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Promoting the ethical development of undergraduate business students through a Deliberate Psychological Education-based classroom intervention

Christopher Drees Schmidt
William & Mary - School of Education

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PROMOTING THE ETHICAL DEVELOPMENT OF UNDERGRADUATE
BUSINESS STUDENTS THROUGH A DELIBERATE PSYCHOLOGICAL
EDUCATION-BASED CLASSROOM INTERVENTION

A Dissertation Presented to
The Faculty of The School of Education
The College of William & Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Philosophy

by
Christopher Drees Schmidt
May 2007
PROMOTING THE ETHICAL DEVELOPMENT OF UNDERGRADUATE
BUSINESS STUDENTS THROUGH A DELIBERATE PSYCHOLOGICAL
EDUCATION-BASED CLASSROOM INTERVENTION

By Christopher Drees Schmidt

Approved May 2007 by

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Chairperson of Dissertation Committee

Charles F. Gressard, Ph.D.

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DEDICATION

This work is dedicated to my mother and father, Linda and Bill Schmidt, who have spent my lifetime trying to provide me with the best of everything: schools, assistance, teams, advice, prayers, support, opportunities, and love. They tirelessly supported my academic struggles over the years and it is only through that support that I have been able to complete this challenging process. Thank you.
# TABLE OF CONTENTS

Acknowledgements                                           x
List of Tables                                              xii
List of Figures                                             xiv
Abstract                                                     xv
Half-Title Page                                             1

Chapter One: Introduction

  Statement of the Problem                                     2
    An "Amoral" Atmosphere                                        5

  Current Approaches to the Problem                            7
    Pedagogical Responses in Business Education                 9

Ethical Development and Cognitive Development                14

Developmentally Focused Education                           15

Purpose of the Study                                          16

Significance of the Study                                      17

Chapter Two: Literature Review

  Review of the Cognitive Developmental (CD) Framework        19

The Process of Psychological Development                     21

Moral Development                                            24

  Higher is Better                                             28

Moral Judgment and Moral Behavior                             29

Deliberate Psychological Education (DPE)                     31

  DPE-based Models of Teaching and Learning                  33
<table>
<thead>
<tr>
<th>Hypothesis 2:</th>
<th>125</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Multidimensional Ethics Scale</td>
<td>125</td>
</tr>
<tr>
<td>Factor 1: Moral Equity</td>
<td>129</td>
</tr>
<tr>
<td>Factor 2: Relativism</td>
<td>131</td>
</tr>
<tr>
<td>Factor 3: Contractualism</td>
<td>133</td>
</tr>
<tr>
<td>Qualitative Evaluations</td>
<td>135</td>
</tr>
<tr>
<td>Summary</td>
<td>136</td>
</tr>
</tbody>
</table>

Chapter Six: Discussion | 137 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion of the Findings</td>
<td>137</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>138</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>139</td>
</tr>
<tr>
<td>Instrumentation Issues</td>
<td>139</td>
</tr>
<tr>
<td>Conceptual Issues</td>
<td>141</td>
</tr>
<tr>
<td>Macro and Micro-morality</td>
<td>142</td>
</tr>
<tr>
<td>The Business Climate and Ethical Behavior</td>
<td>143</td>
</tr>
<tr>
<td>The Judgment-Action Link</td>
<td>145</td>
</tr>
<tr>
<td>Qualitative Summary</td>
<td>146</td>
</tr>
<tr>
<td>Ethical Growth</td>
<td>147</td>
</tr>
<tr>
<td>Enhanced Decision Making</td>
<td>147</td>
</tr>
<tr>
<td>Broadened Perspective Taking</td>
<td>148</td>
</tr>
<tr>
<td>Consideration of Multiple Options</td>
<td>149</td>
</tr>
<tr>
<td>Personal Ethical Principles</td>
<td>149</td>
</tr>
<tr>
<td>Moving Toward Action</td>
<td>150</td>
</tr>
</tbody>
</table>
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Whatever you can do, or dream you can, begin it. Boldness has genius, power, and magic in it. —John Wolfgang Von Goethe

If the world were merely seductive, that would be easy. If it were merely challenging, that would be no problem. But I arise in the morning torn between a desire to improve (or save) the world and a desire to enjoy (or savor) the world. This makes it hard to plan the day. —E. B. White

Twenty years from now you will be more disappointed by the things you did not do than by the one’s you did. So throw off the bowlines, sail away from the safe harbor, catch the trade winds in your sails. Explore. Dream. Discover. —Mark Twain

The Road goes ever on and on
Down from the Door where it began.
Now far ahead the Road has gone
And I must follow if I can,
Pursuing it with eager feet
Until it joins some larger way
Where many paths and errands meet
And whither then? I cannot say.
--J.R.R. Tolkien

When we honestly ask ourselves which person in our lives mean the most to us, we often find that it is those who, instead of giving advice, solutions, or cures, have chosen rather to share our pain and touch our wounds with a warm and tender hand. The friend who can be silent with us in a moment of despair or confusion, who can stay with us in an hour of grief and bereavement, who can tolerate not knowing, not curing, not healing and face with us the reality of our powerlessness, that is a friend who cares.
--Henri Nouwen, Out of Solitude

Sail forth—steer for the deep waters only,
Reckless O Soul, exploring, I with thee, and thou with me,
For we are bound where mariner has not yet dared to go,
And we will risk the ship, ourselves and all.
O my brave soul!
O farther, farther sail!
O daring joy, but safe! Are they not all the seas of God?
O farther, farther, farther sail!
--Walt Whitman, Passage to India
### LIST OF TABLES

**Table**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Statistical Analyses</td>
<td>62</td>
</tr>
<tr>
<td>2</td>
<td>Course Activities</td>
<td>72</td>
</tr>
<tr>
<td>3</td>
<td>Additional DPE Elements not experienced by control group</td>
<td>82</td>
</tr>
<tr>
<td>4</td>
<td>Goals, Activities, Objectives</td>
<td>84</td>
</tr>
<tr>
<td>5</td>
<td>Experimental and Control Groups</td>
<td>110</td>
</tr>
<tr>
<td>6</td>
<td>Age</td>
<td>111</td>
</tr>
<tr>
<td>7</td>
<td>Gender</td>
<td>112</td>
</tr>
<tr>
<td>8</td>
<td>Educational Level</td>
<td>112</td>
</tr>
<tr>
<td>9</td>
<td>Political Liberalism</td>
<td>113</td>
</tr>
<tr>
<td>10</td>
<td>DIT-II Means and Norms</td>
<td>114</td>
</tr>
<tr>
<td>11</td>
<td>Pre-test &amp; Post-test Means on the DIT-II (P &amp; N2)</td>
<td>115</td>
</tr>
<tr>
<td>12</td>
<td>Repeated Measures ANOVA (P-score)- Summary of F Statistics</td>
<td>117</td>
</tr>
<tr>
<td>13</td>
<td>Repeated Measures ANOVA (N2-Scores)- Summary of F Statistics</td>
<td>119</td>
</tr>
<tr>
<td>14</td>
<td>Post-test Means on the DIT-II (Type and U-scores)</td>
<td>121</td>
</tr>
<tr>
<td>15</td>
<td>Repeated Measures ANOVA (T-score)- Summary of F Statistics</td>
<td>122</td>
</tr>
<tr>
<td>16</td>
<td>Repeated Measures ANOVA (U-score)- Summary of F Statistics</td>
<td>124</td>
</tr>
<tr>
<td>17</td>
<td>MES Mean Scores (3 Scenarios)</td>
<td>126</td>
</tr>
<tr>
<td>18</td>
<td>Repeated Measures ANOVA (MES- 3 Scenarios)- Summary of F Statistics</td>
<td>127</td>
</tr>
<tr>
<td>19</td>
<td>Factor 1 Mean Scores (Moral Equity)</td>
<td>129</td>
</tr>
<tr>
<td>20</td>
<td>Repeated Measures ANOVA (Moral Equity)- Summary of F Statistics</td>
<td>130</td>
</tr>
<tr>
<td>21</td>
<td>Factor 2 Mean Scores (Relativism)</td>
<td>131</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Repeated Measures ANOVA (Relativism)- Summary of F Statistics</td>
<td>132</td>
</tr>
<tr>
<td>23</td>
<td>Factor 3 Mean Scores (Contractualism)</td>
<td>133</td>
</tr>
<tr>
<td>24</td>
<td>Repeated Measures ANOVA (Contractualism)- Summary of F Statistics</td>
<td>134</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

### Figure

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Profile Plots- P-scores</td>
<td>118</td>
</tr>
<tr>
<td>2</td>
<td>Profile Plots- N2-scores</td>
<td>120</td>
</tr>
<tr>
<td>3</td>
<td>Profile Plots- Type Indicator</td>
<td>123</td>
</tr>
<tr>
<td>4</td>
<td>Profile Plots- U-scores</td>
<td>125</td>
</tr>
<tr>
<td>5</td>
<td>Profile Plots- All 3 scenarios</td>
<td>128</td>
</tr>
<tr>
<td>6</td>
<td>Profile Plots- Moral Equity</td>
<td>130</td>
</tr>
<tr>
<td>7</td>
<td>Profile Plots- Relativism</td>
<td>132</td>
</tr>
<tr>
<td>8</td>
<td>Profile Plots- Contractualism</td>
<td>134</td>
</tr>
</tbody>
</table>
ABSTRACT

The prominence of ethical scandals in business in recent years has been a major cause for alarm within the profession. Public trust in business has dropped to disastrous lows (Swanson, 2004) and businesses have realized that poor ethics are detrimental to their bottom line. Although attempts are being made to effectively respond to the situation, the literature has called for more effective business ethics education at the undergraduate level. The present situation has left schools of business “scrambling to develop a response” (Felton & Sims, 2005).

The business literature frequently references Kohlberg’s theory of moral development in conceptualizing the situation; however, no research studies to date have evaluated educational interventions aligning this particular theory to educational design. Deliberate Psychological Education (DPE) is grounded by the assumptions of Cognitive Developmental Theory and DPE-based interventions have been empirically validated as effective means for promoting developmental growth: cognitive, moral, ego, and conceptual in a multitude of settings.

The primary directional hypothesis for this study suggested that the business undergraduate students involved in a DPE-based intervention within their ethics course would show an increase in their ethical reasoning abilities during the course of the semester, in comparison to the control group. The Defining Issues Test-II (DIT-II) and the Multidimensional Ethics Scale (MES) were utilized as pre-test and post-test measurement tools. The statistical analyses for the DIT-II clearly supported this hypothesis while the MES findings did not show a significant difference.
Promoting the Ethical Development of

Undergraduate Business Students Through a

Deliberate Psychological Education-Based Classroom Intervention
CHAPTER ONE

INTRODUCTION

Statement of the Problem

The increasing number of ethical scandals prominent in the popular media involving corporate business has motivated business schools and organizations to take a more critical look at their role in the ethical development of students and employees. The public increasingly perceives big business as lacking strong professional ethics, and the business world recognizes this development as potentially detrimental to its future. Swanson (2004) stated that recently “public trust in business dropped to disastrous lows; CEOs and stockbrokers were trusted by only 23 percent of the public, just a few points above used car dealers at 15 percent” (p. 44). How these ethical perceptions affect the bottom line may be the encouragement necessary for the world of business to take a significant look at how to encourage positive ethical development. A 1997 survey found that customer and employee loyalty increases when the business is perceived to be highly ethical. Considering the costs of locating customers and maintaining them, as well as the cost of employee turnover, organizations might increase their profits by being highly ethical (Monson & Bock, 2005).

Business ethicist Velasquez (1998) defines ethics as an “active questioning about what is moral in our lives, in society, or in a profession” (Monson & Bock, 2005, p. 2). Ethical reasoning is encompassed in morality, which involves conformity to certain codes or situational accepted notions of what is right or wrong. It differs, however, in that it involves more than just decision making about what is moral; it also includes how situations are perceived, how we value ethical actions over other competing needs, and
how we demonstrate the motivation and courage to act upon our beliefs when confronted with an ethical dilemma (Monson & Bock, 2005). Hence, the concept of professional ethics exists as something more than an external measurement by which the profession can be viewed as virtuous. It implies a capability for reasoning which allows the individual to make judgments without the influence of self-interest that could damage his or her professional trustworthiness. This reasoning process is an element of one’s overall moral consciousness from which he or she deals with everyday challenging conflicts (Ponemon & Gabhart, 1994).

The literature to date indicates that something different needs to be done in order to decrease ethical violations and promote an increase in the public’s trust in business. Many organizations have recently incorporated ethics training into employee continuing education, and the White House has incorporated compulsory training in ethics in response to indictments of staff members. In addition, research describes an increased focus on a preventative response involving the incorporation of a greater degree of ethical training with business students (Swanson, 2004; Halbesleben, Wheeler, & Buckley, 2005; Macfarlane, 1998; Fleckenstein, 1997; Prodhan, 1997; Trevino, 1992).

“Many corporate leaders and management scholars believe that ethics education is an essential component in business school education” (Halbesleben, et al., 2005, p. 385). Considering the enormous increase in corporate misconduct recently, the necessity for better business education seems apparent. Yet, many business schools continue to avoid this undertaking, by not including a stand-alone course in the curriculum; presently, the accrediting agency only infers that such a course be included but does not require it (Swanson, 2004). President Bush, while speaking to Wall Street financial leaders stated,
"We need men and women of character, who know the difference between ambition and destructive greed, between justified risk and irresponsibility, between enterprise and fraud. Our schools of business must be principled teachers of right and wrong, and not surrender to moral confusion and relativism" (White House Press Release, 2002b) (Swanson, 2004, p. 43). The literature, as well as political leaders emphasize the importance of incorporating ethical education at early age levels and designate the university setting as the appropriate one for inculcating this level of importance. Fleckenstein (1997) suggests that the university "should go as far as it can to influence the ethical reasoning of graduates" (p. 1347).

Business ethics courses currently include an array of teaching strategies attempting to respond adequately to the problem. Many courses remain lecture-based with a focus on informing the student of his or her legal and ethical responsibilities; however, a new approach appears necessary. Although a student may learn about ethics and its importance to the field of business, intellectual knowledge obtained may remain only intellectual and not translate to practical application. A business student may be able to describe an ethical dilemma and point out the correct moral decision to be made, but, unless a student incorporates that knowledge and makes a commitment to higher moral values, the student may not chose to act on his or her intellectual decision. The competitive climate of business can increase the stress and pressure an individual feels to perform in a financially advantageous way for the company; such competitive demands can influence the individual's ability to act in accordance with his or her ethical decisions. In order for an individual to "behave" ethically and effectively manage the
multitude of ethical dilemmas faced in the workplace, he or she would be best prepared through growth in moral character as well as acquisition of requisite knowledge.

*An “Amoral” Atmosphere*

The literature has also suggested that the business field carries with it an inherent acceptance of some ethical violations with individuals making decisions on the basis of “conditional morality (Jackal, 1988 as cited in Monson & Bock, 2005). It has been suggested that “many business students and business faculty appear to be willing to accept unethical business practices as normative behavior in organizations” (Adkins & Radtke, 2004; Bunn, Caudill, & Gropper, 1992; Roderick, Jelly, Cook, & Forcht, 1991; Stevens, Harris, & Williamson, 1993 as cited in Halbesleben, et al., 2005, p. 385). In addition, “experts observe that an amoral, even brutish theory of management has long been taught and learned in business schools” (Ghoshal, 2003; Gioia, 2002; Mitroff, 2004 as cited in Swanson, 2002 p. 53). Studies show that moral myopia actually decreases after taking traditional business coursework and describe how MBA students tend to shift their orientation from that of a consumer (what is best for the customer) to a stockholder (what is best for the business) after two years of study. These suggestions provide critique of the present system, but at the same time bring about a potentially greater systemic problem needing to be addressed. Macfarlane (1998) reflects on the perception of the business curriculum as a “Trojan horse for the uncritical teaching of business values in higher education” (p. 36). One potential reason for the creation of this current “atmosphere” might have to do with the suggestion that business studies are wedded to the interests of the businesses themselves (Barnett, 1990). Macfarlane (1998) refers to O’Hear’s (1998) critical analysis that the lecturers within schools might act as “apostles
for free market values” (p. 36). As such, an educational program focused on increasing ones ethical reasoning must be of equal or greater strength than the influences of this type of atmosphere.

Research shows that this concern about the atmosphere of business organizations and educational institutions proliferates beyond the leadership of these constituencies. Many individuals entering business programs either develop or already hold certain ideas concerning values as well as ethical business practice. For instance, the “common belief that ethics cannot be taught and that one’s moral compass is well set before the graduate school experience fuels doubt in the minds of students as to the importance of the subject” (Chun, 1999 as cited in Monson & Bock, 2005, p. 1). Halbesleben et al. (2005) refer to Carruth and Carruth’s (1991) findings that students believe their moral principles are extremely difficult to change once they are established. In addition, students in business programs also hold the misconception that business ethics work against the financial health of the organization (Cuilla, 1985 as cited in Monson & Bock, 2005), believing that strongly held ethical practice will decrease the profits for the company. For those seeking more ethical business practice, such data should cause an element of alarm within the profession. Present business education is subject to the critique that “it did not deter and perhaps even encouraged recent executive misconduct” (Sims & Felton, 2006).

In order to promote ethical sensitivity and action within the field of business, there remains an urgency to address these beliefs directly so that business majors will confront ethical dilemmas with knowledge and commitment. If current trends continue, and Swanson (2004) is correct in saying that “most business majors claim they won’t fight for
their own personally held values, much less community well-being” (p. 54), the number of scandals as well as negative public perceptions will surely continue to increase.

Current Approaches to the Problem

Approaches for managing ethical development in schools of business as well as functioning businesses in the professional field have been varied. Due to the heightened focus on the issue at hand in the past decade, one begins to recognize the many challenges educators and businesses face in order to overcome the problem. Not only does it appear critical for educational institutions to adopt effective teaching strategies, but it also appears very necessary to confront the perception that morals are unalterable during adulthood and that the philosophical atmosphere of business is inherently amoral (Ghoshal, 2003; Gioia, 2002; Mitroff, 2004 as cited in Swanson, 2004, p. 36).

Although U.S. colleges were founded with the purpose of moral education as a primary goal, the rise in specialized disciplines has led to a decreasing concern for questions of human values and morality (Nicci & Pascarella, 1987 as cited in McNeel, 1994). As the prevalence of moral violations in the professions has increased, colleges and universities have been strongly encouraged to improve and enhance their ethical education curriculums (McNeel, 1994). Business programs, due to the increased numbers of ethical scandals in the media, have been brought to the forefront of this movement.

As mentioned previously, businesses have recently made efforts to assist the development of individual ethical value systems and to encourage ethical behaviors through educational interventions; 85% (a 1992 study) of the Fortune 500 industrial and service companies having attempted to encourage social responsibility and incorporate
ethical values systems within their organizations (Izzo, 2000). Some major companies have utilized moral values education programs focused on assisting salespeople in reasoning through ethical situations and attempting to raise their social consciousness (Izzo, 2000). An increasing amount of studies have addressed the issue of “improving the ethical standards of businesspeople and students by exposing them to ethics education and training” (Halbesleben, et al., 2005, p. 386). Halbesleben et al. (2005) point out a number of studies addressing the issue of ethical standards through ethics education and training. Further, they state that some financial incentives are being offered to businesses who promote ethical activity. The Ethics and Compliance Officer Association (ECOA), which was founded in 1992, is committed to “being the leading provider of ethics, compliance, and corporate governance resources to ethics and compliance professionals worldwide” (ECOA, 2007, in Mission) and presently has 1,000 members. These developments emphasize an increased commitment to ethical training within organizations and highlight some of the responses businesses have made to the issue.

The responses of companies and organizations are admirable and certainly necessary. They represent a willingness to accept and address the issue within an organization and assist individuals, as well as the organization as a whole, in promoting greater ethical sensitivity and action. However, much of the recent literature calls for intervention at an earlier stage—during individual’s preparation for the world of business (Swanson, 2004; Halbesleben, et al., 2005; Macfarlane, 1998; Fleckenstein, 1997; Prodhan, 1997; Trevino, 1992). In addition to organizational efforts, measures should be taken within the curriculums of business schools in order to preventatively address this issue. The educational accrediting agency for business schools--Association to Advance
Collegiate Schools of Business (AACSB)—does not presently require a standard mandated course in business ethics (Swanson, 2004). However, recent revisions (January, 2003) suggest that business schools prioritize the teaching of ethics and “move ethics to ‘first and foremost’ topical importance” (Sims & Felton, 2006, p. 297). Considering the lack of requirement for a stand-alone course, “many business schools continue to sidestep this responsibility” (Swanson, 2004, p. 43). A group of university professors sent an open letter proposing that AACSB mandate a stand-alone course in business ethics as a condition of accreditation but the organization has yet to do so. One AACSB official responded that it tries to be “minimally intrusive on issues of curriculum contents” (Swanson, 2004, p. 45). Some business schools have adopted a stand-alone course in ethics into their curriculum despite the absence of a requirement. Nonetheless, the perceived lack of importance placed on the inclusion of such a course could speak to one of the sources of the problem.

Pedagogical Responses in Business Education

In response to ethical challenges, the field of business has elevated the importance of the teaching ethics in the past 15-20 years. The idea that a powerful change is needed appears to have been met with resounding agreement. However, it appears that only in the last 5-10 years has a more focused response taken place. During the past year, The Association to Advance Collegiate Schools of Business International (AACSB), has reemphasized the importance of teaching ethics (Manstzke, Carnes, & Tolhurst, 2005), and advocates of ethical education are “calling business schools to task for not doing more to produce ‘more ethical or moral graduates’” (Sims, 2004 as cited in Felton & Sims, 2005, p. 377). Despite the increased efforts, some might still believe that “The
teaching of business ethics is indiscriminate, unorganized, and undisciplined in most North American schools of business” (Solberg, Strong, & McGuire, 1995, p. 71). Though many business schools find themselves in a defensive position at present, and “scrambling to develop a response” (Felton & Sims, 2005, p. 378), current literature describes a variety of delivery methods for ethics education. Methods referred to here include reviewing and teaching codes of ethics, reviewing and deliberating on case studies, using literature, plays, etc. not related to business, a scared straight approach, and integration of multiple strategies.

Establishing and reviewing codes of conduct related to ethical business practice has been an understandable response to the present situation and one that has been utilized over time. Codes provide a framework for individuals to work within and revisit when confronting an ethical dilemma. Teaching ethical codes certainly has its place in an educational curriculum, for it remains necessary that all practitioners have a baseline understanding of “best practice.” However, Prodhon (1998) points out three reasons why such a strategy, on its own, is insufficient: (a) conformity cannot be a substitute for individual judgment, (b) institutionalized ethics represent lower levels of moral development, and (c) codes can encourage mechanical reasoning. Rules or guidelines may be beneficial for an individual at a lower level of moral development in that he or she might act in accordance with the rules in order to avoid punishment; however, rules will have less of an impact on individuals who reason at higher levels (Ponemon & Gabhart, 1994). In many professions, specific ethical dilemmas often are not clearly represented in the codes; hence, in addition to understanding codes, students might benefit from gaining or increasing their ability to reason through and process individual
predicaments. Reasoning and processing at higher levels of development should be necessary initial outcome elements of an ethical curriculum; deciding on an ethical course of action after questioning the different options is another important element of the intended outcomes.

Some universities have incorporated a "scared straight" approach to teaching business ethics. University of California Berkeley, University of Maryland, and Pepperdine University have students interact with convicted white-collar criminals and hope the students can learn from the mistakes they made (Sims & Felton, 2006). No research related to the gains students receive from such interventions is available to date.

The teaching strategy of utilizing case studies in the teaching of ethics is carried out very often (Cagle & Baucus, 2006), and it appears to be the most prevalent present technique. The leading business schools (Harvard, Michigan, Stanford, INSEAD, IMD, and others) continue their commitment to this method (Stonham, 1995 as cited in Harrison-Walker, 2000). Case studies describe a real or developed business situation along with a history of an individual or organization that is confronted with an ethical problem (Andrews & Noel, 1986; Herreid, 1994 as cited in Harrison-Walker, 2000). The case study method addresses the common concern that ethics texts and the courses themselves ignore the entire issue of character development (Cragg, 1997) due to the fact that they require students to involve themselves in the dilemmas presented. The technique holds multiple potential benefits for student development: better understanding of reality (Stonham, 1995), cooperative efforts to solve problems (Herreid, 1994; Merry, 1954; Stonham, 1995), the development of higher-order thinking skills (Andrews & Noel, 1986; Herreid, 1994), increased self confidence (Erskine, Leenders, & Mauffetts-
Leenders, 1981), and practice in internalizing concepts used to solve real-world marketing situations (Andrews & Noel, 1986; Herreid, 1994) (as cited in Harrison-Walker, 2000). Each of these benefits are necessary components in the intended outcomes of an ethics course due to the fact that they align with many of the elements of higher order ethical reasoning.

Recently there has been an emergence of strategies quite different from those used in the past. These researchers suggest replacing the use of business ethics case studies with literature, social science studies, and other texts focused on culture. One example suggests the use of fiction (novels, drama, and short stories) to enhance the materials used by instructors (Kennedy & Lawton, 1992). It is believed that such stories have the ability to bring out moral issues in a way students more readily understand and relate to. Shepard, Goldsby, and Gerde (2003 in Felton & Sims, 2005) suggest the utility of presenting ethical issues through film, plays, and novels with the idea that these situations more closely align with the challenges faced in the real world. Ideas such as this exemplify the creative efforts being made within business schools.

Some recent recommended approaches take on a more expansive perspective, with the apparent focus being on teaching students to "live ethics" instead of merely learn about them (Solberg, Strong, & McGuire, 1995). Felton and Sims (2005) outline a number of suggested guidelines for teaching ethics that include determining targeted goals understanding core values, broadening student understandings of the complexities of ethics, understanding ethics as an embedded discipline, broadening cultural perspectives, expanding the number of stakeholders considered, considering generational consequences, enhancing comfort levels, and heightening awareness of accountability. In
addition to lecturettes and case studies, they suggest developing an interactive learning environment where discussions are vigorous and challenging to the students. They highlight the importance of creating a safe classroom environment as well as encouraging the discussion of issues outside of class time. Field exercises, personal application assignments, perspective taking activities, sharing personal experience scenarios, meeting the students where they are, and the inclusion of outside resource persons provide multiple intervention strategies focused on helping students understand their own values and continue to develop ethical sensitivities throughout their careers.

Although there may have been hesitancy in the past to focus on values in educational realms, the call for ethical development requires faculty to encourage students to explore their values, and make that process an “integral part of their educational experience” (Cragg, 1997, p. 240). Felton and Sims’ (2005) suggestions align very closely with recommended interventions stemming from a cognitive developmental perspective. However, despite the present increased emphasis on educational ethics, “how best to teach ethics remains to be studied” (Phillips, 2005 as cited in Hall & Berardino, 2006, p. 408-409). “While current pedagogy relies primarily on factual recounting of actual workplace incidents and actual and hypothetical case studies, calls for new approaches to teaching business ethics have not yet produced significant pedagogical change” (Kennedy & Lawton, 1992, p. 187). Research evaluating the effectiveness of theses types of strategies appears to be the necessary next step. Mudrack’s (2003) response in “The Untapped Relevance of Moral Development Theory in the Study of Business Ethics” initiates a movement to incorporate empirically validated approaches to implementing and evaluating theoretically based education.
Ethical Development and Cognitive Development

Research indicates that individuals involved in particular types of teaching interventions can develop in ways beyond that of information gained (Ponemon & Gabhart, 1994). Such interventions include many of those previously mentioned by Felton and Sims (2005) as well as strategies encouraging intrapersonal reflection alongside requisite knowledge. Small and large group discussions, reflective journaling, team building activities, Socratic dialogue, and dilemma discussions are some examples of these strategies that fall under Social and Information-Processing Models of education (Joyce et al., 2000). Such educational interventions are critical when dealing with content such as ethics and morality that require not only knowledge, but also understanding and the development of a particular way of making meaning of experience. Over three decades ago, Perry (1970) noted, “It appears, then, that it is no longer tenable for an educator to take the position that what a person does with his intellectual skills is a moral rather than intellectual problem and therefore none of the scholar’s business. Epistemologically the knower and known are now inseparable” (Perry, 1970, p. 212). An educators’ accountability is enhanced when it becomes part of his/her responsibility to foster interpersonal growth alongside subject matter knowledge. The cognitive developmental perspective on this type of growth will be described later. First, to simply address the concept of Learning as Development, Moore (2002, p. 26) references Nevitt Sanford (1969), an educational and developmental theorist. According to Sanford, development:

1. refers to “the organization of increasing complexity” (p. 47), and thus is distinct from simple notions of “change” or “growth.”
2. involves the whole individual—in development, intellect, emotion, and action are all inseparable and in interaction.

