managers and organizational leaders. Furthermore, the importance of increasing the understanding of ethical drivers and associated impacts drives the importance for academia and other researchers.

These research results showed a dramatic difference in the ethical decision making tendencies between liberal arts majors and business majors. This difference helps stress the importance of greater understanding of cognitive moral development for higher education institutions. Further research into the causal and dependent relationships behind the differences identified in this research will aid in the development of the role and appropriate nature of ethical education.

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APPENDIX A – Survey Tool

Defining Issues Test, Version 2 (with additional research study questions)

College Senior Issues Test Survey

1. Informed Consent

Respondents who complete all parts the survey will be given the option of entering the prize drawing.

The survey begins with an example, then five dilemmas and a few demographic questions.

By clicking "Next" you indicate your voluntary consent to participate in this survey.

College Senior Issues Test Survey**2. Defining Issues Test-2**

This questionnaire is concerned with how you define the issues in a social problem. Several stories about social problems will be described. After each story, there will be a list of questions. The questions that follow each story represent different issues that might be raised by the problem. In other words, the questions/issues raise different ways of judging what is important in making a decision about the social problem. You will be asked to rate and rank the questions in terms of how important each one seems to you.

PLEASE TRY TO FINISH THE QUESTIONNAIRE IN ONE SITTING.

College Senior Issues Test Survey

3. EXAMPLE of the task

Imagine you are about to vote for a candidate for the Presidency of the United States. Before you vote, you are asked to rate the importance of five issues you could consider in deciding who to vote for. Rate the importance of each item (issue) by checking the appropriate box.

***1. Rate the following issues in terms of importance.**

	Great	Much	Some	Little	No
1. Financially are you personally better off now than you were four years ago?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Does one candidate have a superior moral character?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Which candidate stands the tallest?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Which candidate would make the best world leader?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Which candidate has the best ideas for our country's internal problems, like crime and health care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Note. Some items may seem irrelevant or not make sense (as in item #3). In that case, rate the item as "NO".

After you rate all of the items you will be asked to RANK the top four items in terms of importance. Note that it makes sense that the items you RATE as most important should be RANKED as well. So if you only rated item 1 as having great importance you should rank it as most important.

***2. Consider the 5 issues above and rank which issues are the most important.**

	1	2	3	4	5
Most important item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Again, remember to consider all of the items before you rank the four most important items and be sure that you only rank items that you found important.

Note also that before you begin to rate and rank items you will be asked to state your preference for what action to take in story.

Thank you and you may begin the questionnaire!

College Senior Issues Test Survey

4. Story 1

Famine

The small village in northern India has experienced shortages of food before, but this year's famine is worse than ever. Some families are even trying to feed themselves by making soup from tree bark. Mustaq Singh's family is near starvation. He has heard that a rich man in his village has supplies of food stored away and is hoarding food while its price goes higher so that he can sell the food later at a huge profit. Mustaq is desperate and thinks about stealing some food from the rich man's warehouse. The small amount of food that he needs for his family probably wouldn't even be missed.

*** 1. What should Mustaq Singh do? Do you favor the action of taking food?**

Should take the food
 Can't decide
 Should not take the food

*** 2. Rate the following issues in terms of importance.**

	Great	Much	Some	Little	No
1. Is Mustaq Singh courageous enough to risk getting caught for stealing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Isn't it only natural for a loving father to care so much for his family that he would steal?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Shouldn't the community's laws be upheld?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Does Mustaq Singh know a good recipe for preparing soup from tree bark?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Does the rich man have any legal right to store food when other people are starving?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Is the motive of Mustaq Singh to steal for himself or to steal for his family?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. What values are going to be the basis for social cooperation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Is the epitome of eating reconcilable with the culpability of stealing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Does the rich man deserve to be robbed for being so greedy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Isn't private property an institution to enable the rich to exploit the poor?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Would stealing bring about more total good for everybody concerned or wouldn't it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Are laws getting in the way of the most basic claim of any member of a society?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 3. Consider the 12 issues above and rank which issues are the most important.**

	1	2	3	4	5	6	7	8	9	10	11	12
Most important item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