3. is progressive in that there is an order to the succession of developmental changes that take place.

4. reflects an interaction between the person and the environment.

For Sanford, and other developmental theorists (i.e., Dewey), education is fundamentally about this type of development (Moore, 2002). At this time, however, few studies have tried to link undergraduate business ethics training to cognitive moral development (Izzo, 2000).

Developmentally Focused Education

John Dewey stated, “Development is the fundamental aim of education” (as cited in Reimer, Paolitto, & Hersh, 1983). Fleckenstein (1997) utilizes this philosophy in his suggestions for future ethics education of business undergraduates from a psychological perspective. He explains that ethics education “needs to be personalized based on the individual student and that there is a need for experiential learning methods which would supplement and enhance standard classroom based ethics education” (p. 1347). Dewey’s emphasis on experience, inquiry, and reflection could assist the development of the businessperson due to the social interaction involved. In response to the proposed need for not only knowledge of but dedication to ethical values, Prodhan (1997) states, “Experiential learning is essential once we turn to the question of commitment to values and the ability to act on these” (p. 277). John Dewey’s ideas about developmental education have laid the groundwork for what has become known in the fields of counseling and psychology as the cognitive developmental model.
Educational efforts made toward promoting growth in the moral domain of cognitive development stem from the work of Lawrence Kohlberg. Kohlberg identified three levels of moral development that individuals go through and believed it possible to influence a student’s level of reasoning if instruction is organized with development as a main objective. Kohlberg suggested necessary considerations for organizing such instruction that include: (a) student exposure to a higher level of reasoning than their currently preferred one; (b) student exposure to situations posing challenges to the student’s current way of making meaning; and (c) an instructor developing an atmosphere for open dialogue among conflicting moral viewpoints (Joyce, Weil, and Calhoun, 2000). These components Kohlberg referred to encompass some of the elements of this proposed approach to teaching business ethics from a cognitive developmental perspective.

Although some of the recent literature focused on revitalizing business education curriculums has incorporated a cognitive developmental perspective, no research has been done to measure the effectiveness of a cognitive developmental intervention in this area.

Purpose of the Study

This research study proposed that the implementation of an ethics curriculum utilizing the components of Deliberate Psychological Education would significantly increase the moral reasoning abilities of undergraduate students in a university school of business. If a DPE curriculum could impact business students as it has students in other fields of study, this study might provide the grounds for changing the way ethics is taught in business schools. The suggestion in the literature that business students’ cognitive moral development is weaker than students from most other majors (McNeel, 1994)
implies an increased potential benefit of a developmental intervention. Rest and Narvaez (1994) suggest a persuasive need for research in professions such as business from the cognitive moral development perspective. It is not that efforts have not been made; they indeed have; however, despite the body of ethics education literature, very few studies have been shown effectiveness in changing an individual's ethical standards through "programmatic" ethics training (Halbesleben, et al., 2005). Interventions have succeeded in assisting students to identify certain ethical scenarios, but a change in the student's ethical values did not occur (Halbesleben et. al, 2005). One of the critical components of a cognitive developmental educational intervention involves the concept of reflection. Macfarlane (1998) questions whether students of business are given "sufficient opportunities to reflect critically on the knowledge which forms the core of their studies" (p. 37). Teaching strategies stemming from a cognitive developmental perspective and adding components such as reflection and personalized feedback to the content of an ethics course could be precisely what is called for when researchers state that "only certain types of ethics interventions or programs will effect ethical development" (Ponemon & Gabhart, 1994, p. 115).

Significance of the Study

In developing theoretical and practical responses to ethical misconduct in business, there exist a number of empirically supported factors at play. First, those students of business who believe that their moral compass becomes firmly set at an early age, and is thus relatively unchangeable, have made false assumptions (Rest, Narvaez, Bebeau, & Thoma, 1999a). Secondly, there are realistic, research based, methods for encouraging moral development within educational programs (Faubert, Locke, Sprinthall,
These methods have been touched on briefly in reference to Kohlberg and will be more fully described in the explanation of the study. Lastly, the cognitive moral developmental framework for understanding and promoting moral development has a wealth of knowledge and experience to bring to this particular issue. If such an educational intervention can positively impact the moral development of this population, significant implications for accreditation policies and the teaching methodologies within schools of business should be considered.
CHAPTER TWO

LITERATURE REVIEW

The cognitive developmental framework emerges as particularly relevant for responding to the issue of teaching business ethics. Swanson (2004) elucidates this relevance by emphasizing the research showing that social and behavioral skills, though partly determined at an early stage of development, can be improved upon through educational programs that incorporate theory and practice. Hence, the suggestions that ethics cannot be taught "fly in the face of reality" (Gioia, 2002 as cited in Swanson, 2004, p. 52).

Review of the Cognitive Developmental (CD) Framework

Cognitive Developmental Theory (CDT) and Kohlberg's domain-specific Moral Development Theory assist in the conceptualization of individual moral development and hold theoretical, empirical, and practical significance for responding to the problem of business ethics. A comprehensive review of the theories' tenets and their suggested interventions is presented to demonstrate their significance to this particular issue.

"The fundamental premise of cognitive developmental theory is that reasoning and behavior are directly related to the level of complexity of psychological functioning" (Richardson, Foster, & McAdams, 1998, p. 414). Therefore, an individual's behaviors at a lower level of cognitive complexity might look rigid, concrete, or less adaptive in problem solving situations; whereas, an individual at a more complex level might show more adaptive behaviors and be more capable of complex reasoning when problem solving (Brendel, Kolbert, & Foster, 2002). Research shows that in the field of counseling, students with higher levels of cognitive development tend to have higher
levels of accurate empathetic responses, more effective clinical hypotheses, more complex analyses of the counselor-client relationship, and a greater capacity to understand and meet the needs of the client (Brendel, Kolbert, & Foster, 2002). Hayes (1991 as cited in Foster & McAdams, 1998) indicates that higher levels of cognitive development enhance a counselor's ability to advocate for social and community change as well as promoting change and development in his/her clients. From a business perspective, Lovell (1999) states that if “empathy and skilled interpersonal relations are to become part of the curriculum, then stimulating cognitive stage change needs to get ‘built in’” (p. 201).

CDT is a comprehensive theory of human development based on a unifying set of assumptions and separate stage theories across different functional domains which explains how humans create meaning making systems used to interpret and make sense of their experiences (Sprinthall, Peace, & Kennington, 2001). Generally, it is a theory of human growth and development focused on the cognitive processes that affect behavior over the life span.

Within CDT numerous theories specifically describe the developmental process related to particular domains of functioning. Each of these domain theories enables a greater understanding of the unique aspects involved with different types of development. Although an initial theory about the development of the learner was put forward by John Dewey (1930-1960), Piaget’s cognitive model (1961) has been the basis from which many of the other domain theories have developed including: Moral (Kohlberg, 1969, 1979), Intellectual (Perry, 1971), Conceptual (Hunt, 1971 and Hunt, Harvey, & Schroeder, 1974), Ego (Loevinger, 1977), Spiritual (Fowler, 1981), and Reflective...
Moral Development in Business Education

Judgment (King & Kitchner, 1992). No one theory is a comprehensive enough framework to completely describe cognitive development (Sprinthall, 1994); however, each theory gives an understanding of the unique aspects of a particular domain. Conversations about whether one domain can be considered foremost persist; for instance, Loevinger suggests that the Ego is the "master trait." Other deliberations have to do with whether or not some domains subsume others; for example, whether conceptual development encompasses intellectual development. Nonetheless, each domain theory makes its own contribution to the general body of knowledge, and offers effective modes of practice applicable to education.

The Process of Psychological Development

Dewey’s work in education was the first comprehensive look at how a learner develops and how educators need to take into account individual functioning when organizing educational planning. Piaget’s (1961) seminal work with children has been the means by which the theory of cognitive development has developed over time. Piaget sought to understand how individuals relate to their environment and make sense of what is around them as well as how children develop into mature, adult thinkers. He investigated how humans actively construct meaning of their social environment (Arnold, 2000). According to Piaget, meaning making holds both structure and form, works in stages, and entails a process of development incorporating organization and adaptation. Organization describes the cognitive process of making meaning and adaptation involves two processes. First, the process of assimilation involves one fitting an experience into an existing schema (way of organizing). Secondly, accommodation involves the action one takes when an experience doesn’t fit into that existing schema. The individual must
either create a new schema or modify an old one in order to fully understand and organize the experience. Through the process of development and an effective person-environment interaction, an individual can take progressive steps toward understanding experiences in a more complex fashion and hence “develop” cognitively.

The processes of disequilibration and equilibration are key elements of one’s developmental growth, which Piaget highlighted. He felt that humans strive to be at a steady state of functioning, one where they are comfortable with their cognitive processes and ability to comprehend the environment around them. Equilibration therefore is the comfortable balance an individual maintains between the states of accommodation and assimilation. When one is introduced to or faced with a situation that doesn’t fit into his/her existing schema, a natural tension occurs, and Piaget referred to this as “cognitive dissonance” or disequilibrium. This has been referred to as the critical mechanism, which encourages growth to take place (Lawrence, Gustafson, & Henning, 2001). The management of cognitive dissonance through modification of old schema or the creation of new schema is the essence of CDT.

Eleven central theoretical assumptions about CDT are generally shared across each of the different domain theories.

1. Development is an innate or intrinsic act. Humans are intrinsically motivated to seek competence and mastery over their environment (Sprinthall, 1978).

2. There are stages, or mental structures, within development, which represent specific ways of making meaning of one’s environment (Arnold, 2000) representing the current or preferred level of comprehending.
3. Each stage (or structure) is qualitatively different from the one before and after it (structure and form) and represents an entirely different way of making meaning (Sprinthall, 1978). This qualitative difference has been described as the development of an egg-caterpillar-butterfly or from the humanistic metaphor, an acorn to an oak.

4. Stage development is hierarchical and sequential meaning that one stage builds upon the next (Sprinthall, 1978).

5. The direction of development is invariant and irreversible meaning that one cannot skip stages and one cannot revert back to a prior form of functioning. Although at times individuals may act at a previous level (i.e. times of stress or anxiety) but their meaning making systems do not revert. (Rest, 1986b, Loevinger, 1976).

6. Growth is not automatic. Developmental growth will not occur on its own but requires an effective interaction of person and environment. Hunt describes this assumption with $B = f(p+e)$ meaning that behavior is a function of the person and the environment.

7. There is a consistent relationship between stage and behavior. The vast majority of the time, one’s actions will align with their present stage of cognitive functioning (Stoltenberg, 1981).

8. Physiological development is necessary for psychological and cognitive development to take place.

9. Stage growth is domain specific. Development in one domain does not mean that development has occurred in other domains.
10. Stage growth is modal and not fixed. Although one grows through stages, he/she will utilize ways of knowing in stages earlier and later (Sprinthall & Collins, 1984).

11. CDT is universal across cultures (Snarey, 1985) and across gender (Nassi, 1981).

Humans move through the stages of cognition that represent how they construct meaning of their world. Individuals increase their ability to understand multiple alternatives and respond more relativistically as they progress (Brendel, Kolbert, & Foster, 2002). Therefore, one’s ability to make meaning moves from the less complex to greater levels of complexity in thinking. In order for effective stage growth to occur, and one’s developmental potential be reached, a growth-producing environment is necessary. Following this premise, it has been shown that under certain conditions, it is possible to “promote” cognitive developmental stage growth (Sprinthall & Scott, 1989). Given this, educators would seem to be well advised to infuse such conditions into the curriculum model of a learning program.

**Moral Development**

Morality has been described differently among social scientists, and at times has been referred to as “values, rules, and actions that are preferred by the members of a given society” (Gielen, 1991a, p. 24). This type of definition may be considered too broad, in that there is little distinguishing between the terminology and the sources of such beliefs. Lawrence Kohlberg, viewed morality as involving thoughts, feelings, and actions but accentuated *moral reasoning* as the element that gives moral quality to particular actions (Gielen, 1991a). After an early exploration of moral character (a stable personality trait that would predict immoral behavior) by Hawthorne and May (1928) in classroom cheating studies, the topic was left relatively untouched for an extended period.
in the psychological research (Trevino, 1992). Traditional psychological perspectives of morality grew out of those theoretical frameworks popular in the early 20th century—specifically the psychoanalytic and social-learning traditions. The Freudian tradition conceptualized morality as the control of one’s instinctual drives by the superego through feelings such as guilt, shame, and inferiority (Gielen, 1991a). Hence, one’s moral decision-making process was restricted by the superego, which Freud believed to be developed by one’s environmental situation—specifically, one’s parents. Freud saw the superego as relatively unchangeable over time despite any individual development that might take place. The social-learning perspective viewed morality as a set of learned habits, attitudes, and values, that completely dependent on an individual’s reinforcing social environment (Gielen, 1991a). As the theoretical struggle between behavioral and cognitive approaches to American psychology became resolved in the favor of cognition (Rest & Narvaez, 1994), Lawrence Kohlberg’s theory took root.

Beginning in 1958, Kohlberg’s application of cognitive developmental theory to the notion of morality brought about revived interest in the topic (Trevino, 1992). The popularity of Kohlberg’s theory of cognitive moral development (CMD) arose in the 1960’s among the opposition to the Vietnam War and the Civil Rights Movement and peaked in the 1970’s (Rest, 1994). Kohlberg’s focus on the individual who determines right and wrong instead of dependence on the norms of society remains a key distinguishing feature of CMD (Izzo, 2000; Rest & Narvaez, 1994). The theory is based on the understanding of how humans conceptualize issues of justice and fairness and how these conceptualizations translate to moral decision making and moral behavior (Rest & Narvaez, 1994). Embedded in this philosophy is the idea that humans are active
decision-makers who have the ability to determine "appropriate behavior based on the interaction between cognitive decision making structures and the features of his/her environment" (Kohlberg, 1984 as cited in Izzo, 2000). Twenty years of research provides support for the major components of CDM (Kohlberg, 1969 as cited in Trevino, 1992).

Kohlberg’s CMD framework is composed of three levels with each level containing two stages, the second stage being the more advanced and organized within each particular level. Individuals are thought to move through these stages in an invariant sequence with each stage representing a qualitatively different mode of thought ("structured wholes"). Each stage is hierarchical in that an individual can understand the reasoning processes which occur at a lower level but not more than one stage above their own (Trevino, 1992). Kohlberg noted that much of his theory was a continuance of Jean Piaget’s (1932) work with development in children.

At the Preconventional level (Level I), the individual follows rules only to avoid punishment, and thus, societal expectations remain external to the self (Gielen, 1991a). A stage 1 individual is guided by obedience for its own sake (Trevino, 1992) and physical consequences are not separated from psychological ones (Gielen, 1991a). The stage 2 individual begins to recognize that there exists not just one correct authoritarian viewpoint and begins to do what is right in order to satisfy some personal need ("You scratch my back, I’ll scratch yours.").

One’s moral value at the Conventional level (Level II) resides in performing good in order to maintain order and meet the expectations of others. Here the individual “has internalized the shared moral norms of society or some segment like a family or peer group” (Trevino, 1992). One begins to experience conventions, rules, obligations, and
expectations as being part of the self (Gielen, 1991a). Stage 3 individuals exhibit the desire to do good for the sake of approval or pleasing others but do not take into account institutional or societal systems. At stage 4, one becomes concerned with society and begins to incorporate the rules and laws of certain larger systems designed to promote the common good (Trevino, 1992). The Conventional level is considered to be the level at which most adults remain, and according to Kohlberg, less than 20 percent of American adults reach the final, principled, level thinking (Trevino, 1992).

The individual in the Postconventional level (Level III) has moved beyond the expectations of others and the following of rules for their own sake. This individual incorporates abstract principles of freedom and equality, which might be shared philosophically with others. Here, "the self is differentiated from the expectations of others" (Gielen, 1991a, p. 30), and one might view moral choices as "rights" or "duties." Stage 5 involves making moral decisions based on agreed upon principles in a fair society and considers the potential for changing a law for societal benefit. Here individuals step back and view society in a more theoretical light, considering the rights and values a society ought to uphold. Although they recognize that different individuals or groups will have different values, they believe that most rational people would agree on two main points. First, everyone would like basic rights, such as liberty and life, to be protected. Second, everyone desires some democratic procedures for changing unfair law and for improving society. While stage 3 individuals seek to sustain individual relationships through cooperation, loyalty, and consideration, the stage 5 individual broadens his/her desire for these things to encompass society as a whole. Using principled thinking, one seeks out laws that take the whole into account: "The greatest
good for the greatest number.” Stage 6 is the stage Kohlberg later described as having “disappeared as a commonly identifiable form of moral reasoning” (Trevino, 1992, p. 447). The original description involved individuals who followed universal ethical principles that would benefit humanity. If their principles were challenged by an agreed upon “law,” these individuals would choose to act in accordance with their principles. However, this stage remains unverified and is now generally disregarded.

Kohlberg’s theory has been and continues to be challenged in the literature (Kurtines & Greif, 1973; Simpson, 1976; Gilligan, 1977, 1982; Schweder, 1982; Langdale, 1983; Sullivan, 1984, as cited in Izzo, 2000). Carol Gilligan’s critique has been the most notable and referenced. She suggested that Kohlberg’s theory does not adequately delineate the gender differences involved with moral reasoning and behavior. It was proposed that Gilligan invalidated Kohlberg’s scheme; however, after 10 years, there has been insignificant empirical evidence for this claim (Rest, 1994). Other critiques of Kohlberg’s theory have included suggestions about cultural and gender biases, invariant, hierarchical stage and sequence arguments, and the subjectiveness in the scoring process. In response, Kohlberg strengthened the scoring process, provided more precise theoretical discussions, described in detail the philosophies behind his theories, and conducted an enormous amount of empirical research to further support the theory (Gielen, 1991b).

Higher is Better

An often-challenged assumption of cognitive developmental theory is that the higher an individual is developmentally, the better off he or she is. That is, “higher is better.” Although it has been stated that higher doesn’t necessarily mean happier, it has
been shown that increasing complexity of both reasoning and responses to one’s environment are more effective at higher levels (Brendel, Kolbert, & Foster, 2002).

Kohlberg’s assumption of hierarchical development has been criticized for committing the “naturalistic fallacy,” that is, an assumption that later stages are more advanced simply because they fall into the later parts of the sequence (Rest & Narvaez, 1994). The literature suggests that the notion of “better” does not simply imply that the individual has more intelligence or holds higher moral values. Rather, those at higher stages are said to have “better conceptual tools for making sense out of the world and deriving guides for decision making” (Rest & Narvaez, 1994, p. 16). The literature further suggests that it is humans themselves who believe that higher stages are better when they choose to make their cognitive and physical decisions based on newly preferred ways of making meaning of experience. Research has supported the theory, its assumptions, and its use for facilitating stage growth (Faubert, Locke, Sprinthall, & Howland, 1996).

**Moral Judgment and Moral Behavior**

It has been proposed that “adequate moral reasoning is only a necessary, but not a sufficient condition for moral actions to take place” (Gielen, 1991b, p. 52). Kohlberg himself agreed with the idea that moral judgment comprised only a part of the psychology of morality (Rest, 1994). Literature in a number of fields illuminates the differing perspectives on moral development. One should consider each of these approaches as important in understanding this multifaceted concept. Therefore, instead of dividing different perspectives on morality (cognitive, affective, behavioral), Rest (1994) formulated the Four Component Model in an effort to establish the link between
them. Ultimately, he sought to conceptualize the process an individual goes through from interpreting a moral situation to finally acting out a moral choice.

This model links moral action and moral thought together in a four-step sequence involving: a) an individual's interpretation of the socio-moral situation, b) to a process of conceptualizing the decision about potential responses, c) to following through cognitively on one's responsibility to do so, and d) to the use of ego controls or "willpower" to practically follow through with an action (Gielen, 1991b).

Component I, Moral Sensitivity, involves an awareness of how our actions affect others and how each potential choice in an ethical situation impacts those involved. In taking the perspective of others, the individual imagines scenarios and how they might play out as they contemplate them. Component II, Moral Judgment, entails Kohlberg's work and is measured through the use of the Defining Issues Test (DIT). Here the individual decides on the correct course of action in the particular situation, and individuals at higher levels of moral development process such decisions using a more complex line of thinking. Component III, Moral Motivation, involves the decision to follow through with those values chosen despite the competition one encounters with other value systems. Rest (1994) explains that deficiencies in this component occur "when a person is not sufficiently motivated to put moral values higher than other values—when other values such as self-actualization or protecting one's organization replace concern for doing what is right" (p. 24). The fourth component, Moral Character, involves the ego strength, conviction, and courage (Rest, 1994) to act out the choices made. Although some individuals will falter in times of stress, those at higher levels of
moral development tend to remain of "strong character" (Rest, 1994 p. 24) in following through.

Thoma and Rest (1986) reviewed 28 studies connecting the DIT to a variety of behavioral measures and found a positive relationship. For example, low DIT scores were found with delinquents and cheaters, whereas those participating in social justice meetings, conscientious objectors, and leaders in juries and small groups received higher scores (Gielen, 1991b). Reviews of Blasi (1980), Jennings, Kilkenny, and Kohlberg (1981), and Thoma and Rest (1986) provide support for the significant correlation, albeit low, between moral judgment and moral action. Hence, researchers have established an adequate framework for conceptualizing this important concept and provided a greater understanding of the significant present link between moral stage and behavior.

In summary, Cognitive Developmental Theory and Moral Developmental Theory hold theoretically sound promise for conceptualizing the subject of ethical development. These theories also support a certain type of instructional format that has shown effectiveness in promoting cognitive and moral growth-- Deliberate Psychological Education.

**Deliberate Psychological Education (DPE)**

Deliberate Psychological Education (DPE) (Mosher & Sprinthall, 1971) describes an educational model that has been used to promote cognitive, moral, ego, and conceptual growth. The use of DPE has shown effectiveness in promoting cognitive growth in each of these domains with numerous populations including school counselors (Peace, 1992), nurses (Duckett & Ryden, 1994), teachers (Change, 1994), physicians (Self & Baldwin,
Moral Development in Business Education

1994), accountants (Ponemon & Gabhart, 1994), dentists (Bebeau, 1994), and veterinarians (Self, Olivarez, & Baldwin, 1994).

This model involves five particular components, which are sometimes referred to as "conditions for growth." The first condition for growth involves the learner experiencing a qualitatively significant new role-taking experience. The experience must require an increase in the current functioning level of the individual, but not so much that he or she becomes overwhelmed. Secondly, the learners are to be involved with careful and continuous guided reflection throughout the process. They are to be given ample opportunities to reflect on their experience through activities such as small and large group discussions in the format of Socratic dialogue and a weekly writing assignment, on which the instructor provides critical and supportive feedback. The processing that takes place during the small and large group discussions enables open sharing and the normalization of the positives and negatives of the initial parts of the process. Here the instructor works to "plus-1" the students either in the discussions or feedback to their writing. Hunt (1971) describes the "plus-1" technique as encouraging a developmental mismatch in which a learner is encouraged to use a mode of thinking one level above their currently preferred manner. The mismatch promotes cognitive growth (Holloway & Wampold, 1986). A sincere, thoughtful, and continuous response from the instructor demonstrates support for the student while also offering areas for challenge. Another condition involves the balance between the real experience and discussion, reflection, and teaching. The teaching portion of the model might entail a series of lecturettes with related activities on topics pertinent to the students; activities such as dilemma discussions and case studies can be utilized. The research indicates that the program
must be continuous in that it lasts at least six to twelve months in order for structural
change to occur (Rest, 1986 in Sprinthall & Scott, 1989); however, significant results
have been found in programs lasting three months (Schlaefi, Rest, & Thoma, 1985). The
final condition, the combination of support and challenge, is acted upon by challenging
the students to think in different ways about themselves and their work, as well as the
provision of individual and group support through the periods of disequilibrium.

Deliberate Psychological Education utilizes the Piagetian concepts of assimilation
and accommodation. The provision of a deliberate environmental mismatch, that
encourages participants to seek new levels of cognitive complexity, should encourage the
participant toward growth while not overwhelming them. Such learning conditions
enable changes in how an individual reasons cognitively and, thus, impacts future
behaviors (Lawson & Foster, 2005). Some of these elements mentioned (mismatching
students, group processes, reflective activities, challenging the students through
dilemmas) parallel a suggested integrative response to the challenges of teaching business
ethics of Felton and Sims (2005). However, their suggestions are not framed in any
particular theory of individual development, nor to they offer any support for their
suggestions through empirical validation. Kohlberg’s theory of moral development and
evidence of Deliberate Psychological Educations effectiveness appear to provide the
theoretical bases for understanding and implementing the type of development sought
after by business ethics educators.

_DPE-based Models of Teaching and Learning_

Deliberate Psychological Education utilizes research and accepted educational
practices but it does not fit precisely into one particular model of teaching and learning.
A DPE model incorporates elements of three of the four families of models for teaching and learning described by Joyce, Weil, and Calhoun (2000). The four models proposed include the Social Family of Models, the Information-Processing Family of Models, the Personal Family of Models, and the Behavioral Systems Family of Models. The DPE utilizes teaching strategies from the first two models with a focus on the Social Family of Models.

The Social Family of Models incorporates the means for building a learning community. This emphasis reflects precisely on Kohlberg's educational efforts in creating "just communities" in schools. The ideas for this type of education are not new; they date back to Plato, Aristotle, Aquinas, Locke, Jefferson, and Franklin. John Dewey helped popularize this approach in the early 20th century (Joyce et al., 2000). Cooperative learning strategies fall under this model and focus on creating synergy among the students in an effort to help them work together as partners in the learning process. The idea behind this orientation is that individuals become increasingly motivated when working together and that their interactions encourage individual as well as social complexity. Cooperative efforts also increase positive feelings toward others and increase self-esteem (Joyce et al., 2000). Dewey's ideas concerning cooperative learning led to a model of teaching known as group investigation. He felt that education in a democratic society should teach democratic principles. This model encourages students to develop a social system created by democratic principles, conduct inquiry into the nature of problems and processes, engage in solving social or interpersonal problems, and provide opportunities for experience-based learning (Joyce et al., 2000). The DPE model
encourages these types of teaching strategies by grouping the students into dyads and small groups for challenging debate as well as group reflections.

The Social Family of Models also incorporates the model of jurisprudential inquiry that suggests that individuals have different viewpoints on particular issues that inherently are in conflict. In order to resolve their differences, individuals must interact with one another, take others perspectives, and negotiate solutions (Joyce, et al., 2000). The DPE model incorporates case studies and dilemma discussions as a means to help students practice and gain competence with identifying a problem, identifying the options, identifying values underlying those options, taking a position, exploring the stances underlying it, refining their position, and then testing their assumptions about the facts and consequences (Joyce et al., 2000). In the context of these case studies and discussions, the instructor uses the Socratic dialogue technique and challenges the student’s positions while using metaphor to enhance understanding.

Hunt’s (1971) conceptual systems theory is found in the Social Family of Models; however, it also encompasses elements of the Information-Processing Family of Models’ view of personality development. The idea behind the Information-Processing Family of Models is that humans have an innate drive to make meaning of experience (one of the assumptions of CDT). Hunt focuses on the cognitive complexity of the individual student and the ability of the instructor to provide a constructive mismatch between the student’s present knowledge and the information offered by the instructor. Theoretically, the closer the learning environment is to the level of complexity of the student, the greater is the chance for learning to take place. It is suggested that students at a lower level of complexity respond better to environments with greater structure, whereas
individuals at higher levels need less structure due to their ability to entertain complex ideas. Hunt describes three particular types of environments, which match conceptual complexity levels. The first involves a match resulting in little growth such as high structure with an individual at a high level of conceptual complexity. Little growth occurs because the individual at a high level of conceptual complexity has the ability to entertain abstract concepts and does not require excessive structure. The second involves matching an individual at a lower level of complexity by providing a very structured environment. This type of match can result in moderate growth because the individual at this level seeks a structured environment involving direct instruction. Lastly, one's growth potential is maximized when a developmental mismatch is provided. For instance, an individual at a lower level of complexity may be offered structured instruction in addition to opportunities to conceptualize issues on an abstract level. In such an environment, the individuals present needs are met in addition to their being encouraged to entertain concepts in a more complex manner. Hunt offers “optimal environments” for teaching students at each of his four stages, and the DPE is based on this type of instruction.

The Information-Processing Family of Models directly references the theory of Piaget. This model can be used in many educational settings and is based on adjusting instruction methods to the stage of maturity of the student in an effort to increase the student’s rate of development. Very similar to Hunt’s theory, the educational goal is to accelerate growth (Joyce et al. 2000). And, as mentioned previously, that goal is attained through encouraging the processes of assimilation and accommodation. DPE is grounded in the Piagetian framework that has been advanced by many American educators. Here,
teaching is seen as the creation of environments in which student cognitive structures can emerge and change (Joyce et al., 2000). The student role is that of engagement in activities and self-discovery in which experiences can be inductive. The teacher arranges learning experiences that encourage thinking aligned with particular stages of development. Kohlberg utilizes this perspective in his educational outlook with the belief that it is possible to influence a student's level of thinking on ethical issues when instruction is organized around developmental principles. He emphasized three important conditions for matching teaching to the students' levels of moral reasoning (p. 24). DPE emphasizes precisely this type of adjustment of learning activities to fit students' developmental level.

Presently, different models of educational practice are utilized in the teaching of business ethics. The next section reviews research studies within business utilizing a Kohlbergian framework for understanding moral development as well as one study focusing on a different aspect of ethical reasoning.

Research Studies in Business Ethics

A body of literature focused on the problem of ethical behavior within business has emerged in the last 15 years. The literature continues to offer multiple theoretical perspectives for conceptualizing the issue, and some business programs have suggested teaching methods aimed at ameliorating the problem. Few empirical research studies have been found which measure the effectiveness of certain teaching strategies or of the theoretical perspectives, which ground them.

Research focused on the similarities and differences in the moral development of business professionals and graduate business students in two countries attempted to
provide implications for ethical education in graduate business schools. Kracher, Chatterjee, and Lundquist (2002) hypothesized that American business professionals and graduate students would have higher P-scores on the Defining Issues Test than Indian business professionals and graduate students (Hypothesis I). P-scores represent the use of principled thinking, which is found in the later stages of Kohlberg’s developmental model. They further hypothesized that there would be significant differences in the DITP scores of individuals based on their levels of education (Hypothesis II).

No significant difference in Cognitive Moral Development was found as measured by the P-scores between the professionals and students in the two countries. After further analysis, the data showed that Indian business professionals had significantly lower scores than Indian students and U.S. professionals currently going to graduate school. Potential explanations for these results included the Indian professionals’ lack of trust in their industry as well as the powerful influence of the social system in India. It is suggested that the Indian political and business systems are corrupt enough to “create apathy and to constrain the cognitive moral development of the Indian business professionals” (Kracher et al., 2002, p. 264). Concerning a second hypothesis, a negative correlation was found between P-scores and age as well as a positive correlation between P-scores and education. This study implied that there remains a need for an increased emphasis on ethical education in both countries. The results support the hypothesis that education itself positively affects P-scores on the Defining Issues Test. The researchers proposed that future ethics education be grounded in cognitive moral development theory, and that instructors utilize techniques to shift students from a lower to a higher level of moral development (Kracher et al., 2002).
Limitations of this research included the small sample size and the potential misunderstanding of questions due to cultural differences or breakdowns in the translation. The authors recommended that future research include empirical studies utilizing cognitive developmental theory as well as continued research on the relationship between moral development and behavior.

Izzo (2000) tested the efficacy of a compulsory ethics intervention on the moral development of real estate salespeople. Based on the idea that the increasing utilization of company-mandated ethics training interventions would be beneficial, this research sought to bridge some of the problems with previous research. The research investigated the impact of a government mandated ethics education program on two measures of cognitive development (Defining Issues Test, Real Estate Survey (RES)). He considered four distinct hypotheses; the first two focused on a positive relationship between compulsory ethics education and the ethical development of salespeople. The later two hypothesized that those individuals taking compulsory ethics education would more readily recognize ethical concerns and express ethical intentions in response to their concerns. The results showed no relationship between the mandatory training and an increase in CMD, indicating that, “Government mandated education, in its present form, has no statistically significant positive effect on the moral reasoning of real estate practitioners, either in terms of general measures or on industry specific measures” (Izzo, 2000, p. 236). Hence, the value of such programs was concluded to be “highly questionable” (Trevino, 1994, p. 237) and the idea that “you can’t legislate morality” was reiterated.
The authors suggest some limitations to this study. First, there were segments of the real estate field not included and, therefore, the generalizability may only extend to certain groups. Secondly, the use of paper and pencil instruments may have introduced method variance. One limitation of this review entails the present inability to locate the specific teaching strategies included in the mandated course. Overall, the “mandating” of what is essentially personal growth suggests an initial premise quite contrary to the necessary “Conditions for Developmental Growth” (Brendel, Kolbert, & Foster, 2002), which have been recommended in the research. Izzo (2000) suggests that future researchers “examine the efficacy of various methods of instituting ethics training” (p. 238).

Another research study entailed an effort to fill the gap in the research through the implementation of a specific ethics education program with business management undergraduates. The intervention focused on pluralistic ignorance (PI): “a social comparison error whereby an individual holds an opinion but mistakenly believes that others hold the opposite opinion” (Allport, 1924, 1933; Prentice and Miller, 1996 as cited in Halbesleben, et al., 2005, p. 386). Pluralistic ignorance is an underlying social cognitive error in judgment. Student participants in the study were separated into control and experimental groups on the basis of the particular business management class in which they were enrolled. Students in the control class received no formal, stand-alone lecture on ethics, no discussion of PI, and did not develop case examples. After listening to a lecture on business ethics, students in the experimental group were involved in a three-phase process. First, they were presented the basic notions of PI, its definition, and its past applications. Secondly, instructors engaged students in discussion of PI’s
relationship to ethics. The final phase involved having students develop case examples of PI's influence on ethical decision-making in an organization (Halbesleben et al., 2005). Vignettes were presented to describe the situation, and students were measured on their likelihood of committing an unethical act.

Instead of the DIT measure commonly utilized in moral development research, the study's participants completed a measure assessing the likelihood of committing an unethical act given varying degrees of being caught engaging in the act (Halbesleben et al., 2005). It was hypothesized that students in the experimental ethics education program would report themselves to be less likely to commit unethical behavior in both a school setting and a business setting than those students not participating. The researchers based their procedure on the pluralistic education program developed by Schroeder and Prentice (1998).

Those students involved in the PI-lowering program reported a lower likelihood to commit an unethical act in a business setting but not in the school setting. Results from the research suggest the effectiveness of such an intervention with business students in increasing ethical standards in the context of business education. However, there appeared to be differences between individual responses, which were dependent on the context of the ethical situation. It is suggested that the decreased likelihood of committing an unethical act only occurred within the context of business, and may not necessarily transfer to more broad-based ethical reasoning. The researchers suggest the potential lack of "transfer" to other ethical situations such as cheating highlights the importance of providing ethical training and education to a specifically targeted context (Halbesleben et al., 2005). One question that arises involves whether or not one's
undergraduate experience should be specifically focused on ethical development within a particular context (e.g., business) or on ethical development in all contexts. Due to the fact that this research only shows increased ethical abilities within the business context, one wonders whether or not general moral development (as would be indicated by the use of the DIT) has occurred in conjunction. It has been suggested that higher education needs to be a "liberating process, which helps students become independent and critical learners" and that this level of learning should enable "students to reflect on knowledge which transcends any one particular discipline" (Macfarlane, 1998, p. 35-36). Hence, business schools might be understandably interested in programs that assist ethical development within the foci of the profession (business ethics) alongside the foci of the university as a whole (personal and societal ethics). This research study may also have been successful in promoting Kohlbergian moral development, but one cannot know for sure without the utilization of measures such as the DIT.

The authors note some limitations of their study. First, the two groups cannot be seen as an accurate comparison due to the fact that they were at different levels of their educational program; some students had already completed previous coursework. Secondly, students in the experimental group (PI-lowering program) were exposed to information in the syllabus indicating that ethics would be a course topic and this could have influenced their motivation level and post-test scores. Thirdly, the researchers recognized the challenges inherent in the self-reporting method used in this study, and point out that such self-reports do not necessarily translate into actual behaviors. Lastly, since the study focused on one university over a semester, more research is needed to establish generalizability to other settings and other populations. The research does lend
support to the general importance of ethics education programs based on theory and research and should encourage further research studies utilizing such praxis.

The studies described above focused on different elements of the problem and the current approach to it. The first two utilized the DIT for moral development measurement; one study compared groups while another sought to show the effectiveness, or lack there of, of a mandated educational intervention. Two of these studies referred to cognitive developmental theory; however, no theory to practice link was recognizable. The third study focused on a particular dimension of moral development, pluralistic ignorance, and demonstrated how constructing a course focused on decreasing student’s pluralistic ignorance could produce positive results. Upon review of these and other studies concerning the teaching of business ethics, there appears to be a lack of symmetry between current interventions and the theories being utilized to conceptualize the issue under review. Although cognitive developmental theory continues to be utilized to understand this issue, no cognitive developmental interventions have been researched with the undergraduate business population. Halbesleben et al. (2005) highlighted the effectiveness of certain interventions when they were focused on a particular domain of functioning within a focused context. Although such efforts proved beneficial in a particular context, a specific focus may not meet the university’s aims toward more holistic development within the moral domain. The review of cognitive developmental studies that follows provides validity for the potential positive influence of certain educational models on moral development. They offer significant support for the idea that educational models aligned directly with the theory being used to understand
the issue might more precisely respond to the current problem of teaching business ethics and fill the present gap in research.

*Cognitive Developmental Studies*

Current literature demonstrates the increasing recognition of Cognitive Developmental Theory’s applicability to business ethics. Numerous studies have employed its theoretical tenants in an effort to positively impact moral development growth. Therefore, a review of studies from the cognitive developmental perspective in other fields is provided in order to demonstrate the effectiveness of these educational methods. In addition to meta-analyses, studies of interventions with undergraduate students as well as within the professions of accounting, dentistry, and law enforcement are included.

Ponemon and Gabhart (1994) reviewed a multitude of studies focused on ethical reasoning in the accounting and auditing professions. Through an analysis of the research focused on accounting and auditing companies, they showed how important ethical reasoning is in determining ethical choice and behavior in a variety of decisions. In an analysis of the role of college education on accounting student’s ethical development, research implies that “liberal learning in college may be an important factor in the development of students’ and accounting practitioners’ moral reasoning” (Ponemon & Gabhart, 1994, p. 114). Although only four studies focused on the effectiveness of ethics education, none showed a consistent influence on student’s ethical development as measured by the DIT. Their analysis of the educational research in this area led them to suggest that the type of intervention employed is the key to potential effectiveness, as noted in the previous research reviews. Although the authors do not
specifically describe the type of intervention in their review, they suggest the use of case study discussions and the use of particular dilemma discussions.

In their review of research, Ponemon and Gabhart (1994) suggest that three general elements have important implications for managing the problem of unethical actions within these professions. First, “effective pedagogical interventions at both the university and the firm level may foster the moral development of individual accountants and auditors” (p. 116). Second, developmental growth of ethical reasoning has the potential to occur at all age levels and in all types of learning environments. Thirdly, educators in the U.S. “should seriously consider the effectiveness of traditional ethics interventions in accounting and, when necessary, replace these with formal courses and programs that are designed to foster the highest order of ethical reasoning” (Ponemon & Gabhart, 1994, p. 117). The limitation of this review’s relevance to the proposed research entails the deficiency of explanation for the exact types of interventions the authors suggest. Due to their focus on cognitive development and moral development in particular, one can only assume that they are suggesting the implementation of strategies encouraged within Deliberate Psychological Education. A cognitive developmental perspective does provide a framework based on empirically validated theory for delivering these types of education programs.

Numerous studies support the use of cognitive developmental intervention strategies with the intention of promoting developmental growth. With specific focus on moral judgment, a meta-analysis of 55 educational interventions found that deliberate psychological education interventions were effective in promoting DIT gains (Schlaefli, Rest, & Thoma, 1985). When employing specific educational interventions, the analysis
showed modest but definite effects on developmental growth. Results showed a consistent relationship between effect size and Kohlberg's theory.

Bebeau (1994) describes an extensive intervention he and his colleagues developed and implemented with the assistance of the American College of Dentists (an honor society committed to promoting the ethical values in the profession). The undergraduate curriculum consisted of 43 contact hours over a four-year time frame. Curriculum emphasis was placed on “student performance, self-assessment, and personalized feedback, using validated assessment methods” (Bebeau, 1994, p.122). Personalized feedback through letters detailing results of measures, consults with students, commenting on essays, presentations, and group discussions complemented the material and activities used. This ongoing monitoring and feedback of the performance of students attempted to improve the quality of the moral arguments used, help students clearly develop a professional identity, and influence their perception that instruction in ethics is worthwhile (Bebeau, 1994).

A distinctive feature of this curriculum involved its focus on three of particular aspects of the Four Component Model. The undergraduate curriculum was modified into remedial courses for practicing professionals with courses consisting of 20-25 hours of instruction over several months with smaller groups (4-5 participants). Although many types of intervention strategies were utilized in the curriculum, each course was individually designed based on the DIT scores gathered from the pre-test. Bebeau describes intervention strategies used for all four components of moral development, yet the focus of this review is on moral judgment.
Bebeau’s research into the effectiveness of educational interventions on moral judgment with professional dental students demonstrates that (1) students do need instruction in ethical reasoning; (2) dilemma discussion techniques, along with criteria and feedback, are effective in enhancing moral reasoning; (3) performance in courses can be assessed; (4) academic preparation did not predict moral judgment scores; (5) students value moral reasoning instruction (Bebeau, 1994).

Morgan’s (1998) study with law enforcement trainees involved strategies such as dilemma discussions, small group work, and audio visual aids within the framework of a Deliberate Psychological Education program. Individuals in law enforcement face many challenging circumstances, which require high levels of adaptive responses. Morgan hypothesized that a DPE would significantly increase participants' conceptual and moral development. The criminal justice class, given over the course of one semester, consisted of 32 trainees enrolled in the course and the comparison group (N=32), who received no intervention. The Defining Issues Test (for moral development) and the Paragraph Completion Method (for conceptual level) were given as pre-tests and post-tests. The group receiving the intervention showed significant improvement in their principled moral reasoning as evidenced by the DIT. The intervention group also showed an increase in conceptual level development, but the increases were not significant. Despite some limitations of this study, it further supports the premise that a DPE can positively influence one’s moral development.

Lastly, McNeel (1994) reviews research studies focused on promoting moral development with undergraduate students in response to the calls from U.S. educators for an improvement in the teaching of ethics. McNeel emphasizes an “ethical crisis” in the
disciplines of business and education due to his research showing only moderate effect sizes for moral growth with significantly lower principled reasoning scores for these two majors in comparison to other majors. He suggests the use of Deliberate Psychological Education programs within these and other majors and the inclusion of off-campus learning experiences, out-of-class contact with professors, and opportunities for gentle, non-authoritarian interactions between instructor and student. The research review also includes recommendations for the inclusion of direct exposure to Kohlberg's theory (based on the recommendations of Penn, 1992a, 1992b) within a deliberate psychological education program. When he included direct instruction on Kohlberg's theory with 28 students, McNeel showed strong growth in principled reasoning among students within a 3.5-month period. Business and education majors showed sharper gains in moral judgment than did those of other majors. His review implies the benefits for moral growth of incorporating dilemma discussions, deliberate psychological education, and the direct and targeted approach of Penn into ethics education.

Summary

As described, cognitive developmental theory and the cognitive moral model within it, provide the underpinnings both theoretically and empirically for a similar intervention within business schools. The theory assists our understanding and conceptualization of one's cognitive moral development and the research connected with it validates the assumptions it puts forward. If one were to agree with Dewey that education is essentially about development, the natural next step would be to implement the types of educational interventions that have shown success in promoting it. At the undergraduate level, when students are about to enter a less constricted environment,
encouraging the personal growth necessary to most sufficiently problem solve seems even more appropriate.

Moral development allows for a specific focus on a domain of cognitive development, which at present is of ultimate importance for students entering the world of business. As scrutiny of businesses and business people increases and the idea that ethical business is beneficial for the organization’s bottom line proliferates, a theoretically based and empirically-based intervention at the educational level should be considered. Hence, the author proposes to utilize the psychological viewpoint reviewed by suggesting the implementation of an intervention focused on promoting moral stage growth (Deliberate Psychological Education). In so doing, theory and practice align in an effort to effectively respond to the current situation. Kohlberg’s focus on education during the later years of his work direct us toward research such as this, which incorporates his believe that, if individuals are to reorganize their thinking, they must be more actively involved in the process. Kohlberg felt that growth promoting educational environments must involve challenges to student thinking and stimulation of higher order reasoning skills. The DPE model offers such an opportunity.

The evidence for the effectiveness of such educational programs has been recognized, yet, to date, no particular cognitive developmental intervention has taken place and been studied within an undergraduate business program. Given the present ethical situation in this profession, it appears to be a critical time to integrate the latest psychological research with a population in need.
CHAPTER THREE
RESEARCH DESIGN & METHODOLOGY

This study examined the effects a Deliberate Psychological Education approach to teaching business ethics would have on the cognitive moral development of business school undergraduates. A four month long intervention with 45 students was infused into the present curriculum in an attempt to promote moral growth. In addition, an industry specific measure of business ethics development was used in an effort to specifically address potential professional concerns students will face. The Deliberate Psychological Education program acted as the independent variable in the study while measures of moral development and business ethics were the dependent variables. The following explanations clarify the design and methodology utilized for this research.

Research Design

This research utilized a quasi-experimental, non-equivalent control group design, which is the most frequently used design in field-based applications (Borg, Gall, & Borg, 1997). The purpose was to incorporate a cognitive-developmental approach to teaching business ethics and examine the effects of such an approach on the moral development of the participants. The teaching approach was designed to promote moral development and ethical reasoning. The approach used for the course previously and for the control groups during this study has been referred to as a moral deliberation approach. The study utilized one experimental group and three comparison groups. Each group was pre-tested and post-tested on each of the measures at the beginning and close of the semester.

Population and Sample
The target population for this research study involves business undergraduate students juniors from The College of William and Mary, a small public college in Williamsburg, VA. The students have completed two years of undergraduate coursework (at least 54 academic credits), taken business prerequisites, and have applied and been accepted into the business school. Students can focus their degree in accounting, finance, marketing, operations and information systems management, or a multidisciplinary approach. The study took place during the student’s first semester in the business program and was integrated into BUAD 300—Business Perspectives and Applications.

About 180 students enrolled into four sections of the class and the DPE took place with one of those classes; the remaining classes were used as comparison groups. The students were assessed at the beginning of the semester and then at the course’s completion.

Data Gathering

The Defining Issues Test (DIT-II) and the Multidimensional Ethics Scale (MES) were given twice during the semester. At the beginning of the course, the students received a verbal explanation of the research, an informed consent form, the two measures being used, and a cover letter explaining the purpose of the study. Participation was voluntary and participants were informed of the purpose and procedures involved in the study. Participants were offered the opportunity to receive the results of their measurements as well as the results of the study. The participants also retained the right to decline participation and withdraw from the study at any time. Considering the requirement of completing the course, such an occurrence was unlikely and ultimately did not occur. All responses and data collected were held in confidence.
In addition, throughout the semester, students responded to journal prompts as part of the experimental group curriculum. In the middle and at the end of the semester, there were additional prompts asking the participants to reflect on the process of the class and their view of the experience.

Instrumentation

Demographics

A general demographic questionnaire is included as part of the DIT-II. These questions enabled the gathering of information such as participant’s age, gender, citizenship, primary language, and current political stance. Information from this part of the DIT-II allows for exploration of variables when compared to the other constructs measured.

Defining Issues Test-II

The Defining Issues Test-II was used to measure moral judgment level. The measure designed by Rest, Narvaez, Thoma, and Bebeau (1999b) is a paper and pencil measure and seeking to assess one’s level of moral judgment based on Kohlberg’s theory of moral development. It is a new and enhanced version of the original DIT, which was devised 27 years ago. The DIT-II has updated stories, is a shorter test, has clearer instructions, retains more subjects through reliability checks, and in studies to date, does not sacrifice validity. The correlation of DIT-I with DIT-II is .79. It has largely replaced Kohlberg’s Moral Judgment Interview as the measure utilized for moral development research. Instead of classifying responses into Kohlberg’s six stages, the DIT analyzes responses, which activate three schemas. The scores represent the degree to which the participant uses the Personal Interest, Maintaining Norms, or Postconventional Schema.
The scores purport to measure how individuals conceptualize the possibility of organizing a cooperative society, or put another way, measuring individual development of concepts of social justice (Bebeau & Thoma, 2003).

The test consists of five contemporary moral dilemmas and is scored in the same manner as the original DIT (Center for the Study of Ethical Development, 2002). The five moral dilemmas are followed by 12 items the individual uses for consideration in making a decision on the issue in the dilemma. The participant uses a 5-point Likert scale that ranges from “no importance” to “great importance.” After consideration of the items, the participant selects his or her “action choice” decision and ranks the top four items of consideration used as the basis for his/her decision. The test includes individual subscale scores for stages of moral development 2 through 6. Individual stage scores are determined by aggregating scores across the moral dilemmas.

Normative data continues to be accumulated for the DIT-II and therefore it should be considered exploratory (Bebeau & Thoma, 2003). The DIT-II yields different scores due to the use of a number of indices. The two main and somewhat analogous indices, the N2-Score and the P-Score (Principled Reasoning- Postconventional) are the primary scores utilized for evaluation. The DIT-II also gives two other scores that are beneficial for further analysis: the Type Indicator score and the U-score (Utilizer).

**P-score**

The “P-score” is one of the moral judgment scores determined by the DIT-II. The P-score is the Postconventional Schema Score and it represents the proportion of items selected by the participant that apply to Kohlberg’s Stage 5 and Stage 6 (the Postconventional stages). Due to the lack of empirical support for a stage 6, stages 5 and
6 are described as “5A considerations” and “5B/6 considerations.” 5A considerations focus on “organizing a society by appealing to consensus-producing procedures (such as abiding by a majority vote), insisting on due process (giving everyone his day in court), and safeguarding minimal basic rights” (Bebeau & Thoma, 2003, p. 19). 5B/6 considerations focus on “organizing social arrangements and relationships in terms of intuitively appealing ideals” (p. 19). Hence, 5B/6 considerations enter into stage 6 ideals including. The P-score is computed by summing the scores from Stages 5A, 5B, and 6 and converting that sum into a percentage. The P-score ranges from 0 to 95 and is interpreted as the extent to which the individual prefers Postconventional moral thinking (Bebeau & Thoma, 2003). From normative samples categorized by education level from grades 7-9 through Ph.D/Ed.D levels, the average P-score is M=36.74 (Bebeau & Thoma, 2003).

The N2-score

The “N2-score” is a relatively new developmental index that has shown to outperform the P-score on six criteria for construct validity. This score combines the effects of two indices: the acquisition of new types of Postconventional thinking (significant increases in the P-score) and the rejection of simplistic thinking (significant decreases in ones preference for personal interest items- Stages 2 and 3). Because the hope is that individuals will gain increasingly sophisticated moral thinking while also clarifying ideas that should be rejected due to their simplistic or biased reasoning, both kinds of progress are considered to be desirable (Bebeau & Thoma, 2003). These two indices are combined into one score (N2-score) by adding the P-score to the rating data weighted by three. It is then adjusted to have the same mean and standard deviation as

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the P-score so that comparisons between the two can be made. The N2-score has more stringent rules for handling missing data than the P-score, and, therefore, more responses are invalidated in this score than in the P-score (Bebeau & Thoma, 2003). From normative samples categorized by education level from grades 7-9 through Ph.D/ Ed.D levels, the average N2-score is M=35.67 (Bebeau & Thoma, 2003).

The subscales of the DIT II— the M-score, the A-score, the Type indicator, and the U-score— provide additional information for the researcher. The M-score indicates the extent to which the participant supports statements, which might appear to be of a high developmental level, but are in fact meaningless. This score also incorporates a consistency check by comparing ratings and rankings in an effort to identify random or invalid responses. If scores on either of these subscales exceed the predetermined cutoff, the participant’s responses are invalidated (Rest, et al., 1999). The A-score seeks out evidence of an antiestablishment attitude.

Type indicator

This DIT-II index enables further clarity in understanding participant results. Dependent on ones schema preference (corresponding to stage of reasoning) and whether the profile is consolidated or transitional (firmly in one stage or moving toward another), the researcher can envision seven different “types.” A summary of the characteristics of an individual’s reasoning in the different types is as follows:

Type 1 - predominant in personal interests schema and consolidated
Type 2 - predominant in personal interests schema, but transitional
Type 3 - predominant in maintaining norms schema, but transitional; personal interests secondary schema
Type 4 - predominant in maintaining norms schema and consolidated
Type 5 - predominant in maintaining norms schema and transitional; postconventional secondary schema
Type 6 - predominant in postconventional schema, but transitional
Type 7 - predominant in postconventional schema and consolidated

There are 3 types that are consolidated profiles and 4 types that are transitional ones. As development progresses, one would expect individuals to move from consolidated profiles to transitional profiles considering the idea the positive growth is taking place and reasoning abilities are increasing. As an individual becomes consolidated in a stage higher than previously, their schema preferences change (Bebeau & Thoma, 2003). This score is less robust than either the P-score or the N2-score and is generally utilized for understanding patterns when there is no change on the P-score (Bebeau & Thoma, 2003).

**U-score**

The Utilizer Score (U-score) represents the degree of match between those items the participant endorsed as most important and the action choice selected for that story. For example, in the Famine dilemma, if the participant marks in the first place “Shouldn’t the community’s laws be upheld?” one might expect the participant to select “Should not take the food” as their action choice. This index was conceptualized, in response to critique, to be a moderator of the relationship between justice-based moral judgments and actions. A high U-score represents consistency between the items the participant endorses and their action choice whereas a low score represents poor consistency and therefore offers little insight into the decision-making processes.