College Senior Issues Test Survey

5. Story 2

Reporter

Molly Dayton has been a news reporter for the *Gazette* newspaper for over a decade. Almost by accident, she learned that one of the candidates for Lieutenant Governor for her state, Grover Thompson, had been arrested for shop-lifting 20 years earlier. Reporter Dayton found out that early in his life, Candidate Thompson had undergone a confused period and done things he later regretted, actions which would be very out-of-character now. His shoplifting had been a minor offense and charges had been dropped by the department store. Thompson has not only straightened himself out since then, but built a distinguished record in helping many people and in leading constructive community projects. Now, Reporter Dayton regards Thompson as the best candidate in the field and likely to go on to important leadership positions in the state. Reporter Dayton wonders whether or not she should write the story about Thompson's earlier troubles because in the upcoming close and heated election, she fears that such a news story could wreck Thompson's chance to win.

***1. Do you favor the action of reporting the story?**

Should report the story Can't decide Should not report the story

***2. Rate the following issues in terms of importance.**

	Great	Much	Some	Little	No
1. Doesn't the public have a right to know all the facts about all the candidates for office?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Would publishing the story help Reporter Dayton's reputation for investigative reporting?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. If Dayton doesn't publish the story wouldn't another reporter get the story anyway and get the credit for investigative reporting?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Since voting is such a joke anyway, does it make any difference what reporter Dayton does?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Hasn't Thompson shown in the past 20 years that he is a better person than his earlier days as a shop-lifter?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. What would best service society?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. If the story is true, how can it be wrong to report it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. How could reporter Dayton be so cruel and heartless as to report the damaging story about candidate Thompson?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Does the right of "habeas corpus" apply in this case?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Would the election process be more fair with or without reporting the story?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Should reporter Dayton treat all candidates for office in the same way by reporting everything she learns about them, good and bad?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Isn't it a reporter's duty to report all the news regardless of the circumstances?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

College Senior Issues Test Survey

***3. Consider the 12 issues you rated above and rank which issues are the most important.**

	1	2	3	4	5	6	7	8	9	10	11	12
Most important item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

College Senior Issues Test Survey

6. Story 3

School Board

Mr. Grant has been elected to the School Board District 190 and was chosen to be Chairman. The district is bitterly divided over the closing of one of the high schools. One of the high schools has to be closed for financial reasons, but there is no agreement over which school to close. During his election to the School Board, Mr. Grant had proposed a series of "Open Meetings" in which members of the community could voice their opinions. He hoped that dialogue would make the community realize the necessity of closing one high school. Also he hoped that through open discussions, the difficulty of the decision would be appreciated, and that the community would ultimately support the school board decision. The first Open Meeting was a disaster. Passionate speeches dominated the microphones and threatened violence. The meeting barely closed without fist-fights. Later in the week, school board members received threatening phone calls. Mr. Grant wonders if he ought to call off the next Open Meeting.

***1. Do you favor calling off the next Open Meeting**

Should call off the next open meeting
 Can't decide
 Should have the next open meeting

***2. Rate the following issues in terms of importance.**

	Great	Much	Some	Little	No
1. Is Mr. Grant required by law to have Open Meetings on major school board decisions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Would Mr. Grant be breaking his election campaign promises to the community by discontinuing the Open Meetings?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Would the community be even angrier with Mr. Grant if he stopped the Open Meetings?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Would the change in plans prevent scientific assessment?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. If the school board is threatened, does the chairman have the legal authority to protect the Board by making decisions in closed meetings?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Would the community regard Mr. Grant as a coward if he stopped the open meetings?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Does Mr. Grant have another procedure in mind for ensuring that divergent views are heard?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Does Mr. Grant have the authority to expel troublemakers from the meetings or prevent them from making long speeches?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Are some people deliberately undermining the school board process by playing some sort of power game?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. What effect would stopping the discussion have on the community's ability to handle controversial issues in the future?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Is the trouble coming from only a few hotheads, and is the community in general really fair-minded and democratic?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. What is the likelihood that a good decision could be made without open discussion from the community?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

College Senior Issues Test Survey

***3. Consider the 12 issues you rated above and rank which issues are the most important.**

	1	2	3	4	5	6	7	8	9	10	11	12
Most important item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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7. Story 4

Cancer

Mrs. Bennett is 62 years old, and in the last phases of colon cancer. She is in terrible pain and asks the doctor to give her more pain-killer medicine. The doctor has given her the maximum safe dose already and is reluctant to increase the dosage because it would probably hasten her death. In a clear and rational mental state, Mrs. Bennett says that she realizes this; but she wants to end her suffering even if it means ending her life. Should the doctor give her an increased dosage?