The DIT II reliably replicates and enhances the original DIT that holds documented reliability and validity and is often used in developmental research studies. It holds construct validity and longitudinal studies show that subjects attribute increasing importance to higher moral development over time (Rest, 1986b; Davison, 1979; Rest, 1979; Rest, Davison, & Robbins, 1978). Years in formal education remain one of the
stronger and more consistent correlates of the DIT (Rest, 1986b) and studies show that scores interrelate with the predicted manner of the theory of moral development (Davison, Robbins, & Swanson, 1978; Davison, 1979). Rest and Narvaez (1994) maintain that the DIT II is uncomplicated to administer and score and emphasize that it has been used in multiple studies involving moral development. Hundreds of studies have used the DIT (Rest, Narvaez, Thoma, & Bebeau, 1999b) and there are three main approaches that have been used: comparison of different groups of professionals, gauging the efficacy of educational programs, and measuring the effectiveness of interventional studies (Rest & Narvaez, 1994).

The DIT II evidences concurrent validity as well. Kohlberg's Moral Judgment Interview and the Comprehension of Moral Concepts Test show correlations as high as .70 in age heterogeneous samples (Davison, 1979; Rest, 1979). The DIT is distinctive from measures of general cognition and correlations with IQ and achievement tests only reaching .50 and averaging .36 (Davison, 1979; Rest, 1979). The test is not consistently related to attitudes, values, social desirability, or most personality measures. The correlation between the DIT and moral behavior is significant but not strong; correlations range from .30 to .40 (Rest, 1994). The DIT holds sufficient reliability in that the P-index demonstrates test-retest reliabilities in the .70s and .80s over a variety of periods (from a few weeks to a few months). The internal consistency (Chronbach's Alpha) of the DIT averages in the .70s (Rest, 1988). The DIT II is scored objectively and therefore, inter-rater reliability is not an issue. The DIT II has been found to be equally valid for both males and females (Center for the Study of Ethical Development, 2002).
Rest, Narvaez, Thoma, and Bebeau (1999b) designed a study to validate the DIT II and found that it has significantly better validity than the original DIT and that it is highly correlated with the original ($r = .79$). Through studying 200 participants from four different educational levels, the DIT II was found to purge fewer participants, which led to a more complete distribution of scores and therefore greater validity. The researchers argue that increased validity relates to the innovative ways of looking at the data, and not to the changes of the dilemmas. Though Rest (1986) argues for the utility of the DIT for measuring general moral reasoning, he also promotes the development of measures specific to the industry under study (Izzo, 2000).

The Multidimensional Ethics Scale (MES)

Reidenbach and Robin (1988) focused their research related to business ethics on what they felt was an inherent problem in the use of a single item measure of ethical judgment (McMahon, 2002). Due to the inherent complexity of the ethics construct and their suggestion that current methods were inadequate (Reidenbach & Robin, 1990), they offered a multi-item, multi-trait approach (Ellis & Griffith, 2001). They presented the use of a 33-item inventory for research into business ethics. In 1990, they offered a distillation and validation process in which the original inventory was reduced to 8 items.

Their main assumption is that “individuals use more than one rationale in making ethical judgments” (Reidenbach & Robin, 1990, p. 693) and therefore an effective measurement tool would incorporate a number of different ethical perspectives. Five ethical philosophies were used to develop the MES; they include of theories of justice, relativism, utilitarianism, egoism, and deontology. Reidenbach and Robin’s interpretation of these philosophies is as follows: Deontology is concerned with an
Moral Development in Business Education

individual’s duty to follow legitimate ethical rules (McMahon, 2002). There are many
types of these duties to others (i.e., we must pay debts, care for our children, and tell the
truth) the most prominent of which is the “Categorical Imperative” (Immanuel Kant) ("I
ought never to act except in such a way that I can also will that my maxim should become
a universal law."); these duties create rights for others (Reidenbach & Robin, 1990).
Utilitarianism, a teleological philosophy, is concerned with acting in a manner that will
provide the greatest good for the greatest number (McMahon, 2002). It encourages those
involved in a decision to consider all the potential outcomes of their action or inaction
and weigh them against one another to determine which is best for society as a whole
(Reidenbach & Robin, 1990). Relativism entails the idea that rules themselves are
specific to a culture and therefore no universal ethical rules exist (McMahon, 2002).
Hence, because rules and values might be relative to a specific culture, no one set of rules
takes precedence. Arguments against the relativistic rationale appear to be preferred by
most ethicists (Reidenbach & Robin, 1990). Egoism has to do with promoting an
individual’s long-term self-interests. Justice, based on the writings of Aristotle and his
“principle of formal justice,” entails the idea that equals should be treated equally and
unequals treated unequally.

Through their distillation of these normative philosophical perspectives, they
presented the idea that ethics consists of three theoretical dimensions: moral equity,
relativism, and contractualism. Dimension one, broad-based moral equity, involves
concepts such as justice and fairness, and Reidenbach and Robin (1990) state that it is the
most complex of the three dimensions. The four items making up this dimension are: (1)
Fair/ unfair (2) Just/ unjust (3) Acceptable/ unacceptable to my family and (4) Morally/
not morally right. They believe that this dimension entails the underlying decision-making rule for assessing the moral content of business situations. Items one and two focus on the deontological philosophy whereas the later two integrate a relativistic one. The authors feel that within this dimension lie the fundamental decision rules for evaluating moral content—fairness, justice, goodness, and rightness. The also suggest it integrates the lessons from our early training/upbringing (Reidenbach & Robin, 1990).

Dimension two, the relativistic dimension, involves concepts pertaining to cultural and traditional acceptance. Its two items are (1) Culturally acceptable/culturally unacceptable and (2) Traditionally acceptable/traditionally unacceptable. This dimension concerns itself not with individual considerations, but rather with acceptance of the guidelines and parameters in the cultural system (Henthome, Robin, & Reidenbach, 1992). Therefore, it is implied within this dimension that individuals go beyond a purely legal organization of society and include learned understandings of “how the game is played” (Reidenbach & Robin, 1990). With the understanding that culture and society assist in the defining of one’s ethical beliefs, ethics then become relativistic in that they are subject to the decrees of society (Reidenbach & Robin, 1990).

Dimension three, the contractualism dimension, consists of ideas related to unwritten contracts and unspoken promises (Ellis & Griffith, 2001) and is purely deontological. It addresses the idea that a “social contract” exists between business and society that furthers Conventional contractual requirements to a level involving the ideals of rights, duty, promise, and truth telling (Henthome et al., 1992). The items within this dimension are (1) Violates/does not violate an unspoken promise and (2) Violates/does not violate an unwritten contract.
The MES can be used to determine participant's judgment of the ethicality of behaviors in a scenario. Reidenbach and Robin (1990) offer three different scenarios that can be used with this measure; however, they leave open the possibility for researchers to design their own scenarios, which may more directly relate to their topic of interest. Hence, depending on the research question, one could use these scenarios or others; the instrument is the 8 items, not the scenarios. It is worth noting that the development of the MES has been criticized because the developers only used a few scenarios in the development process. This research study will utilize the three scenarios developed with the instrument.

The MES exhibits high degrees of both construct and predictive validity. The three different dimensions capture an average of 72% of the variance in the univariate evaluative variable (Reidenbach & Robin, 1990). The summated item scores show high reliability with coefficient alphas ranging between 0.71 and 0.92 with an average reliability of 0.8. The first dimension has the greatest impact and hence maintains their idea that that the other two dimensions offer support for the role of dimension one. This impact parallels the suggestions by Kohlberg and Rest concerning justice and fairness (Reidenbach & Robin, 1990). Evidence of predictive validity is also shown with the measures explaining 34%, on average, of the variance in the single item measure of intention to behave in a similar manner (McMahon, 2002). The moral equity factor again had a greater effect with the relativistic and contractualism factors having less impact. The revised scale showed 12% more power in predicting behavioral intention than a single item measure of ethicality. Ten different studies show support for this three-factor measurement tool. Reidenbach and Robin (1990) recommend that future research
examine the relationship between individuals’ ethical evaluative criteria and their stage of moral development with an intention of enhancing the predictability of the work of Kohlberg and Rest. (This instrument can be found in Appendix F.)

Research Questions

The purpose of this quasi-experimental study was to determine if the educational methodologies utilized would have a significant impact on moral reasoning in comparison to the groups not receiving the intervention. It was predicted that students in the experimental group would exhibit significantly higher post-test scores on each of the dependent measures than the students in the three comparison groups.

Research Hypotheses

1. The intervention class will show significant moral stage growth from their pre-test to their post-test as measured by the DIT II.

2. The intervention class will show significant business ethics growth from the pre-test to the post-test as measured by the MES. Two different statistical analyses will be run for the MES.

Table 1 outlines the statistics utilized.

Table 1

Statistical Analyses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Statistics Utilized</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Repeated measures ANOVA</td>
</tr>
<tr>
<td>2a.</td>
<td>Repeated measures ANOVA</td>
</tr>
<tr>
<td>2b.</td>
<td>Repeated measures ANOVAs on each of the three factors of the MES</td>
</tr>
</tbody>
</table>
Scoring Procedures

The Center for the Study of Ethical Development at The University of Minnesota electronically scored the completed DIT II measures. Completed printouts of score results and analyses were provided to the researcher. The researcher scored the MES by hand. This measure allows for such a scoring procedure.

Data Analysis

The general linear model guided the approach in analyzing the quantitative data of this research. The researcher reviewed data for outliers and testing assumptions suggested for conducting statistical tests. Comparisons were made between the comparison and intervention groups based on their pre-tests. Mean scores were obtained for the DIT II and the MES. Due to the non-random selection of groups, repeated measures analyses of variance were conducted to determine if the groups were significantly different on the pre-test DIT II (N and P scores) and the MES.

Analyses of variance were used to compare the post-test scores of the experimental and comparison groups. With a significance level of \( p < .05 \), a multivariate analyses of variance (MANOVA) was used to test the effect of the treatment variable on the dependent measures.

Limitations

Several limitations arise which need to be examined when utilizing a non-equivalent control group study with repeated measures. Gall, Gall, and Borg (2003) state that a significant threat to validity has to do with the idea that pre-existing conditions between the groups might be responsible for any differences found from the pre-test to
the post-test. In addition, factors such as maturation, testing, regression, and instrumentation could also affect the validity of this type of design (Campbell & Stanley 1966). Hence, some interactions could take place between these variables and the process of participant response.

**Statistical Validity**

The small sample size of the intervention group may threaten the statistical validity for this study. Although central limit theorem states that a minimum sample size of N=30 is needed to ensure that the sampling distribution of the means will be normal (Gall, Borg, & Gall, 1997), the experimental group sample was just a little greater (N=45); however, the control groups combined increase total sample size (N=172).

**Internal Validity**

A potentially major threat to the internal validity has to do with the possibility that any group differences found could be due to pre-existing differences rather than the effects of the intervention. The effects of maturation on the internal validity may be a cause for concern considering the population involves undergraduate students potentially developing within the moral domain due to their current environmental situations and other activities they may be involved in outside of the class. The use of comparison groups might minimize this effect due to the fact that if maturation were a factor, it would be a factor for all groups (Gay, 1996).

Testing can also threaten internal validity due to the fact that the same instruments are used. The threat entails the possibility that participants would improve their scores due to their familiarity with or pre-sensitization to the instruments (Gall, Gall, & Borg,
These instruments do not have any clear "right," "wrong," or "better" answers so this threat was limited.

The process of measurement could impact internal validity due to the use of a pre-test; however, literature doesn't suggest that pre-testing sensitizes people to the DIT-II. History can threaten internal validity as well and might confound the independent variable; the fact that this affects all groups at the same time should have reduced the threat. If there were students who chose to drop the course while enrolled, mortality could have threatened internal validity, yet the course was a required element necessary for degree completion and therefore the threat was minimized. Records were kept for each participant to track absenteeism or withdrawal to control for the effects of mortality (Gay, 1996). No student missed more than two classes and these students completed most of the required work. Statistical regression asserts that extreme scores on the first measure will gravitate toward the mean upon retesting (Campbell & Stanley, 1966); the researcher observed the results of the pre-test measures and judged that its impact on the study was minimal. Finally, the instruments themselves need to be considered; it has been shown that both the DIT II and the MES hold solid reliability and validity. Campbell and Stanley (1966) state that non-equivalent control group designs do an admirable job in controlling for the effects of history, maturation, regression, and instrumentation. Experimenter bias threats to internal validity need to be considered due to the fact that both the control and experimental groups are at the same university with the same instructor.
External Validity

The major concern in relation to external validity has to do with whether or not the results are generalizable to the population of undergraduate business students. Participants were not randomly selected and therefore any generalization must be made very cautiously. Pre-test treatment interaction must be considered with the idea that the test could have sensitized the participants to aspects of the treatment and hence, influenced post-test scores. However, neither the DIT-II nor the MES give any information pertaining to the teaching of the course. Treatment diffusion could potentially be a problem in this study considering that the students will all be at the same college and therefore might converse about the occurrences or assignments in the class and adopt pieces of the intervention. The experimental group was not directly asked to not discuss their involvement and activities in the class with members of the comparison groups. Experimenter effects also posed a threat to external validity due to the fact that the course instructor taught all four sections. Conscious or unconscious actions may have affected the participant's performance and responses. However, the preponderance of additional elements were provided outside the classroom; therefore, there was minimal opportunity for this effect. In addition, the researcher facilitated the experimental groups outside of class activities and unconscious actions could have interfered with participant responses. The researcher's involvement may have been mitigated by differences between he and the instructor; however, the researcher observed the classroom activity and attempted to uphold what was stated in the classroom so differences were minimized. In addition, conversation in reflective groups and responses to journals were generally more personalized and therefore different from the in-class content. General reactive
effects were also a concern. Since participants had knowledge of their involvement in the study, normal performance could have been influenced (The Hawthorne Effect). Hence, participants might have attempted to give more favorable responses because they were being studied.

Although there are limitations, this study provides a beneficial method for investigating whether such an educational plan can effect the moral development of business school students in an ethics course.

Ethical Considerations

This study did not present many ethical risks to student participants. All participants were informed of the purpose of the study and retained the right to refuse instrument completion; however, participation in class and completion of traditional coursework remained a requirement. The data was coded to ensure anonymity, maintained in a confidential manner, and only group mean data is disclosed. In addition, the study was reviewed and approved by the College of William and Mary, School of Education Human Subjects Review Committee and ACA ethical guidelines related to treatment and protection of participants were adhered to. Participant information was kept confidential at all times and they were assured that their educational standing would not be impacted in any way due to their participation. Participants were informed that generalized results of the study are available to them upon completion and at their request.

Significance of the Study

This study provides a field-based approach for examining the effects a DPE program has on one’s moral development and reasoning on business ethics scenarios. It
enhances our knowledge regarding the effectiveness of such a program as well as the moral processes that impact student careers in business. The findings hold relevance for business schools in their examination of effective means for developing more ethical graduates. Although there remain limitations, this study enhances curriculum strategies presently utilized at The College of William and Mary and other schools of business. It might also offer support for business educators beseeching the accrediting agency for a stand-alone ethics course.
CHAPTER FOUR

THE INTERVENTION

As described in Chapter 3, all undergraduate students in the business school participate in a semester long BUAD 300 course entitled “Business Perspectives & Applications.” “In this course, students focus on several processes that underlie the content of successful business: communication, teamwork, and ethical decision-making” (BUAD-300 Syllabus). The primary component of the course entails discussion and activity related to ethical business practices and case studies involving business ethical dilemmas. Each of four sections of the class meets once a week for an hour. The experimental intervention was implemented in one of the four sections.

The BUAD 300 - "Business Perspectives & Applications" Course

As part of the introductory semester in the undergraduate business program, students participate in this course in addition to four others held in the business school. Alongside other coursework taking place, this course is designed to specifically focus on ethical practice as it relates to business situations, engagement in the experience of simulating a hypothetical company, and training in presentation organization and style. The course consists of experiential exercises both in and out of the classroom, reading assignments, brief lectures concerning ethics and its relationship to business practice, psychological perspectives on ethical reasoning, and ethical decision making models.

The course is based on a moral deliberation approach to teaching ethics that entails guiding students through four important steps in making ethical decisions (moral inquiry, option development and analysis, decision and action planning, and reflection and evaluation). Most individual classes entail short student-team presentations on
ethical case studies, discussion of the case study and the ethical principles at play, and a brief lecture pertaining to different elements of the ethical decision-making process. The readings and out of class experiences are integrated into discussions and lecturettes throughout the semester.

At the beginning of the course, students are organized into “teams” on which they remain throughout the semester. These teams participate as a group in a number of assignments across the curriculum over the course of the semester. The first BUAD-300 class is dedicated to “team-building,” and the instructor engages the teams in activities meant to facilitate cohesion and an awareness of team dynamics. Topics including team leadership, communication styles, and handling challenges have been reviewed during this time. This year the class focused on “positive experiences” students have had in “teams” previously; the sections outlined and discussed these elements together in preparation for the semester. At this time, one of the methods of evaluation was introduced. Each student was asked to complete an evaluation of each member of their team, themselves as a member of that team, and the team as a whole. These were completed twice over the semester (See “Peer Review Sheets” p. 105).

Students are required to engage in one team presentation on one case study involving an ethical dilemma during the semester. Working as a team gives students the opportunity to analyze ethics cases in business scenarios and apply a common framework for ethical decision-making. This exercise not only requires them to consider situations they are likely to encounter in the future, but they also have to struggle as a team to come to some consensus; such struggle requires taking multiple perspectives. Communication skills also are refined through these ethics case presentations. In this team-based
environment, students become aware of the dynamics of group work, and develop their interpersonal and leadership skills. For the presentation itself, these students act as the "consultants" for the person or company involved in the case study and are to present their "recommendations" as the focus of their presentations. Their preparation for these presentations entails meeting as a team outside of class. These meetings are meant for the students to process the case study they are reviewing utilizing a suggested ethical decision making process (found at the end of this chapter). Through team discussion on the case study, these students organize their presentation to encompass: clarification of the ethical concern, explanation of the differing perspectives within the case, the ethical principles utilized to develop a number of options, and justification for one particular recommendation. Students receive feedback from the class and the instructor on their presentation style and delivery initially, and then the entire class participates in a discussion and analysis of the recommended course of action.

The students are also required to attend one "event" organized by the School of Business during the semester. This year, the event entailed the viewing of a film (Who Killed the Electric Car?) at a local theater as well as participation in a panel discussion with members of the business community.

BUAD-300 students also participate in a simulation exercise in order to further strengthen the goals of communication and teamwork while engaging in business decision-making by running their own company. This is a competitive event that enables the students to display the knowledge obtained across the curriculum over the course of the semester while continuing to work on their communication and teamwork.

The Experimental Curriculum
Critical elements of The Deliberate Psychological Education model (DPE) were infused into the design and implementation of the curriculum. The researcher worked with professors in the School of Education as well as the course instructor in designing and implementing the curriculum. The defining goal of the experimental curriculum was to facilitate developmental growth in the domain of moral reasoning in an effort to evaluate the effectiveness of such an intervention on the students and to help prepare them for the ethical dilemmas they will face in the workplace. It differed from the control curriculum in 3 primary ways: (a) students in the experimental group engaged in written reflection via responses to prompts that highlighted a number of elements related to ethical reasoning, (b) students in the experimental group engaged in reflective groups, as a team, at the conclusion of their presentations, and (c) students in the experimental group were challenged to an increased extent in the classroom discussions to take multiple perspectives when considering the case studies. (See Table 2)

Table 2

<table>
<thead>
<tr>
<th>Course Activities</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Written Reflections (multiple questions on multiple points)</td>
<td>None</td>
<td>No attempted deliberate increase in challenge</td>
</tr>
<tr>
<td>B. Team Reflective Groups</td>
<td>None</td>
<td>No opportunities for additional support and challenge.</td>
</tr>
<tr>
<td>C. Attempted deliberate increased instructor challenges in the classroom</td>
<td>No attempted deliberate increase in challenge</td>
<td></td>
</tr>
<tr>
<td>D. Support and challenge offered through journal responses and team guided reflections</td>
<td>No opportunities for additional support and challenge.</td>
<td></td>
</tr>
</tbody>
</table>

The additional elements infused only minimally impacted the content of what happened within the classroom (these changes will be discussed below). Mainly, the
changes involved "outside of class" activities, which were not required of the control
groups. The researcher assisted the instructor by being the sole provider of the additional
elements incorporated into the course. The content of the model incorporated the aims,
goals and objectives for the program and the course, was designed on the basis of a
particular set of learning outcomes, and followed a simple model of curriculum,
instruction, and assessment. The design of the model was unique from the development
of it in that it entailed the clarification of the sequence of processes by which the goals
were to be attained and evaluated and will be explained below.

Aims

The aims for the both the experimental and control groups integrated the mission
of the School of Business, which seeks to nurture creativity, mentor high ideals, and
accelerate the ambitions of leadership in students. The School of Business at The
College of William and Mary aims to guide students toward being “distinguished in the
knowledge, skills, and leadership behaviors that ensure success not only in the
professional ranks but also in life” (School of Business website). Principled achievement
at the highest level is an overarching aim for the school of business and the college. An
additional aim focused solely on the experimental group was to facilitate individual
growth in moral judgment so that concepts of social justice are consistently integrated
into their evaluation of business practices.

Goals

The goals for both the experimental and control groups entailed the specialized
ideals for the many constituencies involved in the curriculum that further focused the
desired aims. Additional goals for the experimental group are also included. From the
Information-Processing Family of Models, a necessary goal entails providing students with learning experiences that give them practice with particular operations while assisting students in initiating their own learning experiences (Joyce, Weil, & Calhoun, 2000). The course sought to (1) raise student awareness of ethical issues in the world of business, (2) expose students to current ethical issues and current means of responding to them (3) expose students to models of ethical decision making and (4) enhance students’ ability to recognize multiple perspectives in ethical scenarios and take into account the impact of ethics, legality, and financial concerns when contemplating on ethical scenarios. An additional goal for the experimental group only, specifically from the perspective of moral development was as follows: (5) the course sought to encourage student’s to develop from an egocentric and individualized way of thinking to more socially centered, publicly validated way of thinking (Joyce et al., 2000). In terms of moral developmental language, that translates to progressing through lower stages toward the stages where individuals incorporate principled thinking skills.

Intended Outcomes

The objectives entailed the specific, time-oriented desired outcomes of the individual students; they are the prudent measurable elements realized in the classroom (Ornstein & Hunkins, 2003). The main objective for the experimental course was to enhance the ethical reasoning of the students through the application of a DPE program alongside the content of the ethics course. Though many of the objectives for the class are similar for both groups, the differences for the experimental group are addressed within each objective and generally entail a greater degree of understanding and personal exploration into student’s ethical thinking process. Through incorporating the previously
held objectives for this course, as well as the objectives of a DPE program, at the completion of the course, students should be able to:

(1) Obtain knowledge of the five different philosophical perspectives of ethics and morality: justice, relativisms, utilitarianism, egoism, and deontology, as well as the historical development of these philosophies. Students should be able to minimally differentiate these perspectives. The experimental group will be able to personally explore and conceptualize those perspectives they tend to “favor” and why they do so.

(2) Obtain knowledge of Moral Reasoning as characterized by Kohlberg and of the stages of Moral Development. They will display the ability to recognize behavioral and cognitive examples of individuals at different stages. The experimental group will also be able to personally evaluate (on two occasions) at what level they currently reason through moral dilemmas.

(3) Recognize and understand the influential effects of a group or culture on ones moral judgment. The experimental group will utilize the team reflection activity to process their own as well as other’s impact on a particular project.

(4) Understand the importance of ethical decision making models and practically apply one of these models to an ethical dilemma.

(5) Recognize the many possible decisions to be made when confronting ethical situations and incorporate multiple perspectives in deliberating on a decision. Experimental group students will be able to evaluate their efforts toward taking another’s perspective in both their written journals as well as through increased challenges to do so by the instructor in class.
(6) Work effectively as small groups and as a unified team in developing a conclusion for a particular dilemma, defending their rationale for their decision, and succinctly delivering their decision in a presentation format to the class. The experimental group will also be able to process and evaluate their actions as a team and as individuals within that team and focus on areas of success and for improvement (Frustrations? Accomplishments? Goals for next time? Etc.).

(7) The experimental group will accept and incorporate the feedback of peers and the instructor throughout the course and in particular, in response to their presentations and journal reflections.

Experimental Procedure Using a Deliberate Psychological Education Model

The DPE model has been supported in the research as an effective method for promoting cognitive growth in a study such as this (Faubert et al., 1996). The main elements of the DPE include: a significant role-taking experience, a balance of support and challenge, continuity, and a balance between guided reflection and the role-taking experience. The DPE served as the organizing framework for the delivery of the experimental curriculum and distinguished it from the control curriculum. Although all students took part in some of these elements, due to the original organization of the course, within each component, one will find the distinguishing features of the DPE experienced by the experimental group (See Table 3).

Role-taking Experience

Entrance into undergraduate study partially fulfilled the role-taking experience necessary for this study. The number of new experiences individuals come across during this time allow for a significant amount of new encounters that encourage them to
develop as individuals both personally and intellectually. Although the vast majority of the students have been enrolled for two years, they were entering into a very new phase due to their recent application and acceptance into the business studies program. The types of courses they are taking, the focus of their studies, as well as their fellow students change during this time and this change can be considered significantly new. The second component of the role-taking experience entailed their participation in the weekly classes that involved interactions on ethical dilemmas in business and other new elements provided by the DPE. Lastly, the students were asked to work in small teams on two different projects over the course of the semester. Similar assignments may or may not have been accomplished in the past; however, the relationship of the assignment to business was likely new to them due to the fact that previous coursework was not held within the business school. The first entailed the processing of a business ethics dilemma utilizing philosophical perspectives and a particular model of ethical decision-making. Teams of students worked together to review a particular business ethics case study involving a moral dilemma. These teams worked together outside of class to share ideas and integrate differing perspectives into the process. After using a particular model for ethical decision-making, they presented the rationale and critical elements used in their processing and shared their findings, including the recommended course of action, to the class in a succinct and clear presentation format. Another team assignment involved the students engaging in business decision-making by running their own company. This was a competitive event unlike other classroom activities that integrated both the business content of the course as well as the processes learned during the semester. In designing this company, the students were asked to integrate their new understandings of ethical
practice into each step. These exercises allowed for the acquisition of a practical understanding of business applications while consistently integrating ethical principles and moral reasoning.

The experimental group was asked to participate in some additional elements to these role-taking experiences that were designed to expand the moral reasoning and perspective-taking abilities of the students. These included the deliberate focus on challenge within class dialogue and discussions, as well as the team guided reflection meetings. Through these role-taking experiences, students were exposed to others’ views and were asked to challenge and question their own immediate emotional or cognitive reactions to case studies.

**Support and Challenge**

The students received different levels and types of support and challenge during this time. The students in the experimental group were provided with a great deal of support at the initial stages of the course. The instructor and researcher provided compliments for their achievements to date and their willingness to engage themselves in the learning process, encouraged their struggles with the material, and gave empathetic responses to any challenges they might have been experiencing upon entrance into the new program and with classroom activities and projects. The researcher was able to share these supportive elements through journal feedback and the instructor was able to do so in and out of the classroom. The supportive environment persisted throughout, but was at some points lessened during the course when the challenges increased. Over the course of the semester the students were increasingly challenged with more difficult content, more in depth responses to their journal entries, more challenging case studies,
The control group received less of a deliberate focus on this balance and were not supported or challenged to the degree the experimental group was. When the experimental group was asked to personally reflect on the ethical reasoning, the control group was asked to do an activity not involving such introspection. The experimental group also received supportive (and challenging) individual feedback to their journal entries from the researcher that the control group did not receive. All the teams from both groups were invited to utilize the instructor during office hours for additional consultation on the case study dilemma presentations— another opportunity for support and challenge.

**Reflection**

Only the students in the experimental group were asked to write five thoughtful and comprehensive journals over the course of the semester, which were reviewed and
extensively commented on by the researcher. The researcher utilized his understanding of
the typical thought processes taking place at each of the stages of moral development as
described by developmental theory. The researcher tried to evaluate at what
developmental stage their responses were evidencing and then encourage them to try and
process the situation using reasoning skills from one level above their current one. The
participants were given "prompts" (2-3 for each journal) on which to reflect and respond;
these related to content or activities in the course. Much of the time, the "journal
prompts" came directly out of things mentioned or discussed in the class. The intent was
for the journals to become an exercise of personal reflection entailing the feelings and
cognitive processes experienced with the material and exercises during the course.
Consistent and thoughtful responses from the researcher were not an effort to guide their
understandings toward a particular end, but rather an effort to encourage their deeper
reflections on the individual process experienced.

Students were also asked to discuss and reflect on dilemmas as a class and in
small groups. The instructor provided encouragement and challenge in these discussions
to promote further reflection within the individual students. In addition, the students
were placed in small groups on a number of occasions to fulfill the requirements of
assignments revolving around particular dilemmas. The students needed to deliberate
together outside of class on a dilemma, jointly agree on a response to the dilemma, and
present their process and reasoning to the class. These activities provided further
opportunity for reflective engagement outside of the class time.

A major reflective component for the experimental section involved the
researcher engaging the presentation teams in a reflective activity at the conclusion of
their presentation and receipt of feedback from the class. This occurred directly after each team’s presentation and allowed for a concluding, guided group reflection on the process and their perceptions of the feedback. The entire team would meet with the researcher for 30 minutes and discuss and share their individual experiences with the project as well as reflect on the process their particular group went through. These meetings allowed the researcher to support both their achievements and their struggles while integrating their understandings of how higher-level ethical reasoning impacts such a process. A general outline of some of the points covered in these reflective meetings can be found at the end of this chapter.

**Balance of Reflection and Role-taking**

The experimental group students were continually encouraged through journals, class and small group activities, and project assignments to process problems, struggles, and the challenges they met with this new information and the new experiences. The instructor tried to engage both groups of students in discussions pertaining to these issues and tried to normalize any cognitive dissonance experienced. However, the experimental group was observed more carefully and discussed more often due to the researchers involvement. The individuals in the experimental group also had the guidance of the journals and the journal feedback to assist this process to a greater degree.

**Continuity**

The course took place over 15 weeks in which the classes from both groups met together 12 times. The researcher and the instructor worked together to limit the lapses in continuity (i.e. The simulation) and retain the focus on ethics by arranging the schedule (See “Course Schedule” p. 98). Two of the weeks the students worked on the project
related to the development of their own company and one class was cancelled due to weather. Students also met together outside of the classroom on two occasions. One of which involved watching a film and being involved in a panel discussion after the film; the film did encompass ethical principles (Who Killed the Electric Car?). Although the intervention only last for 3 months, this amount of time has been shown to be sufficient to see positive results in cognitive development (Schlaefi, Rest, & Thoma, 1985).

Below, one will find the case studies utilized, the instructions for team meetings and presentations, the journal prompts, course syllabi, individual performance assessment used, and the outline used for reflective group meetings. Table 3 outlines the additional elements integrated into the course for the experimental group, which did not take place within the control group classes.

Table 3

<table>
<thead>
<tr>
<th>DPE Element</th>
<th>Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role-taking experience</td>
<td>Involvement in the Guided Team Reflective groups</td>
</tr>
<tr>
<td>Support and Challenge</td>
<td>1. Delivered through journal feedback.</td>
</tr>
<tr>
<td></td>
<td>2. Delivered in reflective groups.</td>
</tr>
<tr>
<td></td>
<td>3. Efforts made in the classroom to increase challenge through practice in “perspective-taking.”</td>
</tr>
<tr>
<td>Reflection</td>
<td>1. Student journal responses to “reflective prompts.”</td>
</tr>
<tr>
<td></td>
<td>2. Guided Reflective Group involvement</td>
</tr>
<tr>
<td>Balance of Reflection and Role-taking</td>
<td>Evaluation of the balance was accomplished through:</td>
</tr>
<tr>
<td></td>
<td>1. Review of journal responses and discussion with the instructor concerning major “themes”</td>
</tr>
<tr>
<td></td>
<td>2. Immediate reflection upon completion of major role-taking activity (presentations)</td>
</tr>
<tr>
<td></td>
<td>3. Continual evaluation of experimental group progress through researcher/ instructor meetings.</td>
</tr>
<tr>
<td>Continuity</td>
<td>Same for both</td>
</tr>
</tbody>
</table>
Table 4 outlines the goals, activities, and outcomes for all participants in the study. The later part of the table describes the additional goals, activities, and outcomes expected for the experimental group only.
Table 4

*Goals, Activities, Objectives*

<table>
<thead>
<tr>
<th>Goals</th>
<th>Activities</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise awareness of ethical issues in business</td>
<td>Case Studies, Class Discussion</td>
<td>1. Obtain knowledge of the five different philosophical perspectives of ethics and morality: justice, relativism, utilitarianism, egoism, and deontology 2. Recognize and understand the influential effects of a group or culture on one's moral judgment.</td>
</tr>
<tr>
<td>Expose students to ethical issues and means for responding to them</td>
<td>Class Discussion, Presentation Team Meetings</td>
<td>Obtain knowledge of Moral Reasoning as characterized by Kohlberg and of the stages of Moral Development</td>
</tr>
<tr>
<td>Expose student to models of decision-making</td>
<td>Utilization of ethical decision-making model for team presentations</td>
<td>1. Understand the importance of ethical decision making models and practically apply one of these models to an ethical dilemma.</td>
</tr>
<tr>
<td>Moral reasoning stage advancement</td>
<td>Class Discussion, Perspective-taking activities, Reflective Journals, Guided Reflection Team Meetings</td>
<td>1. Advance stage-wise 2. Utilize meta-cognitive processes through reflective activities 3. Evaluate personal stage level 4. Recognize the many possible decisions to be made when confronting ethical situations and incorporate multiple perspectives in deliberating on a decision. 5. Process and evaluate their actions as a presentation team and as individuals 6. Accept and incorporate the feedback of peers and the instructor throughout the course and in particular, in response to their presentations and journal reflections.</td>
</tr>
</tbody>
</table>

*Below-Experimental Group Only*
Case Studies

Students in each section read and reflected on a business case study prior to each class. Prior to each class, a small group of students (4-6) worked together through a four-step methodology for evaluating and presenting on such a case study. This group presented their findings on the case and their choice for action as the "consultants" on the case to the class. After the presentation, the rest of the class evaluated the students on their presentation style and delivery through both complimentary and constructive feedback. From that point, discussion began concerning the options suggested for action and the reasoning behind their final recommendation. The experimental group differed from the control group in that the professor worked, through guided discussion and Socratic dialogue, to challenge the students to take multiple perspectives on the case and challenged the rest of the class to evaluate how they might respond in a similar situation. In an effort to gradually increase the challenge in the class, the case studies were organized so that they grew in complexity over the course of the semester. Differentiating this organization between the control and experimental groups was not accomplished due to course design and the researcher and instructor's desire to make the entire course beneficial for all students. Rearranging the case studies for the experimental could have potentially caused confusion for the students and resulted in a lesser learning experience.

Case #1: A Solid Deal

After a spate of bad luck that included an extended illness by his wife, Dan Henderson is excited to have landed a job as salesman at Quality Furniture, a long-established and respected business in a medium-sized Midwestern city. Quality has an upscale clientele and only sells furniture from well-known manufacturers. It enjoys a reputation for quality products and service: for example, customers can return a product for any reason
whatsoever within the first year after purchase. And given the high quality of its product line, there are rarely any customer complaints.

Several weeks after beginning his job, Dan waits on a woman shopping for a dining room set. As she enters the store he overhears her saying to her daughter, “I can’t tell you how glad I’ll be to get rid of that junk we’ve had since we were married. This time we’re going to get something that will last. It’s going to be real wood, not that cheap veneer.” As Dan steers the woman toward the sales floor, she tells him that she wants a durable table that won’t discolor or warp. She immediately takes a liking to the first table Dan shows her. He tells her it has “a genuine teak finish.” She admires the grain and the finish, and listens as Dan points out that the table is one of the finer pieces from a well-respected manufacturer, and it undoubtedly has the qualities of durability and beauty that she values. But he does not tell her that this table, like much contemporary fine furniture, is actually wood veneer over a synthetic compound more warp-resistant than wood.

Just as the woman appears ready to buy, her cell phone rings. Excusing herself to take the call, Dan ponders whether to tell his customer explicitly that the table is not solid wood but a high-grade laminate. Yet he also thinks about how much he could use the commission from this sale to help make the payment on his wife’s medical expenses.

Just then, Dan hears the woman again mention “real wood” into her cell phone and then hang up. Walking back to Dan, she proudly says to him, “I’ll take the table.”

Case #2: A Perfect Hire?

Holly Cranston is the human resources manager for a mid-size regional plumbing and supply company. She has been highly involved in the interview process and background checks of three candidates for a management position. All three are competent, but Holly anticipates that they will offer the job to one of two candidates, Walter Flowers or Jennifer Strawson.

One of the company’s top priorities over the past five years has been to monitor and control the costs of employee benefits, especially health insurance. Holly has attended several seminars and annually speaks with several insurance companies on plans and rates.

One day after work, Holly stops by the hospital to visit a friend and, by chance, runs into Jennifer. She is on the children’s ICU ward, pushing her 7-year old son in a wheelchair. It is obvious that the child was born with a severe physical disability and there are bandages and tubes on the boy’s chest and arm. Jennifer sees Holly and briefly explains to her that his son is recovering from an infection as a result of a recent operation. She does not go into many details about her son’s condition, but it is obvious that he requires considerable medical attention on a regular basis. Jennifer does share that the boy will require several more operations in the next few years.
Holly is touched by Jennifer’s situation, but begins to think about the impact of her son’s condition on company medical expenses. The issue did not come up in the interview process and Holly is not allowed to ask direct questions about a potential employee’s family. Jennifer is probably the leading candidate for the job, but Holly is concerned about what her son’s condition could do to the company’s insurance rates over the next few years. Officially, Holly shouldn’t even know this information about Jennifer’s son.

On the way home, Holly begins to think about the other prime candidate for the job, Walter Flowers. During his interview process, Mr. Flowers happened to mention that he was single. Holly knows he could also be a good employee.

Case #3: Email Trail

Bill is a manager at a medium-sized corporation. Every once and a while he has lunch with his old friend Bud Lane, who is the computer systems administrator for the office. Bud’s job is to update the software, to add users to the system, and generally to make sure that the network is running without glitches. On the network system Bud is what is called a “super user” because he is the only one with access to every file. He knows and can change all the passwords that employees use to get into the system and to read their email.

Today Bill joins Bud for lunch. Bud seems a bit agitated. Bill asks him what is wrong and he replies, “I’ll tell you if you promise to keep it a secret.” Bud then goes on to tell Bill that over half of the office managers and staff are going to be fired and the rest of the operation will be folded into another office. These changes will be announced in one month. Bud mentions one piece of “good news”: Bill will have a job in the new arrangement, though no one else in his sub-unit will be retained.

Bill looks at his friend in disbelief. “How do you know this?” Bud recounts that he read it in the email correspondence between two senior managers. Bill is upset by the news and by the way Bud obtained it. “Isn’t it unethical or illegal to read other people’s email?” Bud says, “Those guys know that email isn’t secure. That’s why employees shouldn’t use the office email for sending any confidential information. We can’t protect their privacy; besides, any good hacker can get into the system. My central assignment is to monitor the computer system, and that means that often I come across many emails as a part of my job.”

After lunch Bill goes back to his office. Sharon, one of his co-workers, comes over to tell him that she is getting ready to put a deposit on a new house. Bill knows that she is one person who will be let go. As a single parent, Sharon will have a difficult time making mortgage payments without a job. Bill considers Sharon a close friend as well as a trusted colleague. Shocked and saddened, Bill goes back to his office to sort things out.

Case #4: An Education on Prescription Drugs

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It is estimated that one in five college students is under treatment for depression. Many others who suffer from depression have not sought treatment, perhaps because they lack awareness or do not fully understand their condition. Additionally, some college students are afraid to discuss their depression out of fears that peers and potential employers will stigmatize them.

In recent years, pharmaceutical companies have devoted large portions of their marketing efforts toward reaching this college demographic – affluent 18-24 year-olds. Like most others in the industry, Dig-It Pharmaceuticals has used a variety of campaigns in this effort, including direct-mail advertising and television commercials. But market research now suggests that a more effective way of reaching these important consumers is through sponsoring forums about depression on college campuses. These forums would be hosted by a well-known MTV personality who actually suffers from depression. Her condition is well known to viewers, and she openly discusses on her show the prescription drug she uses to treat her condition – which just happens to be a Dig-It Pharmaceuticals product.

Dig-It has recently contacted Steven Simpson, president of Nunly College, about the possibility of hosting a forum at his college. The company claims its motivation is simply to educate college students about depression and the options for treating it. The company has offered to provide free samples of its depression medication to the student health center, as well donate $50,000 annually to the health center so that it may provide better treatment for Nunly students. All the company asks in return is that the Dig-It logo be displayed prominently in the health center. Dig-It also stipulates that Nunly may not enter into any similar agreement with another pharmaceutical company.

As President Simpson ponders whether to accept this offer, he thinks about the real problem that many Nunly students seem to have with depression. Further, he knows how much the annual $50,000 would help to ease the cuts imposed on the health center’s budget over the past two years. President Simpson doesn’t see any real downsides to the proposal, as long as health center personnel are free to prescribe whatever medications they judge medically appropriate.

Case #5: Savanna Smith Bourbon

Mr. Savanna Smith, III, is president of a family-owned company that for generations has produced one of the finest American bourbons. Savanna Smith Bourbon is distinctive liquor appreciated the world over despite its high cost. Savanna’s marketing strategy has always been to rely on its reputation as the bourbon preferred by those who know bourbon best.

Over the past few years, company officials have come to realize that aggressive competition may be forcing the company out of business. Other distilleries have greatly cut into Savanna’s market share by catering to the tastes of those who don’t really know or care about fine bourbon. They have done this by marketing a variety of very sweet, but still highly alcoholic, beverages destined to be “gulped” rather than sipped.
Advertising executives in Savanna’s marketing department believe that Savanna’s target market – the bourbon connoisseur – is disappearing, and without a major change of strategy the company will struggle to survive.

Savanna’s vice president of marketing offers Mr. Smith two alternatives for energizing the business. One is to follow the competition and begin producing a sweeter product that lends itself to faster consumption. The second option is to begin a long-term marketing strategy to educate consumers about the joys of appreciating fine bourbon – drinking slowly, savoring the smell, discriminating subtle differences in flavor and quality.

Market research clearly shows that brand loyalty for adult beverages is often established well before some consumers reach the legal drinking age of 21, and so any successful campaign will actually have to target the 15-18 year-old demographic. Savanna’s Vice President for Marketing is quite certain that well-placed ads in magazines like Spin, Allure, and Rolling Stone could establish product loyalty before a whole generation of potential customers is lost to the competition. The plan is to create a fictitious, but very hip animal character with a keen sense of smell and taste – he will be called “Discriminating Dog”. Ads will show Discriminating Dog using his keen senses in a variety of ways most humans cannot – appreciating and enjoying very subtle differences in tastes and smells.

President Smith clearly prefers the latter strategy – targeted advertising. He thinks it could not only save the company but also encourage more responsible drinking among younger drinkers. However, he’s concerned about advertising in magazines that are popular with teenagers. Smith’s VP assures him that “these advertisements won’t contain a bottle of bourbon anywhere – only our logo. Ads will show this cartoon character explaining the fine points of being a discriminating consumer. We’ll actually be doing society a favor. Isn’t it better to encourage responsible drinking – slowly sipping fine bourbon – than to encourage wild and dangerous binge drinking? Every young person who adopts our product will likely drink much less alcohol in their lifetime.”

Case #6: Imperial Manufacturing

Imperial Manufacturing produces refrigerators, microwave ovens, and other appliances for residential use. Since its inception in the 1940s, Imperial’s corporate office and production facilities have resided in Smallsville Nebraska, and it has grown to be one of the area’s largest employers with over 1,800 workers. Over the past several years, Imperial has faced increased market pressure from foreign firms who manufacture similar products. Things have gotten so competitive that Imperial’s CEO, David Barron, feels that the company must start obtaining some of its component parts from foreign suppliers. Barron thinks such “outsourcing” is the only way he will be able to continue meeting the stockholders’ expectations for company earnings.

There are two distinct ways outsourcing could help Imperial. One is cheaper labor. Several components for its microwave are much cheaper when purchased from suppliers...
Labor is much cheaper in this part of the world, allowing Imperial to obtain parts of similar quality but with lower costs.

The second advantage of outsourcing relates to environmental regulations. Imperial can obtain sealed compressors from manufacturers in China and Mexico at a much lower unit cost than for what it can manufacture them in Smallsville. This is because Chinese and Mexican factories are not required to be nearly as diligent about not releasing refrigerants into the atmosphere during production. U.S. regulations about this are so tight that the company will soon need to install expensive monitors and scrubbers, and this would pretty much erase the company’s entire profit margin on refrigerators.

While outsourcing will no doubt help Imperial’s bottom line, it will also mean that Imperial will likely cut about a third of its manufacturing jobs in Smallsville. While he hates to see long-time employees lose their jobs, he sees no other way for the firm to meet its earnings targets over the next few years.

**BUAD 300 Section One Reflective Journals**

As described, the experimental group students were asked to write reflective journals in response to particular “prompts” throughout the semester. Some of these “prompts” had been decided upon prior to the course beginning; others, however, developed out of class discussions concerning certain material covered. The researcher and the instructor worked together to devise what they felt were the most pertinent topics for reflection at different times. Each of the “prompts” echo major concepts inherent in moral development and two focused on definitive objectives for the course (i.e., perspective taking and personal evaluation of stage level). The researcher responded to each journal entry and the students were asked to keep one file containing all their journals over the course of the semester in order for there to be opportunity for a continuous conversation. Below are the five journal assignments and the unique “prompts” asked in each. They enable the reader to establish exactly what was requested of the students.
Journal #1 Section 1:

Here’s your written assignment for this week – your reading assignment will be posted on Blackboard.

As part of the reflective element of the course and the case studies covered each week, you are asked to respond in writing to a few questions. For each question, please write at least one substantial paragraph that exhibits depth of reflection. Professor Schmidt will respond to these journals and thus begin a dialogue with you about your journals. As you journal over the semester, please review his feedback carefully and potentially integrate this discussion into your next journal.

Journal for Friday, September 29th

Question 1: How important is it to incorporate/try to understand/acknowledge multiple points of view when practicing moral deliberation? Why?

Question 2: Is there a relationship between these ethical dilemmas/case studies and W&M's honor code? Why or Why not?

Question 3 (for teams 9 & 10 only): What “perspective” did you bring to your group’s processing of the dilemma that you feel was unique?

NOTE:

- Journals are due on Friday morning by 10:00am.
- Title of the document: “Yourname9.29.06” (date should be the Friday you’re turning it in)
- Saving your Journal. Each time you submit a journal, you will obviously give it a new name; however, please work from the same document every time (i.e.- your last journal entry will also include all the others).

Please submit all journals to Prof. Schmidt at cdschm@wm.edu.

Thanks,

Prof. A

Journal 2: Section 1:

Here’s your assignment for this Friday, 10/20:

Readings for 10/20 Class:
- “Ch. 5 Deciding What’s Right: A Psychological Approach” in Coursepack if you have not already read this article (from last week)
- Savanna Smith Bourbon case in “Ethics Cases & Presentations” Folder on Blackboard

**Journal for Friday, Oct. 20:**

*After reading through Ch. 5 from the coursepack, explain which stage of cognitive moral development you believe you currently utilize. Why in particular did you choose that stage? What does this tell you about your ability to make ethical decisions? How might your “stage” change over time?*

Please respond to this prompt in 2-3 substantial paragraphs exhibit depth of reflection. Please also put your responses on the same file you sent last time (Journal entry 1) so all of your reflections and feedback from your previous journal remain on one document. You are more than welcome to respond to any comments or questions provided in the previous feedback as well, but it is not required.

*For Teams 7, 8, 1 and 2 only (teams who presented on Friday 9/29 and Friday 10/13): What unique “perspective” did you bring to your group’s processing of your assigned ethical case in preparing for your presentation.*

**NOTE:**

- Journals are due on Friday morning by 10:00am.
- Saving and Emailing your Journal. Each time you submit a journal, label the document in the same manner with the new date on which it is due (“Your name10.20.06”) and attach it to your email to Professor Schmidt (cdschm@wm.edu). [Remember: your recent journal entry will include all your previous journals.]

Please submit all journals to Prof. Schmidt at cdschm@wm.edu.

Thanks,

Prof. A

11/15/06- Journal 3:

As we move back into the ethics component of the course, please take a moment to reflect on the following in one substantial paragraph (you are more than welcome to write more).

*How has your “ethical reasoning” has developed over the course of the semester thus far? How and/or why has this development taken place/ or not taken place? What can you do in the remaining weeks to come in order to make further steps toward increasing your “stage of ethical reasoning?”*
For the teams who presented this week: *What unique “perspective” did you bring to your group’s processing of your assigned ethical case in preparing for your presentation.*

**Journal 4: Section 1:**

Last week’s journal was part one of two – we decided to separate the journal into two pieces this week (hence the “one paragraph”) in order to take the opportunity to also reflect on this past Friday’s case and discussion. So here’s part 2:

*Both presentation teams began with an explanation of the “ethical principles” they utilized in devising and ultimately deciding on “options.” In this journal entry (and again, it can be one substantial paragraph), please describe what ethical “principles” you utilize in your own life and which you plan to utilize when working in business (i.e. “do no harm”).*

For the teams who presented this week: *What unique “perspective” did you bring to your group’s processing of your assigned ethical case in preparing for your presentation.*

We know you are getting ready for break, but with no Marketing this week, this should be a short assignment like the last journal – one substantial paragraph will suffice – but you are more than welcome to write more. As before, please put your responses on the same file you sent last time so all of your reflections and feedback from your previous journal remain on one document. You are more than welcome to respond to any comments or questions provided in the previous feedback as well, but it is not required.

**NOTE:**

- Journals are due on this Tuesday, 11/21 by 5:00PM
- Saving and Emailing your Journal. Each time you submit a journal, label the document in the same manner with the new date on which it is due (“Your name11.21.06”) and attach it to your email to Professor Schmidt (cdschm@wm.edu). [Remember: your recent journal entry will include all your previous journals.]

Please submit all journals to Prof. Schmidt at cdschm@wm.edu.

**12/2/06 Journal 5: Section 1 -- Final Journal Assignment!**

*For the final reflection, please carefully read through each of your journal entries over the course of the semester. After reading, reflect on what changes you recognize in yourself over this time. Reflect on any growth or development you may observe in yourself. One substantial paragraph is certainly acceptable, but you are welcome to write more as you explore any changes that have occurred this semester throughout our course.*

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For the teams who presented this week: What unique “perspective” did you bring to your group’s processing of your assigned ethical case in preparing for your presentation.

NOTE: In addition, your presence at the final class of the semester is very important. Not only will there be ample refreshments and food, course evaluations and final assessment tools will be given. Your participation in these required elements of the course are indispensable for the future development of the program here at W&M.

- Journals are due on Monday by 5:00pm.
- Saving and Emailing your Journal. Each time you submit a journal, label the document in the same manner with the new date on which it is due ("Your name 12.4.06") and attach it to your email to Professor Schmidt (cdschm@wm.edu). [Remember: your recent journal entry will include all your previous journals.]

Please submit all journals to Prof. Schmidt at cdschm@wm.edu.

Thanks,

Prof. A

The BUAD 300 Course Syllabus

The syllabus for the course can be found below. It gives an overview of the intentions for the course and loosely references the aims, goals, and objectives mentioned in detail earlier. The syllabus also includes the materials utilized, notes about assignments, the expectations of the students, and the evaluation process. It is included here so that the reader can have first-hand knowledge of what the student’s received and used as guidance during the course.

THE COLLEGE OF WILLIAM & MARY-MASON SCHOOL OF BUSINESS

BUAD 300 Business Perspectives & Applications- Fall Semester 2006

Christopher Adkins, Tyler Hall 237
christopher.adkins@business.wm.edu 221-2046
Office hours by appointment

Overview: The Integrated Foundation Experience

A distinctive element of the undergraduate business program at William and Mary is the integrated foundation experience (“the block”). In this first semester, juniors engage in real-
world problem solving through case studies and simulation exercises; they learn of the current business challenges from guest speakers; they develop the essential skills of communication and team dynamics. Through these experiences, students are prepared for specialized business study and enriched professional development.

Business 300 (Business Perspectives and Applications) plays an integral role in the foundation semester experience. In this course, students focus on several processes that underlie the content of successful business: communication, teamwork, and ethical decision-making. Working in teams throughout the semester, students analyze ethics cases in business scenarios, applying a common framework for ethical decision-making. This exercise not only requires them to consider situations they are likely to encounter in the future, but they also have to struggle as a team to come to some consensus; such struggle requires taking multiple perspectives. Communication skills also are refined through these ethics case presentations. In this team-based environment, students become aware of the dynamics of group work, and develop their interpersonal and leadership skills. These elements of communication and teamwork culminate in a business simulation exercise in which teams engage in business decision-making by running their own company. This competitive event integrates both the business content and processes learned throughout the semester, and provides a practical understanding of business applications.

Required Materials:

1. XanEdu Coursepack available on www.xanedu.com. You will need to register and login, select state, College of W&M, and our course ["BUAD 300 Fall 06 (C Adkins W&M)"], and purchase online with a credit card. You will be able to access the coursepack online and print if you like.

2. Simulation Materials [Details to follow regarding online registration. Cost will be approximately $35, and you will need to use a credit to pay online.]

3. DVD Discs for recording presentations (to be distributed in class – no additional purchase required).

Readings and Assignments

A schedule of readings and assignments will be posted on Blackboard. The assigned readings and cases may be updated if I need to change the pace or direction based on our class discussions. Also, I may choose to integrate current issues that may arise throughout the semester.

NOTE WELL: All students must check Blackboard at least TWICE a WEEK for announcements and updates. I will use Blackboard as the primary means for updating you on changes and posting all course-related details.

Expectations

Business 300 is a one credit pass/fail course with the primary purpose of integrating business disciplines and skills through various readings, exercises, and experiences. Active participation in class, extra-class sessions, and in your team activities is essential.
Your evaluation will be based on four areas of performance. Each student will receive a P or F for each area. To pass the course as a whole, you must receive a P in all four areas. (Should you not pass one area, you may be required to repeat the course. Failure of two areas will result in a failing grade).

The four components are:

I. Short presentations. To help foster innovation, integrated business thinking, communication skills, and ethical considerations, each team will propose a business solution for a current ethical and/or team situation. Details on these presentations will be discussed in class.

II. Assignments. Students will be asked to complete weekly assignments as posted on Blackboard. The assignments will vary in scope and nature based on the topic at hand, and will be integrated with the current discussions we are having in class. I will typically post these assignments after our class each Friday.

III. Simulation. After Spring Break, we will begin focusing on the Business Simulation. This activity will require you to integrate the business concepts and teamwork and communication skills learned throughout the semester as you compete against other teams in running a company. The exercise culminates in our week-long SimWeek where teams present their strategic approaches before a “Board of Directors” of faculty and business professionals. Guidelines regarding attendance, participation, and grading will be distributed after Spring Break.

IV. Attendance, Preparation, and Participation.
   A. Class Meetings. Attendance will be taken at every class. You are expected to attend every class meeting. More than ONE unexcused absence may result in failing this component.

   NB: All students are expected to have read the assigned cases and readings and be prepared to share their analysis in class.