***1. Do you favor the action of giving more medicine?**

Should give Mrs. Bennett an increased dosage to make her die. Can't decide Should not give her an increased dosage

***2. Rate the following issues in terms of importance.**

	Great	Much	Some	Little	No
1. Isn't the doctor obligated by the same laws as everybody else if giving an overdose would be the same as killing her?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Wouldn't society be better off without so many laws about what doctors can and cannot do?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. If Mrs. Bennett dies, would the doctor be legally responsible for malpractice?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Does the family of Mrs. Bennett agree that she should get more painkiller medicine?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Is the painkiller medicine an active hallucinogenic drug?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Does the state have the right to force continued existence of those who don't want to live?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Is helping to end another's life ever a responsible act of cooperation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Would the doctor show more sympathy for Mrs. Bennett by giving the medicine or not?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Wouldn't the doctor feel guilty from giving Mrs. Bennett so much drug that she died?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Should only God decide when a person's life should end?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Shouldn't society protect everyone against being killed?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Where should society draw the line between protecting life and allowing someone to die if the person wants to?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***3. Consider the 12 issues you rated above and rank which issues are the most important.**

	1	2	3	4	5	6	7	8	9	10	11	12
Most important item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

College Senior Issues Test Survey

8. Story 5

Demonstration

Political and economic instability in a South American country prompted the President of the United States to send troops to "police" the area. Students at many campuses in the U.S.A. have protested that the United States is using its military might for economic advantage. There is widespread suspicion that big oil multinational companies are pressuring the President to safeguard a cheap oil supply even if it means loss of life. Students at one campus took to the streets in demonstrations, tying up traffic and stopping regular business in the town. The president of the university demanded that the students stop their illegal demonstrations. Students then took over the college's administration building, completely paralyzing the college. Are the students right to demonstrate in these ways?

***1. Do you favor the action of demonstrating in this way?**

Should continue demonstrating in these ways
 Can't decide
 Should not continue demonstrating in these ways

***2. Rate the following issues in terms of importance.**

	Great	Much	Some	Little	No
1. Do the students have any right to take over property that doesn't belong to them?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Do the students realize that they might be arrested and fined, and even expelled from school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Are the students serious about their cause or are they doing it just for fun?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. If the university president is soft on students this time, will it lead to more disorder?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Will the public blame all students for the actions of a few student demonstrators?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Are the authorities to blame by giving in to the greed of the multinational oil companies?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Why should a few people like Presidents and business leaders have more power than ordinary people?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Does this student demonstration bring about more or less good in the long run to all people?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Can the students justify their civil disobedience?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Shouldn't the authorities be respected by students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Is taking over a building consistent with principles of justice?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Isn't it everyone's duty to obey the law, whether one likes it or not?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***3. Consider the 12 issues you rated above and rank which issues are the most important.**

	1	2	3	4	5	6	7	8	9	10	11	12
Most important item	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Second most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Third most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fourth most important	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

College Senior Issues Test Survey

9. Demographics

*** 1. Please select the area of study from the list below that most closely describes your major:**

(Double majors may select more than one)

- | | |
|---|--|
| <input type="checkbox"/> Accounting | <input type="checkbox"/> Criminal justice |
| <input type="checkbox"/> Finance | <input type="checkbox"/> English |
| <input type="checkbox"/> Marketing | <input type="checkbox"/> Languages |
| <input type="checkbox"/> International business | <input type="checkbox"/> Environmental Studies |
| <input type="checkbox"/> General business | <input type="checkbox"/> History |
| <input type="checkbox"/> Management | <input type="checkbox"/> Philosophy |
| <input type="checkbox"/> Health care management | <input type="checkbox"/> Political science |
| <input type="checkbox"/> Anthropology | <input type="checkbox"/> Psychology |
| <input type="checkbox"/> Archaeology | <input type="checkbox"/> Sociology |
| <input type="checkbox"/> Arts | <input type="checkbox"/> Other liberal arts |
| <input type="checkbox"/> Mathematics | <input type="checkbox"/> Economics |
| <input type="checkbox"/> Biology/Chemistry/Physics and other natural sciences | <input type="checkbox"/> Engineering |
| <input type="checkbox"/> Cultural and ethnic studies | <input type="checkbox"/> Information sciences |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Other professional programs or designations |