   B. Events. Throughout the semester, you will be required to attend several events outside of class. **You must attend ALL of these events to receive a Passing grade for the course.** Required events outside of class are indicated on the “Schedule of Classes, Events, and Assignments” posted on Blackboard.

   C. Team Meetings. Your team will meet weekly throughout the semester to work on projects in your Marketing, Finance, and Information Systems courses, as well as for Business 300 assignments. For various projects and assignments, each team member will be required to submit an evaluation of their fellow team members. Should these evaluations indicate that a student is not present at their team meetings or not contributing to the team’s efforts, this student will likely receive an “F” in the course.

NOTE: While I will be rather strict regarding attendance, I recognize that certain occasions may arise (College-approved absences, illness, family emergencies) that require you to miss a class, event, or team meeting. Planned events should be brought to my attention immediately so we can discuss your situation (failure to do so will forfeit the possibility of an excused absence). All College-approved absences required
documentation from the supervisor of the activity. Also, please contact me as soon as possible should a family emergency or personal illness arise. A doctor's note from the Health Center or another physician is required in cases of illness to qualify as an excused absence from a class or event. *All students will be expected to make up any missed work due to an excused or unexcused absence.*

Should you have concerns regarding your performance, please do not hesitate to contact me.

**Course Schedule**

Below one will find the schedule utilized for the course. The researcher and instructor reorganized the original schedule in order to accommodate a number of factors. First, due to the cancellation of the first class because of weather, the number of classes was decreased by one week. The amount of journal entries required was lessened due to this change in schedule. Also, it was necessary to set aside two entire days to complete the assessments instruments used for the quantitative data collection. Because the assessments were to take more time than was allotted for each section, the four sections were combined into two groups on these days, and the classes met for two hours each. Hence, sections 1 and 2 took the assessment instruments together, as did sections 3 and 4. Lastly, due to efforts for continuity (as highlighted in the DPE), the researcher and instructor organized the semester so that there were weeks after the simulation when ethics again became the primary focus.

**MASON SCHOOL OF BUSINESS -- THE COLLEGE OF WILLIAM & MARY**

**BUAD 300 Business Perspectives & Applications -- Fall Semester 2006**

**Schedule of Classes, Events, and Assignments**

*All Sessions in Tyler 102 unless otherwise noted.*

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>Sept 1, 26, Friday</td>
<td>Team Orientation Day</td>
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<tr>
<td>Sections 1-2: 10:00-11:50am</td>
<td>CANCELLED due to Weather</td>
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<tr>
<td>Sections 3-4: 12:00-1:50pm</td>
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<tr>
<td>Sept 6, Wednesday</td>
<td>Documentary Film and Panel Discussion at Kimball Theater</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Section 1</th>
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<th>Section 3</th>
<th>Section 4</th>
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<tr>
<td>Sept. 8, Friday</td>
<td>6:30-9:30pm</td>
<td>10:00-10:50am</td>
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<td><strong>Who Killed the Electric Car?</strong></td>
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<td><strong>REQUIRED EVENT</strong></td>
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<td>Sept. 15, Friday</td>
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<td>Sections 1-2:</td>
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<td><strong>Course Overview</strong></td>
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<td><strong>Team Introductions</strong></td>
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<td>Sept. 22, Friday</td>
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<td><strong>Ethics Assessment</strong></td>
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<td><strong>Readings &amp; Assignments on Blackboard</strong></td>
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<td><strong>Team Evaluations Due at 12noon</strong></td>
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<td><strong>Class will not meet</strong></td>
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# Majors and Concentrations Week, October 23-27

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<tr>
<th>Date</th>
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<th>Sections</th>
<th>Event Description</th>
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| Oct. 23, Monday | 7:00-9:00pm   | All Sections      | "What Should I Choose?" A Panel Discussion with Faculty  
*See brochure and Blackboard for more details*  
**REQUIRED EVENT** |
| Oct. 27, Friday | 10:30-11:50am | Sections 1-2      | "Whatever You Choose, Odds Are: You’ll Be Doing Something Different"  
Closing Event of M & C Week with Alumni  
*See brochure and Blackboard for more details*  
**REQUIRED EVENT** |
| Nov. 3, Friday  | 10:00-11:50am | Sections 1-2      | Simulation Overview  
Presentation Expectations  
Reading: Marketplace Simulation Overview (on Blackboard)  
**REQUIRED EVENT** |
| Nov. 3-10, Friday – Friday | 10:00-11:50am | Sections 1-2      | Simulation Week – Several BUAD 300 sessions this week  
Presentations on Wednesday and Thursday, Closing Event on Friday  
*No classes in BUAD 311 (Marketing), 323 (Finance), 362 (IT)*  
*More details to follow on Blackboard and www.marketplace6.com* |
| Nov. 17, Friday | 10:00-11:50am | Section 1, 2      | Short Presentations (Cases & Guidelines on Blackboard)  
Teams 5, 6  
Readings & Assignments on Blackboard |
| Nov. 24, Friday |               |                   | Thanksgiving Break – Class will not meet |
| Dec. 1, Friday  | 10:00-11:50am | Section 1, 2      | Ethics Case Discussion  
Readings & Assignments on Blackboard |
| Dec. 8, Friday  | 10:00-11:50am | Sections 1-2      | Closing Ethics Discussion |
|               | 12:00-1:50pm  |                   |                                                                                         |
Presentation Guidelines

Students received the guidelines below in order to assist their team presentation project. The guidelines outline the ethical decision-making model suggested for use during this assignment. The team presentations generally followed this outline in the delivery of their decision-making process and ultimately, their recommendations for action concerning that particular case study. Two “Presentation Guidelines” are included to show some of the additions and requests made by the instructor as the cases become more complicated over time. Again, this information allows the reader the opportunity to gain an in-depth understanding of the process the students went through for this particular element of the course.

Mason School of Business, College of William & Mary
BUAD 300 – C. Adkins
Presentation Guidelines for “A Solid Deal”, “Perfect Hire”, and “Email Trail” Ethics Cases

Overview of your Presentation
I would like your team to set up the ethical case for our discussion by presenting the key ethical issues and offering at least three courses of action for the individual in responding to the situation.

Length of Presentation
Aim for 5 minutes; I will stop you at 7 minutes.

Structure of the Presentation
You should use the coursepack article, “Moral Reasoning” (Harvard), as your guide for structuring your presentation. The four-step methodology (overview on p. 3) should be applied to your case:

1. Moral Inquiry. One person on your team should open the presentation, providing a brief (about one minute) yet “fully fleshed out depiction of the moral problem from the standpoint of the parties involved” (p. 3). Take us inside the main character’s mind as they examine the ethical issues, and highlight the key facts and conflicts that arise. You should close this session with a clear, crystallized statement of the ethical dilemma as your team understands it. See pp. 4-5 for details on these steps.
2. Option Development and Analysis
3. Decision and Action Planning

The next 3 (or 4) team members each provide a course of action that the main character can follow, and the reasons why that action is the most morally acceptable means for resolving the dilemma (steps 2 & 3 combined: (“Option Development and Analysis” and “Decision and Action Planning”). Each member should clearly present the action (be specific) and convincingly communicate the rationale supporting this behavior. See pp. 6-9 for details on these steps.

4. Reflection and Evaluation. The opening team member should briefly conclude the presentation after the 3 (or 4) solutions have been offered. You need not worry about leading the class through the reflection and evaluation step; I will do this, but your team should be prepared to answer questions from the class.

Basic Expectations
- Full-team participation is required. Everyone must be present, and everyone must play a speaking role in your presentation.
- A simple PowerPoint slideshow is required (probably no more than 10 slides). You should bring the presentation on at least two disks (CD and floppy), and save the presentation on the campus server.

- A simple PowerPoint slideshow is required (probably no more than 10-12 slides). You should bring the presentation on at least two disks (CD and floppy), and save the presentation on the campus server.

Mason School of Business, College of William & Mary
BUAD 300 – C. Adkins
Presentation Guidelines for “An Education on Prescription Drugs” and “Savanna Smith Bourbon” Ethics Cases

Overview and Structure of your Presentation

For your assigned case, you are acting as ethical consultants to the company and/or individual facing the ethical dilemma. Your objective is to review the scenario, consider several solutions, and ultimately recommend a particular solution to the problem. In other words, you are covering the four-step approach to moral reasoning as mentioned in the “Moral Reasoning” article in our coursepack:

1. Moral Inquiry. Consultants must first understand the problem at hand. One person on your team should open the presentation, providing a brief (about one minute) yet “fully fleshed out depiction of the moral problem from the standpoint of the parties involved” (p. 3). Frame the ethical issues facing the company, and
highlight the key facts and conflicts that are important. You should close this session with a clear, crystallized statement of the ethical dilemma as your team understands it. See pp. 4-5 for details on these steps.

2. Option Development and Analysis
3. Decision and Action Planning

Consultants are expected to present a company with several possible solutions. You can have one or several team members offer several (at least 3) courses of action that the company can follow, and the reasons why that action is the most morally acceptable means for resolving the dilemma (steps 2 & 3 combined: (“Option Development and Analysis” and “Decision and Action Planning”). Each member should clearly present the action (be specific) and convincingly communicate the rationale supporting this behavior. You should also highlight how each approach addresses or resolves the financial implications and legal obligations facing the company. See pp. 6-9 for details on these steps.

4. Reflection and Evaluation. In conclusion, one of your team members should offer the recommended course of action. Remember, you are consultants, and the company wants you to offer a convincing solution for their ethical dilemma. [I suggest you present your recommended course of action as the last of the three solutions; this will allow you to transition into your recommendation by highlighting how the first two approaches are insufficient or unsatisfactory.]

Your team should be prepared to answer questions from the class at the end.

As you approach your case, you will discover that the issues can become rather complex when you consider all the parties involved, and the implications and consequences of the various options. Don’t be dismayed: focus on the facts, frame the ethical question(s), and use your ethical imagination to generate an ethically responsible, legally acceptable, and financially realistic solution.

Length of Presentation
Aim for 5 minutes; I will stop you at 7 minutes.

Basic Expectations
- Full-team participation is required. Everyone must be present, and everyone must play a speaking role in your presentation.
- Business formal attire.
- A simple PowerPoint slideshow is required (probably no more than 10-12 slides). You should bring the presentation on at least two disks (CD and floppy), and save the presentation on the campus server.
Guided Team Reflection Outline

As stated previously, a major reflective component of the course entailed the presentation teams meeting with the researcher following their presentation for 30-45 minutes to reflect on the process experienced from start to finish. The goal in these meetings was to allow and encourage the students to review the entire process of handling an ethical dilemma as individuals as well as within a group. Not only were the cognitive factors reviewed in these reflective meetings, but also the students were encouraged to reflect on and process together the feelings they experienced during this time. The outline below reviews some of the major points of reflection, which occurred in these meetings. The researcher continually updated this outline throughout the semester in an effort to ensure that each team covered similar discussion points and the meetings were as equivalent as possible. In addition, below one will find an example of the email sent to the students regarding these meetings.

Presentation Team Guided Reflection Topics and Questions

Reasons behind reflection process
- Grounding of the cognitive deliberation process
- Understanding the importance of incorporating multiple perspectives (we interpret things in different ways)
- Recognize areas of disequilibrium- areas where we can grow
- Expand perspective

Do you think about this situation differently now vs. when you first read it?

1. Group Processing:
   a. What did you notice about other’s reasoning? Differences from yours?
   b. What did you learn from others in the discussions you had?
   c. How did the group process help or hinder coming to a conclusion?

Did you have options that you threw out? How did you come to agree?

2. What makes this situation a moral dilemma?
   a. What does it mean to “reason through” moral dilemmas such as these?
   b. What were your “intentions” in going through this reasoning? Goals?
3. Was the action plan you came up with consistent with your intentions and expectations?
   a. Yes—what led to the successful outcome?
   b. Yes—what were the unexpected events or contributions from each of you?
   c. No—why unsuccessful?

Whose shoes did you get into initially? How far did you go stepping into the shoes of the other players?

4. How would the different parties involved see the situation?
   a. How satisfied do you think would be with the outcome of the situation?
   b. What would they be proud of? What would they want to change?

5. Self: Emotions experienced?
   a. What understandings and decision are you (individual or group) proud of?
   b. What would you change or do differently?
   c. Were you able to act consistently with your principles and beliefs?
      a. Yes—what have you learned about what you use to make moral decisions?
      b. Which categories do you find yourself drawn to as justifications for moral actions? What basis/framework do you use?
      c. Principles mentioned in class—Fairness, keeping promises, not harming others, help others, self interest, emotions—any more important than others? Situational?
      d. Were the principles you used the same as those you use normally? Where do these come from?
      e. Has your foundation of beliefs changed in any way (how do you look at such situations)?
      f. What role did you play in the process of moral deliberation within the group?
      g. Are you presently satisfied with your ability to engage in the process of moral decision making?

Before that—interested in the feelings experienced in this process—
   - Enjoyable?
   - Frustrating?
   - Real-life?

What will you “take away” from this, which you will incorporate into the next case studies? What do you remember from the feedback from the class?
What are the differences between hypothetical and real life dilemmas?

A Message to the teams concerning reflective meetings:
Teams

As part of your presentation this Friday, I am asking that each team have a short meeting immediately after our class finishes. You will meet with Chris Schmidt (the adjunct professor and doctoral student who conducted the assessments last Friday), and he will lead you through a short discussion about your presentation with the goal of learning
more from the experience. The meeting will last 30 minutes—in my office Tyler 237—and refreshments will be served (you deserve it!).

Please let me know if you received this message, and if you have concerns or questions. Thanks for your cooperation. Good luck on your presentations—I’m looking forward to this Friday!

Prof. A

Individual & Team Performance Evaluations

Twice during the semester (post-simulation and end of the semester), students were asked to evaluate their performance—their own, and that of their team members—on a number of factors. By viewing the attached evaluation forms below, one will notice the guidelines for the students and the different criteria, which were used for this evaluative process. The students receive copies of the forms for personal review.

W & M School of Business—Individual Performance Evaluation
Guidelines and Criteria

Guidelines
1. Disregard your general impressions and concentrate on one factor at a time.
2. Study carefully the definition given for each factor and the specifications for each category.
3. Use your team contract as the guide for meeting expectations, not your personal expectations.
4. Call to mind instances that are typical of the student’s work and behaviors. Do not be influenced by unusual cases that are not typical.
5. Determine the category that best describes the student’s accomplishments in that area and fill this number in on the accompanying performance rating form.

Definition of Factors

1. Quality of Work: Consider the degree to which the student team member provides work that is accurate and complete.

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<tbody>
<tr>
<td>Produces unacceptable work, fails to meet minimum project requirements.</td>
<td>Produces work that meets minimum project requirements.</td>
<td>Meets minimum project requirements.</td>
<td>Regularly produces work that meets minimum project requirements and sometimes exceeds project requirements.</td>
<td>Produces work that consistently exceeds established project requirements.</td>
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<tr>
<td>50</td>
<td>70</td>
<td>80</td>
<td>90</td>
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2. Timeliness of Work: Consider the student team member’s timeliness of work.

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<tr>
<td>Fails to meet deadlines</td>
<td>Occasionally misses</td>
<td>Regularly meet</td>
<td>Consistently meet</td>
<td>Consistently completes</td>
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3. **Task Support**: Consider the amount of task support the student team member gives to other team members.

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<tbody>
<tr>
<td>Gives no task support to other members.</td>
<td>55</td>
<td>65</td>
<td>75</td>
<td>90</td>
<td>95</td>
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<tr>
<td>Rarely gives task support to other members.</td>
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<td></td>
<td></td>
<td>95</td>
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<tr>
<td>Occasionally provides task support to other members.</td>
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<td></td>
<td></td>
<td>90</td>
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<tr>
<td>Consistently provides task support to other members.</td>
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<td></td>
<td></td>
<td></td>
<td>95</td>
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<tr>
<td>Consistently gives more task support than expected.</td>
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<td>100</td>
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4. **Interaction/Attitude**: Consider how the student team member relates and communicates to other team members.

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<tr>
<td>Behavior is detrimental to the group.</td>
<td>50</td>
<td>65</td>
<td>85</td>
<td>95</td>
<td>100</td>
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<td>Behavior is inconsistent and occasionally distracts group meetings.</td>
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<td>Regularly shows team behavior which includes listening to others, and allowing his/her ideas to be criticized.</td>
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<td>Consistently demonstrates appropriate team behavior.</td>
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<td>Consistently demonstrates exemplary team behavior.</td>
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5. **Attendance at Group Meetings**: Consider the student team member’s attendance at group meetings and client meetings.

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<tr>
<td>Failed to attend the group meetings.</td>
<td>0</td>
<td>50</td>
<td>65</td>
<td>90</td>
<td>95</td>
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<tr>
<td>Attended 1%-33% of the group meetings.</td>
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<tr>
<td>Attended 34%-75% of the group meetings.</td>
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</tr>
<tr>
<td>Attended 76%-95% of the group meetings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attended 95%-100% of the group meetings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. **Responsibility/Reliability**: Consider the ability of the student team member to carry out a chose or assigned task, the degree to which the student can be relied upon to complete a task.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is unwilling to carry out assigned tasks.</td>
<td>0</td>
<td>60</td>
<td>75</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Sometimes carries out assigned task but never volunteers to do a task.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carries out assigned tasks but never volunteers to do a task.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistently carries out assigned tasks and sometimes volunteers for other tasks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistently carries out assigned tasks and always volunteers for other tasks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. **Involvement/Participation**: Consider the extent to which the student team member participates in the exchange of information (does outside research, brings outside knowledge to a group).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fails to participate in group discussions and fails to share relevant material.</td>
<td>0</td>
<td>65</td>
<td>85</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>Sometimes participates in group discussions and rarely contributes relevant material to the project.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes part in group discussions and shares relevant information, and sometimes exceeds expectations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regularly participates in group discussions and sometimes exceeds expectations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistently exceeds group expectations for participation and consistently contributes relevant material to project.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. **Leadership/Catalyst for Decision-Making**: Consider how the team member engages in leadership activities and helps the group reach agreement.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not display leadership skills.</td>
<td>Displays minimal leadership skills in team.</td>
<td>Occasionally assumes leadership role.</td>
<td>Regularly displays good leadership skills.</td>
<td>Consistently demonstrates exemplary leadership skills.</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

9. **Overall Performance Rating**: Consider the overall performance of the student team member while in the group. Do not consider extraneous knowledge that you may possess which is not relevant to group behavior, such as if you associate with the student outside of class in a friendship or working relationship.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance significantly fails to meet group requirements.</td>
<td>Performance fails to meet some of the group requirements. Barely pulled his/her weight on the project.</td>
<td>Performance meets all group requirements.</td>
<td>Performance meets all group requirements consistently and sometimes exceeds requirement.</td>
<td>Performance consistently exceeds all group requirements. Outstanding job!</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>65</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

10. **Number of Hours Contributed to the Project**: Provide an estimate of the total number of hours the individual has worked on the project.

---

**Individual Performance Evaluation Form**

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Individual's Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class/Section:</td>
<td>Team:</td>
</tr>
<tr>
<td>Date:</td>
<td></td>
</tr>
</tbody>
</table>

**Rating Guide:**

<table>
<thead>
<tr>
<th>(for #1-9 below)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>poor</td>
<td>excellent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Insert Names:**

1. Quality of Work
2. Timeliness of Work
3. Task Support
4. Interaction/Attitude

---

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<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Attendance at Group Meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Responsibility/ Reliability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Involvement/ Participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Leadership/Catalyst for Group Decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Overall Performance Rating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Est. Hrs. Contributed to Project to Date</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:

Signature: ________________________________
CHAPTER FIVE

RESULTS

This chapter presents the results of the statistical analyses. A description of the sample and demographic data will be presented, followed by results of the statistical analyses for the two proposed hypotheses. For clarity, the analysis of each instrument will be presented separately. The final section will report supplemental qualitative findings drawn from the journal responses of the participants.

As described in Chapter 3, this study utilized a quasi-experimental pre-test/post-test design involving all four sections of the course, with one section receiving the experimental intervention, and three sections serving as a control group. The participants were tested using two instruments (Defining Issues Test-II (DIT-II) and The Multidimensional Ethics Scale (MES)). There were 172 student participants in the study; however, 156 useful results were received from the DIT-II and 152 from the MES. Data was not considered useful if participants did not complete either the pre-test or the post-test. Ten additional participants were eliminated from the DIT-II data due to questionable internal consistency scores on that instrument (i.e., meaningless item checks).

Demographic Findings

Demographic information was gathered during the DIT-II data collection. As reported in Chapter 3, it included data regarding participants’ age, gender, citizenship, primary language, and political viewpoint. With the exception of two instances, complete demographic data was received from all participants in the study. Table 5 shows the demographic differences between the experimental and control groups.
Table 5

Experimental and Control Groups

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Male</th>
<th>Female</th>
<th>Sophomore</th>
<th>Junior</th>
<th>US Citizen</th>
<th>Non US Cit.</th>
<th>English</th>
<th>Non English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>45</td>
<td>25</td>
<td>20</td>
<td>2</td>
<td>43</td>
<td>42</td>
<td>3</td>
<td>44</td>
<td>1</td>
</tr>
<tr>
<td>%</td>
<td>26</td>
<td>55</td>
<td>47</td>
<td>4</td>
<td>96</td>
<td>93</td>
<td>6</td>
<td>98</td>
<td>2</td>
</tr>
<tr>
<td>Control</td>
<td>127</td>
<td>72</td>
<td>53</td>
<td>3</td>
<td>123</td>
<td>122</td>
<td>4</td>
<td>121</td>
<td>5</td>
</tr>
<tr>
<td>%</td>
<td>74</td>
<td>57</td>
<td>42</td>
<td>2</td>
<td>97</td>
<td>96</td>
<td>3</td>
<td>95</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>172</td>
<td>97</td>
<td>73</td>
<td>5</td>
<td>166</td>
<td>164</td>
<td>7</td>
<td>165</td>
<td>6</td>
</tr>
<tr>
<td>%</td>
<td>100</td>
<td>56</td>
<td>42</td>
<td>3</td>
<td>97</td>
<td>95</td>
<td>4</td>
<td>96</td>
<td>3</td>
</tr>
</tbody>
</table>

It can be seen in the table that the percentages of each of these demographic results in the experimental and control groups were about equal.

Table 6 shows the age breakdown of the participants. For the 172 participants in the sample, ages ranged from 18 years to 35 years; however, the majority were 20 years of age (138; 80.2%).

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Table 6

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>18.0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>19.0</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>20.0</td>
<td>138</td>
</tr>
<tr>
<td></td>
<td>21.0</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>22.0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>23.0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>26.0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>27.0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>35.0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>99.4</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>172</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean Age = 20.175
Mean SD = 1.44

It can be seen in this table that although there was a range of ages, the vast majority of the participants were 20 years old. A Chi-square test revealed no significant differences (.541) between the experimental and control groups.

Table 7 shows the breakdown of participants by gender. There were 97 males (56.4%) and 73 females (42.2%) in the study.
Table 7

*Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>97</td>
<td>56.4</td>
</tr>
<tr>
<td>Female</td>
<td>73</td>
<td>42.4</td>
</tr>
<tr>
<td>Total</td>
<td>170</td>
<td>98.8</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>172</td>
<td>100.0</td>
</tr>
</tbody>
</table>

It can be seen that there were more men than women in the sample. The difference found within the entire sample is almost identical to the difference found between the control and experimental groups and a Chi-square test revealed no significant differences (.812).

Table 8 illustrates the educational level of participants.

Table 8

*Educational Level*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>5</td>
<td>2.9</td>
</tr>
<tr>
<td>Junior</td>
<td>166</td>
<td>96.5</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>99.4</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.6</td>
</tr>
<tr>
<td>Total</td>
<td>172</td>
<td>100.0</td>
</tr>
</tbody>
</table>

There were 166 participants classified as juniors in college (96.5%) and five as
sophomores (2.9%). It can be seen in the table that the majority of the participants were juniors in college.

From the sample, 164 (95.3%) were US citizens and 165 (95.9%) stated that English was their primary language. Additionally participants “political viewpoint” was solicited using a 1-5 scale ranging from “liberal” (1) to “conservative” (5), and the majority of participants fell in the middle range (2-4). Political viewpoint findings are presented in Table 9.

**Political Liberalism (high scores = Conservative)**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>99.4</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.6</td>
</tr>
<tr>
<td>Total</td>
<td>172</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Mean = 3.07  
SD = 1.082

It can be seen in this table that the majority of the participants described themselves as being in the middle ranges concerning their political viewpoints, as shown by the mean score.
As noted in Chapter 3, the Defining Issues Test-II (DIT-II) is the updated version of the older Defining Issues Test (DIT), and it purports to measure one's level of moral judgment based on Kohlberg's theory of moral development. It provides two main scores, the P-score and the more rigorous N2-score that is suggested to have greater construct validity (Bebeau & Thoma, 2003). The DIT-II provides two additional indices that were analyzed: the Type Indicator score and the U-score (Utilizer).

The vast majority of the participants were juniors in college (96.5%); the average normative sample scores for juniors in college are (P-score) M= 34.45 and (N2-score) M=32.65 (i.e., Juniors in college utilize Postconventional reasoning 33%-34% of the time.). The DIT-II does not provide norm data for the Type Indicator Score or the U-Score. Table 10 presents and compares participants' means scores with norms on the DIT-II.

Table 10

*DIT-II Means and Norms*

<table>
<thead>
<tr>
<th></th>
<th>Total Sample Means</th>
<th>Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test P-score</td>
<td>40.16</td>
<td>34.45</td>
</tr>
<tr>
<td>Post-test P-score</td>
<td>43.41</td>
<td>--</td>
</tr>
<tr>
<td>Pre-test P-score SD</td>
<td>14.64</td>
<td>15.57</td>
</tr>
<tr>
<td>Post-test P-score SD</td>
<td>15.23</td>
<td>--</td>
</tr>
<tr>
<td>Pre-test N2-score</td>
<td>40.21</td>
<td>32.65</td>
</tr>
<tr>
<td>Post-test N2-score</td>
<td>44.17</td>
<td>--</td>
</tr>
<tr>
<td>Pre-test N2-score SD</td>
<td>14.56</td>
<td>16.04</td>
</tr>
<tr>
<td>Post-test N2-score SD</td>
<td>14.77</td>
<td>--</td>
</tr>
</tbody>
</table>
In both the pre-test and the post-test, this study's participants were above the average on both the P-score and N2-score. As seen in Table 10, the normative standard deviations for juniors in college for the P-score and N2-score are similar to those found for these participants on their pre-test as well as their post-test.

Findings With Relation to the Hypotheses

Hypothesis 1.

The experimental group will show significantly greater moral stage growth from pre-test to the post-test than the comparison group as measured by the DIT-II (P-score & N2-score).

The mean pre-test and post-test scores and standard deviations are shown in Table 11.

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test P-score</td>
<td>Experimental</td>
<td>36.2118</td>
<td>16.54346</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>41.8964</td>
<td>13.45665</td>
<td>89</td>
</tr>
<tr>
<td>Post-test P-score</td>
<td>Experimental</td>
<td>45.3333</td>
<td>16.07439</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>42.5674</td>
<td>14.85722</td>
<td>89</td>
</tr>
<tr>
<td>Pre-test N2-score</td>
<td>Experimental</td>
<td>35.0336</td>
<td>18.48830</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>42.4767</td>
<td>11.88720</td>
<td>89</td>
</tr>
<tr>
<td>Post-test N2-score</td>
<td>Experimental</td>
<td>44.7836</td>
<td>16.43718</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>43.9030</td>
<td>14.07371</td>
<td>89</td>
</tr>
</tbody>
</table>
It can be seen that the experimental group increased their means scores by eight to ten points on both P and N2 scores, while the control group only increased minimally. The experimental group's mean scores on the post-test (Pre-test-P-score M = 44.83; Post-N2-score M = 44.24) were higher than the control groups mean scores on the post-test (Pre-test-P-score M = 41.51; Post-N2-score M = 42.61). Although there were differences on the pre-test between the two groups, those differences were not significant.

This study incorporated two measures (DIT-II and MES), given at two different times (pre-test and post-test) with two different groups (experimental and control). Therefore, 2 x 2 repeated measures ANOVAs were utilized to evaluate the differences between the two groups from the pre-test to the post-test. The P-score and the N2-score were run in separate analyses due to the fact that the N2-score is more rigorous and is more likely to purge items due to higher item data requirements.

*P-score.* The results of the repeated measures ANOVA for the P-scores (pre-post) can be found in Table 12. There was a significant interaction between the pre-tests and post-tests, and the experimental and control groups (time * Group [F (1,126) = .003, p > .05]). As anticipated, this indicates that the P-scores for the experimental group rose significantly more than those from the control group. The within-subjects effects also show that there was a statistically significant positive increase in the experimental group’s P-scores from the pre-test to the post-test [F (1, 126) = .003, p > .05] in comparison to the control group. The different tests listed in the table (Pillai’s Trace, Wilks’ Lambda, Hotelling’s Trace, Roy’s Largest Root) indicate several methods of
testing for significance. As the number of degrees of freedom increases, the values of these tests tend to converge. Pillai's is considered to be one of the more robust tests.

Table 12

Repeated Measures ANOVA (P-score)- Summary of F Statistics

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hyp/ df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.089</td>
<td>12.294(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.001</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.911</td>
<td>12.294(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.001</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.098</td>
<td>12.294(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.001</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.098</td>
<td>12.294(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.001</td>
</tr>
<tr>
<td>time * Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.068</td>
<td>9.156(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.003</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.932</td>
<td>9.156(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.003</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.073</td>
<td>9.156(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.003</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.073</td>
<td>9.156(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.003</td>
</tr>
</tbody>
</table>

a Exact statistic
b Design: Intercept+Group
Within Subjects Design: time

Figure 1 shows the changes made by both groups using the mean pre-test and post-test P-scores and augments the significance found in the ANOVA.
The profile plot clearly shows how the experimental group increased their scores over time where as the control group showed minimal increase.

N2-score. The repeated measures ANOVA of the N2-scores (pre-post) is shown in Table 13. It can be seen that there was a significant interaction between the pre-test and post-tests and the experimental and control groups (time * Group [F (1, 126) = .001, p > .05]). Once again, this indicates that the N2-scores for the experimental group rose more than those from the control group as anticipated (Figure 2). As with the P-score findings, the within-subjects effects show that there was a statistically significant positive increase in the experimental group’s N2-scores from the pre-test to the post-test [F (1, 126) = .003, p > .05] in comparison to the control group.
Table 13

Repeated Measures ANOVA (N2-Scores)- Summary of F Statistics

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hyp/ df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.134</td>
<td>19.448(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.000</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.866</td>
<td>19.448(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.000</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.154</td>
<td>19.448(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.000</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.154</td>
<td>19.448(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.000</td>
</tr>
<tr>
<td>time * Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.079</td>
<td>10.787(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.001</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.921</td>
<td>10.787(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.001</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.086</td>
<td>10.787(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.001</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.086</td>
<td>10.787(a)</td>
<td>1.000</td>
<td>126.000</td>
<td>.001</td>
</tr>
</tbody>
</table>

a Exact statistic
b Design: Intercept+Group
Within Subjects Design: time

Figure 2 shows the changes made by both groups using the mean pre-test and post-test N2-scores and augments the significance found in the ANOVA.

Figure 2. Profile Plots- N2-scores
This figure graphically displays the changes made by the participants on the N2-score. Although the groups are closer at the post-test than they were at the pre-test, the amount of change over time within the experimental group is significantly different from the change of the control group.

Additional DIT-II Indices

The DIT-II offers two additional indices for further statistical analysis, the Type Indicator Score and the U-Score. A review of the mean scores and standard deviations on these two indices (Table 14) shows that the experimental group made increases in their type indicator scores, while the control group decreased minimally. The U-scores show that both groups decreased from the pre-test to the post-test.
Pre-test & Post-test Means on the DIT-II (Type & U)

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test Type Indicator</td>
<td>Experimental</td>
<td>4.92</td>
<td>1.98</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>5.35</td>
<td>1.71</td>
<td>88</td>
</tr>
<tr>
<td>Post-test Type Indicator</td>
<td>Experimental</td>
<td>5.44</td>
<td>2.06</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>5.32</td>
<td>1.83</td>
<td>88</td>
</tr>
<tr>
<td>Pre-test U-Score</td>
<td>Experimental</td>
<td>.148</td>
<td>.127</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.148</td>
<td>.147</td>
<td>71</td>
</tr>
<tr>
<td>Post-test U-Score</td>
<td>Experimental</td>
<td>.109</td>
<td>.105</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.113</td>
<td>.116</td>
<td>71</td>
</tr>
</tbody>
</table>

Type indicator. The type indicator profiles participants into one of 7 “types” closely correlated to the Kohlbergian stages of moral development and offers a clear schema preference. The results of a repeated measures ANOVA using the type indicator score show that there is an interaction from the pre-test to the post-test comparing the two groups (Figure 3); however, that interaction is not significant \[ F (1, 125) = 1.78, p > .05 \] (Table 15). This score is less robust than either the P-score or the N2-score (which had significant interactions) and therefore the lack of a statistically significant difference is not concerning. This score is generally utilized for understanding patterns when there is no change on the P-score (Bebeau & Thoma, 2003). However, it is beneficial to recognize the “stage” level movement in the participants in a more clearly outlined manner (i.e. correspondence between “type indicator” and “stage”) because it shows that positive developmental growth did take place.
Table 15

Repeated Measures ANOVA (T-score)- Summary of F Statistics

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hyp/df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
<td>.011</td>
<td>1.406(a)</td>
<td>1.000</td>
<td>125.000</td>
<td>.238</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.989</td>
<td>1.406(a)</td>
<td>1.000</td>
<td>125.000</td>
<td>.238</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.011</td>
<td>1.406(a)</td>
<td>1.000</td>
<td>125.000</td>
<td>.238</td>
</tr>
<tr>
<td>time * Group</td>
<td>.011</td>
<td>1.406(a)</td>
<td>1.000</td>
<td>125.000</td>
<td>.238</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.986</td>
<td>1.835(a)</td>
<td>1.000</td>
<td>125.000</td>
<td>.178</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.015</td>
<td>1.835(a)</td>
<td>1.000</td>
<td>125.000</td>
<td>.178</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.015</td>
<td>1.835(a)</td>
<td>1.000</td>
<td>125.000</td>
<td>.178</td>
</tr>
</tbody>
</table>

a Exact statistic
b Design: Intercept+Group
Within Subjects Design: time

Figure 3 shows the changes made by both groups using the mean pre-test and post-test Type Indicator scores.
This figure graphically displays the changes made by both groups from the pre-test to the post-test. Though the analysis does not find significant differences, the positive movement can be seen.

_U-score_. The Utilizer Score (U-score) represents the degree of match between those items the participant endorsed as most important and the choice of action selected for that story. It is suggested that a high U-score is representative of consistency between the items the participant endorses and their action choice, where a low score represents poor consistency. The repeated measures ANOVA (Table 16) shows no significant interaction between the two groups from the pre-test to the post-test \( F(1, 102) = .923, p > .05 \) as well as a large drop in scores for both groups (Figure 4). One noticeable difference on this index is the large amount of purged subjects. Over 30 fewer scores were available for analysis on this index, which may have impacted the results. In addition, the area on the assessment where the respondent indicates his or her "choice of action" was missed by a number of participants potentially due to the layout of the assessment. Nonetheless, the fact that these scores decreased in both groups while in all
other indices scores rose is a cause for concern. This concern and potential explanations for it will be reviewed in Chapter 6.

Table 16

Repeated Measures ANOVA (U-score)- Summary of F Statistics

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hyp/ df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Pillai's Trace</td>
<td>.049</td>
<td>5.223(a)</td>
<td>1.000</td>
<td>102.000</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.951</td>
<td>5.223(a)</td>
<td>1.000</td>
<td>102.000</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>.051</td>
<td>5.223(a)</td>
<td>1.000</td>
<td>102.000</td>
</tr>
<tr>
<td>time * Group</td>
<td>Roy's Largest Root Pillai's Trace</td>
<td>.000</td>
<td>.009(a)</td>
<td>1.000</td>
<td>102.000</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>1.000</td>
<td>.009(a)</td>
<td>1.000</td>
<td>102.000</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>.000</td>
<td>.009(a)</td>
<td>1.000</td>
<td>102.000</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest Root</td>
<td>.000</td>
<td>.009(a)</td>
<td>1.000</td>
<td>102.000</td>
</tr>
</tbody>
</table>

a Exact statistic
b Design: Intercept+Group
Within Subjects Design: time

Figure 4 shows the changes made by both groups using the mean pre-test and post-test U-scores.

Figure 4- Profile Plots- U-scores
This plot shows the decreasing U-scores of both groups from the pre-test to the post-test. Hence, those items the participants selected as important showed decreasing consistency over time.

**Hypothesis 2:**

The intervention class will show significant business ethics growth from the pre-test to the post-test as measured by the Multidimensional Ethics Scale (MES).

*The Multidimensional Ethics Scale.* Reidenbach and Robin’s (1988, 1990) Multidimensional Ethics Scale, as explained in Chapter 3, examines individual ethical judgment as it relates to business scenarios. Its designers contended that current measurement practices were inadequate for studying the complex process of ethical decision-making (Reidenbach & Robin, 1990). They felt that individuals use multiple grounds for making ethical judgments, and that any measurement tool should seek to understand the means by which an individual determines a particular ethical judgment (McMahon, 2002). The MES consists of three different scenarios, which are evaluated by the respondent. The respondent decides the ethicality of the action taken in the scenario by indicating his or her choice on 8 items using a 7-point scale anchored on
either side by words such as “Just/ Unjust.” The eight items are organized into the three factors of ethical decision-making being measured (Moral Equity, Relativism, Contractualism).

The MES offers three methods for evaluation. First, mean scores can be analyzed for all three scenarios collectively (“Avgall3scen”). Second, mean scores for corresponding factors can be analyzed across all three scenarios ("allscen1to4" (moral equity), "allscen5to6" (relativism), "allscen7to8" (contractualism)). For the purposes of this study, only scores from the first two methods were analyzed utilizing repeated measures ANOVA’s. None of these analyses showed significant interactions between the two groups from the pre-test to the post-test. To follow, one will find the analyses completed in the order they are described.

Table 17 displays the mean scores for the experimental and control groups on all three MES scenarios combined.

Table 17

*MES Mean Scores (3 Scenarios)*

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreAvgall3scen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>5.4263</td>
<td>0.66800</td>
<td>39</td>
</tr>
<tr>
<td>Control</td>
<td>5.0964</td>
<td>0.80469</td>
<td>115</td>
</tr>
<tr>
<td>Total</td>
<td>5.1799</td>
<td>0.78359</td>
<td>154</td>
</tr>
<tr>
<td>PostAvgall3scen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>5.4199</td>
<td>1.01377</td>
<td>39</td>
</tr>
<tr>
<td>Control Group</td>
<td>5.3112</td>
<td>0.91982</td>
<td>115</td>
</tr>
<tr>
<td>Total</td>
<td>5.3387</td>
<td>0.94229</td>
<td>154</td>
</tr>
</tbody>
</table>
For the first analysis, repeated measures ANOVA was performed on the participant's mean scores on all three scenarios combined from the pre-test to the post-test (Table 18). No significant interaction was found [F (1, 152) = .131, p > .05] in these analyses. Interestingly, the control group appeared to make positive changes and the experimental group scores decreased very slightly; however, no meaningful interaction was found (Figure 5).

Table 18

Repeate Measures ANOVA (MES- 3 Scenarios)- Summary of F Statistics

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hyp/ df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.013</td>
<td>2.044(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.155</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.987</td>
<td>2.044(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.155</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.013</td>
<td>2.044(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.155</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.013</td>
<td>2.044(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.155</td>
</tr>
<tr>
<td>time * Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.015</td>
<td>2.303(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.131</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.985</td>
<td>2.303(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.131</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.015</td>
<td>2.303(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.131</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.015</td>
<td>2.303(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.131</td>
</tr>
</tbody>
</table>

a Exact statistic
b Design: Intercept+Group
Within Subjects Design: time

Figure 5 shows the changes made by both groups using the mean pre-test and post-test scores on all three scenarios.
This figure illustrates the control group's increasing concern that the actions taken in all three scenarios were unethical ones. The experimental group showed little change in their responses over time.

Factor 1: Moral Equity ("all scen 1to4")

A repeated measures ANOVA was performed using the mean scores from the participants on factor 1 of all three scenarios combined. These mean scores can be found in Table 19.
Table 19

*Factor 1 Mean Scores (Moral Equity)*

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre all scen. 1to4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>5.9893</td>
<td>.55973</td>
<td>39</td>
</tr>
<tr>
<td>Control</td>
<td>5.6536</td>
<td>.73818</td>
<td>115</td>
</tr>
<tr>
<td>Total</td>
<td>5.7386</td>
<td>.71082</td>
<td>154</td>
</tr>
<tr>
<td>Post all scen 1to4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>5.8910</td>
<td>1.30495</td>
<td>39</td>
</tr>
<tr>
<td>Control</td>
<td>5.7812</td>
<td>.85237</td>
<td>115</td>
</tr>
<tr>
<td>Total</td>
<td>5.8090</td>
<td>.98315</td>
<td>154</td>
</tr>
</tbody>
</table>

The results of the repeated measures ANOVA show that no significant interaction was found [F (1, 152) = .167, p > .05] (Table 20). The control group means increased slightly while the experimental group means decreased slightly.
Table 20

Repeated Measures ANOVA (Moral Equity)- Summary of F Statistics

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hyp/ df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>.000</td>
<td>.032(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.858</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>1.000</td>
<td>.032(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.858</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.000</td>
<td>.032(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.858</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.000</td>
<td>.032(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.858</td>
</tr>
<tr>
<td>time * Group</td>
<td>.013</td>
<td>1.928(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.167</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.987</td>
<td>1.928(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.167</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.013</td>
<td>1.928(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.167</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.013</td>
<td>1.928(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.167</td>
</tr>
</tbody>
</table>

a Exact statistic  
b Design: Intercept+Group  
Within Subjects Design: time

Figure 6 shows the changes made by both groups using the mean pre-test and post-test scores on the moral equity dimension.

Figure 6. Profile Plots- Moral Equity
Factor 2: Relativism ("5to6")

A repeated measures ANOVA was performed using the mean scores from the participants on factor 2 of all three scenarios combined. The mean scores for both groups are seen in table 21.

Table 21

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre5to6</td>
<td>Experimental</td>
<td>4.7094</td>
<td>1.09405</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>4.4783</td>
<td>1.12770</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.5368</td>
<td>1.12026</td>
<td>154</td>
</tr>
<tr>
<td>Post all scen 5to6</td>
<td>Experimental</td>
<td>4.7521</td>
<td>1.17096</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>4.7000</td>
<td>1.26163</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.7132</td>
<td>1.23574</td>
<td>154</td>
</tr>
</tbody>
</table>

The repeated measures ANOVA shows that no significant interaction was found \[F (1, 152) = .387, p > .05\] (Table 22). However, both the experimental group and the control group made positive changes.
Table 22

Repeated Measures ANOVA (Relativism)- Summary of F Statistics

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hyp/ df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.011</td>
<td>1.640(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.202</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.989</td>
<td>1.640(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.202</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.011</td>
<td>1.640(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.202</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.011</td>
<td>1.640(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.202</td>
</tr>
<tr>
<td>time * Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.005</td>
<td>.752(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.387</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.995</td>
<td>.752(a)</td>
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<tr>
<td>Hotelling's Trace</td>
<td>.005</td>
<td>.752(a)</td>
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<td>152.000</td>
<td>.387</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.005</td>
<td>.752(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.387</td>
</tr>
</tbody>
</table>

a Exact statistic
b Design: Intercept+Group
Within Subjects Design: time

Figure 7. Profile Plots- Relativism

This figure illustrates the increasing importance all participants placed on the lack of
ethicality, with regard to relativism, of the actions taken in the scenarios.

_**Factor 3: Contractualism ("allscen7to8")**_

A repeated measures ANOVA was performed using the mean scores from the participants on factor 3 of all three scenarios combined. The means scores for both groups on the pre-test and the post-test are found in Table 23.

**Table 23**

**Factor 3 Mean Scores (Contractualism)**

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre all scen 7to8</td>
<td>Experimental</td>
<td>5.0171</td>
<td>1.18395</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>4.6000</td>
<td>1.26907</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.7056</td>
<td>1.25748</td>
<td>154</td>
</tr>
<tr>
<td>Post all scen 7to8</td>
<td>Experimental</td>
<td>5.1453</td>
<td>1.22127</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>4.9826</td>
<td>1.30570</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.0238</td>
<td>1.28287</td>
<td>154</td>
</tr>
</tbody>
</table>

The repeated measures ANOVA revealed no significant interaction [F (1, 152) = .283, p > .05] (Table 24). Again, both the experimental group and the control group made positive changes.
### Table 24

**Repeated Measures ANOVA (Contractualism) - Summary of F Statistics**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hyp/df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.030</td>
<td>4.673(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.032</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.970</td>
<td>4.673(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.032</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.031</td>
<td>4.673(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.032</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.031</td>
<td>4.673(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.032</td>
</tr>
<tr>
<td>time * Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.008</td>
<td>1.159(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.283</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.992</td>
<td>1.159(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.283</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.008</td>
<td>1.159(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.283</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.008</td>
<td>1.159(a)</td>
<td>1.000</td>
<td>152.000</td>
<td>.283</td>
</tr>
</tbody>
</table>

a Exact statistic
b Design: Intercept+Group
Within Subjects Design: time

*Figure 8. Profile Plots- Contractualism*
This figure demonstrates how both groups placed increasing importance, with regard to contractualism, on the lack of ethicality of the actions that took place in all three scenarios.

**Qualitative Evaluations**

As described in Chapter 3, participants in the experimental curriculum were asked to write journals on a regular basis in accordance with the tenets of Deliberate Psychological Education. Twice the participants were asked to reflect on changes they felt they had experienced over the course of the semester. Once they were asked to evaluate their moral judgment skills presently and then speak to how they might be able to increase their skills set in this area over the later half of the semester. Another journal prompted them to consider any changes made in their personal ethical decision-making over the entire semester. Although a more detailed evaluation of these journal responses will be highlighted in the discussion section (Chapter 6), the participant evaluations clearly supported the quantitative findings of the DIT-II. The participant responses brought forward a number of themes related to growth in the moral domain. Primary themes included the broadening of perspectives and an increasing awareness of themselves as individuals as well as the complexities inherent in ethical decision-making. Participants spoke about broadening their approach to ethical dilemmas in that they now evaluate situations to a greater extent (i.e. taking more factors into consideration) than they had previously. Participants also mentioned that they gained a greater awareness of themselves during the process, in that they made strides toward defining their personal value system, and in so doing, began to incorporate others viewpoints. Participants also learned to recognize their immediate emotional reaction in order to differentiate it from a
more thought out problem solving process. Another area of growth mentioned involved an increased ability/desire to incorporate multiple perspectives (emotional or cognitive) into their decision making process so that conclusions on dilemmas could be focused on increasing the greater good.

Summary

The repeated measures ANOVAs analyzed the different indices of the DIT-II and the different factors of the MES. The experimental group showed statistically significant growth in moral development in comparison to the control group as measured by the DIT-II. The analyses of the MES did not show statistically significant changes for the experimental group in comparison to the control group.
CHAPTER SIX
DISCUSSION

The purpose of this study was to evaluate the effectiveness of incorporating a deliberate psychological education curriculum into an undergraduate business ethics course. It was anticipated that positive growth in the moral domain would enable business students to more effectively navigate the multitude of challenging circumstances they will face as professionals. One semester-long ethics course, comprised of four different sections, was examined in this study. One of the sections served as the experimental group and received a Deliberate Psychological Education (DPE)-based intervention, while the three remaining sections served as a control group. The intervention entailed the use of written reflective journals, guided reflection team meetings, and attempts at increasing the challenges students faced in the classroom. Through these methods, it was hypothesized that participants in the experimental group would increase their moral development over the course of the curriculum as compared to the control group.

Discussion of the Findings

This study suggests that moral reasoning can be taught and/or facilitated in a business education curriculum through the implementation of a DPE–based intervention. Although the utility of deliberate psychological education has been established in numerous and diverse practice settings, it had not previously been tested with undergraduate business students. Inasmuch as a principle component of the experimental curriculum was the addition of a guided reflection element, the study suggests that encouraging students to participate in specific types of reflective activities alongside their
coursework could lead to significant increases in their moral development. Specific discussion of the findings and their implications will follow:

_Hypothesis 1._ It was hypothesized that the experimental group would exhibit significantly greater increases in principled reasoning from pre-test to post-test, as evidenced by their scores on the DIT-II (P & N2 scores). The statistical analyses clearly supported this hypothesis. In both the P-score and the N2-score, the experimental group made significantly greater changes in their preference for Principled reasoning than the control group when confronting moral dilemmas. The significant changes in the N2-scores show that they also reduced their levels of Conventional reasoning, an indicator of psychological development.

Further analysis using the type indicator index of the DIT-II was also consistent with the hypothesis. The experimental group moved from Consolidation in the Maintaining Norms Schema (Type 4) toward Transition into the Postconventional Schema (Type 5). This indicates that there was an increase in preference for higher order thinking skills increased to the point of making qualitative shifts in reasoning capabilities. That is, when confronting an ethical dilemma, these students now possessed more complex “tools” for making ethical decisions.

These statistical analyses infer that the deliberate psychological education curriculum implemented with the experimental group had a significantly positive influence on the moral judgment capabilities of the students. The experimental course sought to increase student preference for Postconventional reasoning while decreasing student preference for Conventional reasoning; the statistical analyses of the DIT-II illustrate that these desired changes took place.
Hypothesis 2. It was hypothesized that the experimental group would exhibit
significantly greater increases in ethical judgment than the control group as indicated by
pre-test to post-test scores on the Multidimensional Ethics Scale (MES). Analysis of all
three scenarios of the MES in combination revealed no statistically significant results for
either the experimental or control group.

A second analysis looked specifically at different dimensions within the MES to
determine whether or not participants changed their ethical reasoning skills as applied in
any one of three particular areas measured by the MES: moral equity, relativism, or
contractualism. Again, no significant differences were found; however, in both the
relativism and the contractualism dimensions, participants in both the experimental and
control groups showed positive increases in scores on the post-test. Although the
increases were not significant, the results do evidence change in the hypothesized
direction. In the moral equity dimension, the scores for the experimental group slightly
decreased, while scores for the control group increased very slightly, a finding that
contradicts previous research. Some explanations for the unanticipated findings are
presented in the following paragraphs.

Instrumentation Issues

It was anticipated that the findings from the first hypothesis would be consistent
with those for the second hypothesis; that is, that if the experimental group showed
significant increases on the DIT-II, then similar significant changes would have been
apparent on the MES. In fact, although both groups made positive changes on two of the
three dimensions of the MES, the instrument detected no significant changes. There are a
number of possible explanations for why this occurred.
First, the authors of the instrument point out that the constructs being measured by the MES differ somewhat from those being measured by the DIT-II. Although one of the dimensions of the MES (moral equity) purports to link to what is being measured by the DIT-II (moral judgment with regard to justice and fairness), it may be that the other two dimensions incorporate differing philosophies. Moral development theory has been criticized for emphasizing rights and justice principles as precursors to behavior without adequately accounting for other lines of moral philosophy (Fraedrich, Thorne, & Ferrell, 1994). The validity of this critique has yet to be confirmed, and the authors have suggested further comparison of the MES and DIT-II in future research. The current findings suggest that while the participants grew in moral reasoning as it relates to justice and fairness, their concurrent incorporation of the philosophies of deontology and relativism were less considerable. These findings could be a result of and, thus, lend support to Fraedrich et al.'s contention.

A second reason for the unanticipated finding could be that although both measurements instruments focused on the moral domain, differences in the type of responses expected from participants led to their reasoning being influenced by other factors. On the DIT-II, individuals are asked to read a scenario in which characters are placed in a certain predicament, directed to respond, and then asked to prioritize identified items in order of their importance to the decision making process. In this task, they are able to imagine being in the situation and evaluate what principles they will utilize in order to finalize a decision and follow through. The MES differs from the DIT-II in that it is retrospective. The participant is asked to read a scenario in which a seemingly unethical action has already taken place. The participant is then asked to
evaluate the actions that were taken by another within the scenario. Whereas the DIT-II assesses the moral reasoning behind how a person might act, the MES asks participants to make a judgment about a particular course of action by another. While both of these operations remain in the moral domain, it is possible measure different elements of the reasoning process. Students in the experimental group evidenced positive development with regard to their moral judgments, but their increases in determining the lack of ethicality of actions were less considerable. Despite the lack of significance, the positive growth indicated in both the experimental and control groups on the MES should be noted because it emphasizes that positive change did take place. In addition, this research begins to answer the literature's question about the relationship between the MES and the DIT-II by highlighting their distinctive features. Consider for instance, the experimental group's score decreases in the 'moral equity' dimension. This finding is intriguing given that Reidenbach and Robin (1990) compared their moral equity dimension to Kohlberg and Rest's notions of justice and fairness that are involved in all ethical decision-making, despite one being in any particular stage. If moral equity does in fact equate with moral judgment as measured by the DIT-II, increases in the experimental groups scores in this dimension should have also increased. Future research is needed to evaluate this relationship further and to re-consider how these instruments can and should be used together.

Conceptual Issues

The MES was selected for use in this study in response to a call from previous research to utilize business-ethics-specific measures alongside the DIT-II (Fraedrich et al., 1994; Izzo, 2000; Reidenbach & Robin, 1990). The literature has suggested that
measurements of moral reasoning carried out in business ethics research may not produce the same results as in other contexts (Mamburg, 2001). It points out that measurement tools related to ethical reasoning have not been (and, perhaps, should be) constructed specifically for the business population (Fraedrich et al., 1994). In corroboration with McNeel’s (1994) findings that the undergraduate business students generally score lower on the DIT than students in other majors, businessmen and women have often tested significantly lower than the American population in general (Mamburg, 2001). This suggests that people confront and perceive moral dilemmas differently in the business context than in other situations (Mamburg, 2001), and that they generally reason at lower developmental levels.

Macro and micro-morality. Fraedrich et al. (1994) have suggested that individuals utilize different ethical decision making philosophies at home than they do at work, and that “cognitive moral development issues that relate to a person’s non-work experiences in home and family situations are not the most significant factor in day-to-day-business ethics issues” (p. 834). They further explain that the “work group” and/or “significant others” within the organization are the most influential factors effecting employee behavior. If true, it could be that participants in the study may not have been able to relate to the different types of considerations required on each assessment.

The DIT-II assesses issues related to macromorality; that is, the elements of moral reasoning that are related to global issues such as structures of society and public policy (Rest, et al., 1999). The central questions of macromorality include: “Is this a fair institution (or role structure or general practice)” and “Is society organized in a way that different ethnic, religious, and subcultural groups can cooperate in it and support it?”
Moral Development in Business Education 143

(Rest et al., 1999). The situations for consideration on the MES may be more related to micromorality, in that they are specific to a particular context and everyday happenings (Rest, et al., 1999). In this case, they were related to the business context.