2. Which term best describes your college or university?

- | | |
|-------------------------------|--|
| <input type="radio"/> Secular | <input type="radio"/> Religiously affiliated |
|-------------------------------|--|

Please provide the following information about yourself:

College Senior Issues Test Survey

***3. What is your level of education? Please mark the highest level of formal education you are currently enrolled in or have completed:**

- Grades 7, 8 9
- Grades 10,11,12
- Vocational/Technical school (schools that do not offer a bachelor's degree)
- Junior College
- Freshman in a bachelor's degree program
- Sophomore in a bachelor's degree program
- Junior in a bachelor's degree program
- Senior in a bachelor's degree program
- Professional Degree beyond the bachelor's degree (M.D., M.B.A., D.D.S., J.D., Nursing)
- Professional degree in Divinity
- Master's in teaching or Master's in Education
- Master's degree in graduate school
- Doctoral degree Ed.D.
- Doctoral degree Ph.D.
- Other

4. Which best describes your race/ethnicity? [Check all that apply]

- African American or Black
- Asian or Pacific Islander
- Hispanic
- American Indian/ Other Native American
- Caucasian (other than Hispanic)
- Other (please specify)

***5. What is your gender?**

- Male
- Female

***6. How many brothers and sisters do you have? Put 0 if you don't have any.**

The number of brothers:

The number of sisters:

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7. What is your age?

Enter your age in years:

***8. In terms of your political views, how would you characterize yourself?**

- Very Liberal Somewhat Liberal Neither Liberal nor Conservative Somewhat Conservative Very Conservative

***9. Are you a citizen of the U.S.A?**

- YES NO

***10. Is English your primary language?**

- YES NO

11. If you wish to be participate in the prize drawing, please enter a contact email below for the purposes of notifying you if you have won.

Once the prizes have been awarded, this information will not be stored or utilized for any other purpose.

(Please do not enter any other form of identifying remarks or information)

College Senior Issues Test Survey

10.

Thank you for your participation!

APPENDIX B - Majors

Listing of Undergraduate Education Majors and Categories for this Study

<u>Majors</u>	<u>Major Classification</u>
Accounting	Business
Finance	Business
Marketing	Business
International Business	Business
General business	Business
Management	Business
Health Care Management	Business
Anthropology	Liberal arts
Archaeology	Liberal arts
Arts	Liberal arts
Mathematics	Liberal arts
Biology/Chemistry/Physics and other natural sciences	Liberal arts
Cultural and ethnic studies	Liberal arts
Communications	Liberal arts
English	Liberal arts
Languages	Liberal arts
Environmental sciences	Liberal arts
History	Liberal arts
Philosophy	Liberal arts
Political science	Liberal arts
Psychology	Liberal arts
Sociology	Liberal arts
Other Liberal Arts Major	Liberal arts
Criminal Justice	Other
Economics	Other
Engineering	Other
Information sciences	Other
Professional programs and designations	Other

APPENDIX C - HSRC

Human Subjects Review Committee



**HUMAN SUBJECTS REVIEW COMMITTEE
PROTECTION OF HUMAN SUBJECTS INITIAL REVIEW QUESTIONNAIRE**

[Note: Dissertation, or other formal research proposal, need not be submitted with this form. However, relevant section(s) may need to be attached in some cases, in addition to filling out this form completely, but only when it is not possible to answer these questions adequately in this format. Do not submit a proposal in lieu of filling out this form. In addition, review carefully the full text of the Human Subjects Research Committee Policies and Procedures on page 4 of the Research Manual.]

Date submitted: Date received:

Title of Proposed Research:
Undergraduate Education Background and Ethical Decision Making

Principal Researcher(s):
Ian King

Degree Program Doctor of Business Administration

Rank/Academic Standing All but Dissertation (ABD)

Other Responsible Parties (if a student, include faculty sponsor; list other involved parties and their role)
Dr. Paul Shelton, PhD, Dissertation Committee Chair

(Please include identifying information on page 6 also.)**

(1) Characteristics of Subjects (including age range, status, how obtained, etc):

Subjects will be graduating seniors enrolled in an undergraduate program at a college or university with a course of study in either a liberal arts studies (LAS) program or a business focus degree program. The institutions are selected due to convenient access on the part of the researcher. All participants will be a minimum of 18 years of age, and participation is voluntary.

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(2) Describe any risks to the subjects (physical, psychological, social, economic, or discomfort/ inconvenience):

There will be minimal risk to the participants. The participants will be asked to take a Defining Issues Test-Revised (DIT-2) to assess value responses to decisions. The respondents identity will be kept anonymous. In addition to the actual DIT-2 questions, respondents will be asked for general demographic data including age, gender, siblings, and political orientation, the secular/religious affiliation of their higher education institution, and the degree program in which the respondent is enrolled.

Participants will be given the opportunity to voluntarily submit an email contact address to participate in a prize drawing as an incentive to participate.

(3) Are the risks to subjects minimized (a) by using procedures which are consistent with sound research design and which do not unnecessarily expose subjects to risk, and (b) whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes?

Degree of risk: 1 2 3 4 5 6 7
low high

1

(4) Briefly describe the objectives, methods and procedures used:

The intent of this study is to discover if differences in exist in ethical decision-making and undergraduate education background. The study will compare ethical decision-making value criteria and compare these results to educational background, and accounting for any multivariate impacts from demographic influences.

The DIT-2 will be administered utilizing a SurveyMonkey methodology over the internet. All participants will have access to and familiarity with personal computer operations. The DIT-2 consists of 5 evaluative questions asked of each respondent.

Access to the participants will be pre-arranged with the educational institution and the appropriate department heads and administrative individuals.

A desired minimum number of responses is 100 each from the LAS and business program subject populations.

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(5) Briefly describe any instruments used in the study (**attach a copy of each**).

Defining Issues Test-Revised (DIT-2)

(6) How does the research plan make adequate provision for monitoring the data collected so as to insure the safety, privacy and confidentiality of subjects?

All responses will be submitted electronically via the SurveyMonkey interface and there will be no identifying data collected beyond the general demographic information previously described. The higher education institution attended by the respondent will also be confidential. Detailed results of each respondent will be collated on an excel file that will be encrypted and secured with a password. Emails submitted as part of the participation incentive drawing will be stored separate from survey results and deleted once the prize winners are identified.

(7) Briefly describe the benefits that may be reasonably expected from the proposed study, both to the subject and to the advancement of scientific knowledge – are the risks to subjects reasonable in relation to anticipated benefits?

The understanding of ethical decision-making remains a salient area of study in business. Ethical behavior has been positively associated with organizational performance, especially in high performance organizations (HPOs). Business organizations have also been increasingly seeking potential employees from non-traditional business educational background. If there exists correlations between educational background and ethical decision-making, this could lead to further research possibilities that could aid in developing more effective hiring practices for achieving desired organizational ethical dynamics and lead to more focused training a development protocols in business organizations.

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(8) Where some or all of the subjects are likely to be vulnerable to coercion or undue influence (such as children, persons with acute or severe physical or mental illness, or persons who are economically or educationally disadvantaged), what appropriate additional safeguards are included in the study to protect the rights and welfare of these individuals?

No subject are anticipated to be vulnerable to coercion or undue influence.

(9) Does the research place participants "at risk"? No If so, describe the procedures employed for obtaining **informed consent** (*in every case, attach copy of informed consent form; if none, explain*).

The survey will be clearly identified as being voluntary and anonymous before any questions are administered.

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COMMITTEE REVIEW

Committee Use ONLY

Signature	Recommend Approval	Recommend Conditional Approval	Not Recommended
Chair _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____
Member _____	_____	_____	_____

Comments (continue on back if necessary, use asterisk to identify):

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Title:

Undergraduate Education Background and Ethical Decision Making

Principal

Researcher(s): Jan King

Date application completed: Jan 17, 2014


COMMITTEE FINDING:

1) The proposed research makes adequate provision for safeguarding the health and dignity of the subjects and is therefore approved.

2) Due to the assessment of risk being questionable or being subject to change, the research must be periodically reviewed by the HRSC on a _____ basis throughout the course of the research or until otherwise notified. This requires resubmission of this form, with updated information, for each periodic review.

3) The proposed research evidences some unnecessary risk to participants and therefore must be revised to remedy the following specific area(s) of non-compliance:

4) The proposed research contains serious and potentially damaging risks to subjects and is therefore not approved.

Chair or designated member 

Date 1/24/14