Developmental theory does not support the idea that different contextual situations themselves call for or encourage different types of ethical reasoning. Rather, it proposes that an individual with moral reasoning capacities in the Postconventional schema will reason through an ethical situation utilizing those advanced cognitive capacities. However, developmental theory does suggest that in certain situations of stress or anxiety, an individual might choose to respond to an ethical dilemma in a way that corresponds to a stage of ethical reasoning below an individual’s current capacity. In situations of micromorality, when a certain ethical dilemmas become more personalized and anxiety producing, contextual factors could potentially influence the cognitive structures applied in decision-making. The business world, often accused of having an amoral atmosphere, may be ripe for these types of stressors.

The business climate and ethical behavior. It has been suggested that the climate of the business world functions within “conditional morality” in that the culture often involves the changing of rules with the situation at hand or the shifting of the power and the politics of the moment (Jackall, 1988 as cited in Monson & Bock, 2005). It has also been suggested that social conventions can have a powerful impact and inform many moral decisions (Turiel, 1983 as cited in Thoma, Rest, & Davison, 1991). The climate of competition, an inherent demand of a free market economy, can potentially influence ethical behavior. It may be that an individual within such a climate must be firmly anchored in a principled stage of moral reasoning in order for his or her ethical reasoning
and behavior not to be negatively impacted by it. According to Goleman (1995 as cited in Monson & Bock, 2005), one can have knowledge of moral philosophy, landmark business cases, and decision models, but stress and pressure are often pivotal drivers of behavior.

In the current study, participants in the experimental group showed a significant increase in their moral judgment capabilities, advancing to a stage at which they were beginning the transition into Postconventional thinking. However, their MES scores suggested that there may still be systematic gaps in their reasoning processes considering the fact that they were only recently attained during a semester-long intervention. It could be that although their reasoning capabilities were present, as evidenced by the P & N2 scores, their perspective changes were still “fresh” and were not fully incorporated into their responsive decisions and action evaluations when they were confronted with more micro-moral situations. Weber’s (1990 as cited in Mamburg, 2001) findings supported this suggestion, finding that business students obtained lower average scores on measurements of their responses to ethical dilemmas when the dilemmas were known situations. The scenarios in the MES may have been more personal to the participants of this study; thus, they might have had first-hand experience with the stressors that come along with such scenarios. Participants from the experimental group showed that they have the means to reason at Postconventional levels. Developmental theorists, beginning with Piaget, have taken this phenomenon into account and refer to it as decalage.

“Decalage represents the way in which development can be haphazard or uneven and often occurs as a result of cognitive dissonance that accompanies psychological growth” (Morgan, 1998). The participants might have utilized relativistic rather than principled
meaning making due to the familiarity of the scenario situations and responded in a manner more similar to how they believe “the game is played” (Reidenbach & Robin, 1990).

*The judgment-action link.* As explained in Chapter 2, the link between moral reasoning and high standards of behavior continues to be an issue of controversy. Thoma and Rest (1986) provide support for a moral judgment-action correlation, albeit a weak one. Thoma (1994) concluded that: “various measures of moral judgment development are related to moral actions, however the magnitude of these relationships is not large” (p. 201). As noted previously, the DIT-II is a measurement of moral judgment, not moral action. Therefore, one could assume that the accurate measurement of moral action fell outside the purview of this study. The neo-Kohlbergian framework emerged in response to concerns that the traditional Kohlbergian model was an inadequate explanation of the complexities of moral reasoning suggesting that moral judgment is important, but not the only determinant of moral action (Rest, 1994). Rest’s Four Component Model (Rest, 1994) introduced in Chapter 2 presents four critical steps necessary for a moral judgment to become a moral action beginning with moral sensitivity and moral judgment. The ability to follow through with an action entails the utilization of components III and IV, which incorporate moral motivation and moral character. Moral motivation (III) involves the ability to prioritize one’s moral values relative to other values such as self-actualization or protecting one’s organization. In situations when an individual’s moral values are compromised due to other factors, that individual exhibits a decreasing likelihood for following through with an action choice corresponding to his or her judgments. Moral character (IV) encompasses the courage, persistence, and ego strength...
to follow through with a moral judgment and is, therefore, inextricably linked to moral motivation. An individual must exhibit competence in each of the four components in order to follow through with an action choice (Rest, 1994). Consequently, a failure to act morally “is due to a breakdown in one or more of the component processes” (Thoma, et al, 1991, p. 660) and not solely the result of one’s level of moral judgment. This concept is particularly relevant to the findings of this study.

The experimental group demonstrated significant growth in their moral judgment capacities; however, these rather swift and recent advances may not have been as reinforced as they could have been if the intervention had continued. Their type indicator scores highlighted this by placing them as being “Transitional” and not “Consolidated” in the Postconventional stage. Meaning, they acquired the requisite understanding to reason at the Postconventional level, but have may not rely solely on this reasoning stage at all times. A judgment-action link inconsistency might account for this finding as their evaluations of actions on the MES could have reflected the utilization of prior (pre-intervention) reasoning methods due to their special circumstances.

Qualitative Summary

Student’s journals throughout the semester highlighted their perspectives on individual changes that took place. These journals offer strong support the results of the DIT-II while also bearing light on some of the challenges inherent in the process of ethical development. Six primary qualitative themes emerged in the journal responses that appear to supplement and extend the statistical findings: They include: ethical growth, enhanced decision making, broadened perspective taking, consideration of multiple options, personal ethical principles, moving toward action, and uncertainty.
Ethical Growth

The vast majority of students stated how the course positively impacted their development in ethical decision-making. One student stated: “I believe my ability to engage in ethical reasoning has grown tremendously over the past months.” Another stated: “I have come to a more in-depth idea and appreciation of ethical reasoning.” A number of students explained how practicing ethical reasoning to such an extent had increased their comfort level with these types of dilemmas: “I feel much more confident in ethical situations and am better prepared to solve problems.” Other students highlighted the importance of learning the process of ethical decision-making: “I have learned that decision-making is a process and not just one step. This has helped me to be more discerning, cautious and sure about my intentions.” Another student spoke to this positive progression from a more personal perspective: “This semester has humbled me to the point of realizing that I don’t always have the best answer to ethical dilemmas. Sometimes it is in the council of others where we truly see the light.”

Enhanced Decision Making

Students specifically pointed out how their increasing awareness of ethical principles and the reasoning process enabled them to make better decisions. One student reported: “I have developed significantly in terms of how I recognize what may potentially be an ethical issue.” Another student reflected that the course “contributed to my heightened awareness of the prevalence of moral decisions in a business setting.” Students spoke about their “moral radar” and “moral red-flags” “going off” more frequently after spending time considering dilemmas. Ultimately, this “thinking about one’s thinking” is a meta-cognitive process and some students spoke to this specifically:
"I never usually stopped to think about my decision making process and how I look at ethical situations, but after taking this course I am much more aware of my cognitive processes."

**Broadened Perspective Taking**

The importance of perspective taking clearly resonated with the students, and many of their journal responses highlighted their incorporation of this process into their ethical reasoning. One student described this by stating: "I've started to take other people into consideration and map out in my head consequences of not only my actions, but those of others as well." Another student stated: "I am able to see the other options and understand where others that I am working with are coming from in their opinion."

Students explained how they began to analyze issues more globally by considering the impact the decisions had on greater numbers of people as illustrated in the following statement: "I realized that the most significant change has been the development of my ethical reasoning from a personal level to a societal level." Another student said: "I look at all variables and perspectives now. In this class I have learned to also think about other peoples lives when making ethical decisions, as well as taking into account that other people have different moral values" I have grown in a way that I really think about the greater good before making decisions."

When reflecting on perspective taking, a number of students explained how their experience of working through dilemmas as small and large groups increased their awareness of the importance of not only recognizing but also incorporating other viewpoints. For example, one student reported: "I think working with a group has really enhanced my moral reasoning. I usually much prefer to do things on my own, but..."
working with a group has taught me a lot about what people value and what people think is right and wrong.” Another student stated: “The experience of group work has made me a better listener. I understand people and their wants and needs better, which is essential to ethical reasoning.”

Consideration of Multiple Options

The students also emphasized their increased dependence on taking the time to consider multiple options when confronting ethical dilemmas. That was illustrated by one who said: “I realized that it is necessary to think about all the possible options and weigh these options with the possible results” When a difficult problem is presented in your life, it’s important to think it through and analyze the moral implications from every angle possible.” Another student stated: “Earlier on in the semester I might have simply settled for a “choose the lesser of two evils” approach but I think these cases have encouraged me to look in new directions for solutions that actually solve the whole problem.”

Students pointed out how they chose to “step back” more often and “take time” to consider problematic situations as illustrated in statements such as: “I approach problems less with a full head of steam and try to focus on evaluating every aspect of the dilemma” and: “I now take more time in analyzing situations and thinking through various factors, or different perspectives instead of hastily planning what action to take.” One student appeared to recognize the importance of the reflective process in saying: “I have realized that there needs to be time for reflection, whereas before I felt as if I had the right answer all the time.”

Personal Ethical Principles
Some of the students also stated that they gained an increased awareness of their personal ethical principles over the course of the semester. Reflecting on this, one reported: “Over the course of the class I think I have found my moral and ethical standards. I think they were always there but now I’ve recognized them and can utilize them more.” Another student shared how the course activities “allowed me to analyze just how ethical I really am and what principles matter most to me.” Some students highlighted the process of self-discovery in such statements as: “This course has challenged me to define my value system and standards, which has actually made me more aware of my decisions and myself.” And, in a rather strong summary statement, one student explains: “Over the length of this course, I believe that the main benefits I will be taking away with me are awareness, impartiality, and dedication to a set of principles.”

Moving Toward Action

The journal responses seemed to indicate that students were beginning to incorporate their newly developed capacities for ethical reasoning into their daily lives: a finding that was not convincing in the statistical results. Statements such as “I’ve been implementing these ideals for small, daily decisions,” “I am much more patient… my thought process is much more mature,” “I am simply more aware about ethical reasoning taking place every single day in my life” and “It seems that I’m taking a proactive approach to moral reasoning rather than a reactive one” each seem to speak to the present incorporation of new levels of ethical reasoning. Similarly, another student stated: “I feel that I now have the tools to apply this experience with ethics to the situations I will have
in college, and later in the workplace, and have the courage to tackle them with confidence."

Uncertainty

Not all the students reflected on the classroom experience as being extremely beneficial; a few spoke about how greater lengths of time as well as more “real-life” experiences are needed for lasting change in ethical reasoning to take place. After reflecting on some positive changes, one student remarked: “I don’t believe that this development has taken place in the normal sense because it takes significant amounts of time or perhaps an evocative experience to allow a person to change their stage of ethical reasoning.” Other students echoed the importance of actual experiences as shown by one who said: “I believe only through real time problems can we learn how to solve them, but in reality, one needs to experience the problem for himself to be able to fully recognize the consequences.” However, another student spoke of at least being better prepared for these real life situations when he said: “The moral insight we have gained throughout the semester will be invaluable when faced with choices that really do matter, and could potentially help or hurt hundreds of people.”

A small number of students did not feel as if much change took place during the semester. One student stated: “I would make the same choices now that I would have at the beginning of the semester... Instead, I have set myself up for future development.” This student continued to explain how real world experiences will allow him to put into practice what he has learned, and then greater changes might take place. Another student reflected: “My ethical reasoning has not changed much, if at all, over the course of the semester. However, I have become more aware of my thought process and how I assess
ethically trying situations.” Hence, it seems that even the limited number that did not experience much change from the course, did speak to benefits gained.

Student journal responses such as the above highlight the positive personal experiences in a few key areas of moral development. They appear to accurately emphasize the quantitative findings of the study in that participants did feel as if moral development took place; however, some felt that greater amounts of time would be necessary for those positive movements to become their modal stage of functioning in all situations. Ultimately, they provide a personalized account, which offers greater understanding into the experience of the participants.

Implications

The findings of this study offer exciting possibilities for addressing the problem of business ethics through educational means. Despite the considerable discussion on this topic and the attempts address it over the past 10 years, trust in businesses remains a serious concern. In February 2004, the *Wall Street Journal* reported that 75% of Americans found the image of big corporations to range from “not good” to “terrible” (Rich, 2004 as cited in Swanson, 2004). Though exploratory, this study provides important information for responding to the question of how to substantively respond to the problem. Swanson states: “While strengthening ethics education won’t cure all ills, it is a necessary ingredient in repairing this tarnishing of the social contract between business and society” (Swanson, 2004, p. 57). Fraedrich et al. (1994) argue for the appropriateness of utilizing cognitive moral developmental (CMD) models to study ethics, stating that the usefulness of CMD “is not questioned, and the desirability of CMD
is believed to be very important in understanding and improving business ethics” (p. 834).

In view of the results of this study, it would seem remiss to not further explore the utility of a cognitive developmentally-focused curriculum within a business ethics course. The addition of DPE elements significantly impacted the moral reasoning stage level of participants and may have influenced positive movement in participant evaluations of unethical actions in business scenarios. These additional elements were easily integrated into the current business ethics course. Additionally, the study would also seem to emphasize the potential benefits for a stand-alone course in business ethics as opposed to integrating ethics throughout the curriculum or not having a course at all. That question remains under debate within business schools and their accrediting agency (see Chapter 1 discussion).

In addition to a stand-alone course, developmental strategies should also be integrated into other components of the undergraduate business curriculum. Extension of DPE strategies throughout an educational program should assist the “anchoring” of newly acquired capacities for ethical reasoning. Hunt (1974) suggests that cognitive development takes time. Students, who have attained “transitional” status following an intervention, will potentially continue their development and become “Consolidated” with continued intervention.

Finally, the reflective component of the intervention applied in this study was appeared to be a powerful contribution to the business ethics curriculum. Future researchers may want to explore further the specifics of its impact with this population. Although reflection is a somewhat ambiguous concept, and its exact definition remains in
flux, its importance within educational realms has been noted (Schön, 1983, 1987). Dewey (1933) defined reflection as “active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusion to which it tends” (p. 79). He described the reflective process as entailing reflective thinking and reflective activity. Reflective thinking refers to the previous definition while reflective activity refers to those activities (i.e. journals, reflective dialogue) an individual participates in that encourage the reflective process. King and Kitchner (1994) describe reflective thinking as entailing the “continual evaluation and integration of beliefs, assumptions, and hypotheses against existing data and against other plausible interpretations of the data” (p. 7). These elements of the reflective process were precisely what were asked of these students, and the benefits should be noted. Researchers should examine the efficacy of reflective components utilized in future intervention studies. If Solberg et al. (1995) are correct in their claim that the positive impact on moral reasoning declines when ethics education is integrated into other courses, schools of business should seriously consider a stand-alone course.

Limitations & Recommendations

Although this study adds to our understanding of a CMD approach to business ethics, there were clearly some limitations. As mentioned earlier, cognitive development takes time. The DPE model emphasizes that a program should be between six months and one year (Reiman, 1995; Theis-Sprinthall, 1984). This research took place over the course of one semester. Second, although participants were new to the program and entering a new “role-taking experience,” a more comprehensive role-taking experience extending beyond the classroom might have been even more beneficial. One example of
this would be Fleckenstein’s (1997) proposal of an integrative service project for business students.

Experimenter bias and desensitization were potential threats to the internal validity of the study. The researcher was involved in the study in order to provide many of the additional elements incorporated into the experimental class. It was the researcher who responded to the journal entries and who facilitated the reflective group meetings. Hence, there is a chance that the experimental group was influenced through the researcher’s unique personality, choice of discussion topics, and responses to the written journals. This threat was attended to in scoring procedures in that the instruments were either scored electronically, by another individual, or otherwise without opportunity for influence (i.e., numerical data). Finally, the instructor for the experimental group was also the instructor for the control group. Although this had minimal impact on the additional out-of-class reflective elements, there remains the possibility that it impacted the in-class teaching style. The instructor was asked to provide increasing elements of challenge to the participants in the experimental group, mainly through perspective-taking prompts; however, this became increasingly difficult for the instructor throughout the semester due to time limitations and the pressures of teaching four sections in a row. The fact that the experimental group was the first section taught could have been another limitation, considering the fact that the instructor was delivering the information for the first time.

This researcher would recommend a more continuous research study be accomplished utilizing similar intervention techniques. The use of an additional co-instructor or teaching assistant would be extremely beneficial due to the amount of time it
takes to individually and comprehensively respond to participant journal entries. Also, that individual can organize and facilitate reflective groups outside the classroom. Importantly, an additional assistant allows the instructor to remain somewhat unbiased in the classroom due to his/her lack of intricate knowledge of participant reflections.

Lastly, this research draws attention to questions regarding the instruments utilized and the construct being measured. This study begins to explore the association between the DIT-II and the MES, but further correlational studies are necessary to examine their relationship to one another.

This study only begins to fill the void in the current literature. Further research is necessary to determine the effectiveness deliberate psychological education has with this population. Studies need to be conducted utilizing different instructors and in a variety of settings in order to enhance generalizability. Also, as this study would suggest, increasing the length of the intervention may prove additionally beneficial.

Conclusions

If the aim of education is development (Dewey, 1938), and the aim of incorporating ethics into the business curriculum is to produce more ethical graduates, a cognitive developmental perspective should be taken seriously. Business schools are preparing students to effectively and ethically operate in a challenging context and those schools should seek to assist students in enabling them to meet the professional demands and challenges that come along with that context.

This study supplies another empirically validated rejoinder to the ideas that ethics cannot be taught and one’s ethical reasoning or “moral compass” is well set by young adulthood. The results from the DIT-II and the MES show that ethical judgment can be
facilitated with this undergraduate population. Hence, it has begun to fill the void in the business education research. If the business world seeks individuals who will fight for their personally held beliefs, this study should be used as a launching pad to further the research in this area. However, one cannot deny the fact that this goal may not be as conditionally accepted as we might expect. Some researchers question the desirability of cognitive developmental growth within the world of business—stating that individuals reasoning at the Postconventional level may actually create problems for an organization and/or influence others to progress through the stages of CMD (Fraedrich et al., 1994).
APPENDIX A

Human Subjects Review Proposal

1. Brief Rational (Include procedures and statistical analyses.):

The prominence of ethical scandals in business over the last 15 years has been a major cause for alarm within the profession. Public trust in business has dropped to disastrous lows (Swanson, 2004) and businesses are realizing that poor ethics are detrimental to their bottom line. Although attempts are being made to effectively respond to the situation, the literature calls for more effective business ethics education at the undergraduate level. Presently the accrediting agency for business schools does not require a stand-alone ethics course despite the requests of professors from around the country. The agency’s recent revisions (Jan. 2003) do suggest business schools make “teaching ethics a higher priority (Phillips, 2003) and move ethics to “first and foremost” topical importance” (Sims & Felton, 2006). The present situation has left schools of business “scrambling to develop a response” (Felton & Sims, 2005).

The business literature frequently references Kohlberg’s theory of moral development in conceptualizing the present situation; however, no research studies to date have evaluated educational interventions aligning this particular theory to educational design. This study proposes delivering an ethics course based on recommended teaching interventions supported by cognitive developmental theory and moral education practices. These include:

- Discussion of controversial moral dilemmas
- Practice perspective taking within dilemma discussions
- Emphasis on mutual respect, sensitivity to others, and cooperation
- Support and challenge within the classroom discussion
- Use of material that promotes role-taking
- Guidance with models of ethical decision making as well as gaining an understanding of the types of moral justifications
- Availability of faculty
- Directly teaching Kohlberg’s stages
- Utilizing the DIT (Defining Issues Test) for measurement

Deliberate Psychological Education (DPE) developed from research in cognitive developmental theory and empirically supports the utilization of five elements of an educational intervention for promoting individual growth.

1. Involvement in a significantly new role taking experience
2. Inclusion of both support of and challenge for the students
3. Guided Reflection
4. Balancing reflection with the role-taking experience
5. Continuity

The potential subjects for the proposed study are undergraduate business majors at The College of William & Mary School of Business and are under the primary instruction of
Christopher Adkins. One of four class sections will be utilized as the experimental group; three others will serve as control groups for the study. The researcher will oversee the development of the experimental curriculum to be delivered by Mr. Adkins. While all four groups will receive instruction aimed at promoting moral reasoning; the experimental group will receive an instructional model designed specifically to fully satisfy all the above-listed tenets of DPE. In particular, the experimental group will receive instructional strategies aimed at maximizing the level of challenge experienced by the participants. In accordance with the DPE model, the additional challenge will be matched with added instructor attention to support during classroom discussions to ensure that cognitive disequilibrium is educative rather than overwhelming. Further, the researcher will have direct responsibility for an expanded guided reflection element by responding individually to student journals and meeting with presenter “teams” after assigned class presentations to facilitate structured reflection on their experienced. The control groups will receive instruction of no less quality or quantity than is usually provided in the BUAD 300 course; rather, the experimental group will supplement the standard curriculum with a more comprehensive focus on the conditions for developmental growth.

Subjects in the experimental and control groups will complete two measurement instruments at the beginning and end of the course. Those instruments are the Defining Issues Test II (DIT) of moral development and the Multidimensional Ethics Scale (MES), both of which hold high reliability and validity and are suggested for use with such a research study.

Research Questions:

The purpose of this quasi-experimental study is to determine if the educational methodologies utilized will have a significant impact on moral reasoning in comparison to the groups not receiving the intervention. It is predicted that students in the experimental group will exhibit significantly higher post-test scores on each of the dependent measures than the students in the three comparison groups.

Research Hypotheses:

3. Moral development for the experimental group will be significantly greater than that for the control groups as indicated from their pre-test to their post-test as measured by the DIT II.

4. Business ethics growth for the experimental group will be significantly greater than that for the control groups as indicated from their pre-test to their post-test as measured by the overall MES score.

5. Business ethical reasoning growth for the experimental group will be significantly greater than that for the control groups as indicated from their pre-test to their post-test as measured by each of the three sub scores of the MES.

Scoring Procedures:

The Center Study of Ethical Development at The University of Minnesota will electronically score the completed DIT II measures. Completed printouts of score results
and analyses will be provided to the researcher. The researcher will score the MES by hand. This measure allows for such a scoring procedure.

Data Analysis:

The general linear model will guide the approach in analyzing the quantitative data of this research. The researcher will review data for outliers and testing assumptions suggested for conducting statistical tests. Comparisons will be made between the comparison and intervention groups based on their pre-tests. Mean scores will be obtained for the DIT II and the MES. Due to the non-random selection of groups, repeated measures analyses of variance will be conducted to determine if the groups were significantly different on the pre-test DIT II (N and P scores) and the MES. Experiment-wise alpha increases will be controlled for by setting alpha at p=.01 as called for in the “Bonferroni correction” which addresses the increased chance of committing Type 1 error when conducting multiple tests (Borg, Gall, & Borg, 1997).

Analyses of variance will be used to compare the post-test scores of the experimental and comparison groups and Pearson-product correlations will be used to examine the relationship between the outcome measures. Analyses of variance and Pearson r statistics will present information about the magnitude of the relationships between levels of moral development and business ethics. With a significance level of p<.05, a repeated measures analyses of variance will be used to test the effect of the treatment variable on the dependent measures. Correlations will be used to analyze the relationships between the measures and the items included in the demographic questionnaire.

2. Describe participants and how obtained.

Participants for this research will be undergraduate juniors from The College of William and Mary. The students have completed two years of undergraduate coursework (at least 54 academic credits), taken business prerequisites, and have applied and been accepted into the business school. Students can focus their degree in accounting, finance, marketing, operations and information systems management, or a multidisciplinary approach. The study takes place during the student’s first semester in the business program and will be integrated into BUAD 300- Business Perspectives and Application. Business Ethics is the major component of this course.

All of the students in the four sections of the class (approximately 180) will be asked to complete the two instruments and a demographic data form at the beginning and the end of the semester. Only one of the sections of students (approximately 45) will be in the experimental group and will be receiving additional support, challenge and reflective guidance on their work by the researcher. The professor of the course is involved in and very supportive of the development and implementation of this research.

Although the course is required for continuance in the program and recidivism is not likely, should a student request out of the experimental group, the instructor will place that student in one of the other three sections.

3. Privacy and Confidentiality:

Participants will utilize a code number when completing the instruments and therefore will retain their confidentiality. At no point will the instruments require...
identification of specific individuals and no identification of individuals can occur in the reporting of the data collected.

Proceeding participation in the instruments or the class, the students will be provided with an informed consent form in which they will be fully informed regarding the nature of the research, their voluntary status as respondents and participants, and the manner in which their responses will be examined and reported. The research instruments will only be given to the students who signify their consent and agree to proceed.

The data will be stored under lock and key by the researcher and when all data have been gathered, utilized for data analysis. Data from one of the instruments (DIT II) will be sent to the University of Minnesota for analysis while the other instrument (MES) will be scored by the researcher.

4. Results:
Once the data have been analyzed, the results will be sent to participants who indicated such an interest. The students will be given a sheet along with the consent form on which they can indicate whether they wish to receive the results of the study.

5. Consent Form:

Informed Consent Form

I, ________________________________ agree to participate in a research study focusing on the moral reasoning of business school undergraduates. The purpose of this study is to examine the effects certain educational interventions might have on individual moral reasoning as measured by two research instruments.

The researcher is conducting this study in an effort to increase the body of knowledge on moral development and moral education. The teaching strategies and outside of class activities are all recommended practices and do not pose any risks to the students. The researcher is a doctoral student in the Counselor Education Program in The School of Education at The College of William and Mary.

As a participant, I understand that my involvement in the study is purposeful in that students were chosen due to their involvement with the this course—BUAD 300. I understand that the research instruments will take me about seventy minutes to complete and I will be taking them at the beginning and end of the semester. I also understand that my name will not be linked with the study’s results in any way, that any key linking my name to my responses will be destroyed, and that I will have the opportunity to gain access to the study’s report.

I understand that I may keep a copy of this consent form. If I have any questions or problems that arise in connection with my participating in this study, I should contact Christopher Schmidt, M. Ed. at 757- 221- 2363 or edschm@wm.edu or Dr. Michael Deschenes, the chair of the Protection of Human Subjects Committee at the College of William and Mary at 757-221-2778 or mrdesc@wm.edu.
My acceptance below indicates that I am at least 18 years of age, understand this form, and that I consent to participating in this study.

Signature: __________________________________ Date: ______________

6. Personal Qualifications:

Christopher D. Schmidt, M. Ed., is a Doctoral Candidate in the Counselor Education Program in The School of Education at The College of William and Mary. He has completed two years of coursework, has and will continue to assist in the teaching of masters level courses, has successfully submitted three research proposals to the Human Subjects Review Board, is the Co-director of the New Horizons Family Counseling Center and counsels for families, couples, and individuals through the center, and is proposing this study for his dissertation research.

Christopher Adkins is the Director of the Undergraduate (BBA) Business Program and instructor of the course. He is also a Ph.D. student in The School of Education. Mr. Adkins and Mr. Schmidt have previously worked together on a qualitative research project examining the role and practice of reflection.
APPENDIX B

Informed Consent Form

I, ___________________________________________ agree to participate in a research study focusing on the moral reasoning of business school undergraduates. The purpose of this study is to examine the effects certain educational interventions might have on individual moral reasoning as measured by two research instruments.

The researcher is conducting this study in an effort to increase the body of knowledge on moral development and moral education. The teaching strategies and outside of class activities are all recommended practices and do not pose any risks to the students. The researcher is a doctoral student in the Counselor Education Program in The School of Education at The College of William and Mary.

As a participant, I understand that my involvement in the study is purposeful in that students were chosen due to their involvement with the this course—BUAD 300. I understand that the research instruments will take me about eighty minutes to complete and I will be taking them at the beginning and end of the semester. I also understand that my name will not be linked with the study’s results in any way, that any key linking my name to my responses will be destroyed, and that I will have the opportunity to gain access to the study’s report.

I understand that I may keep a copy of this consent form. If I have any questions or problems that arise in connection with my participating in this study, I should contact Christopher Schmidt, M. Ed. at 757-221-2363 or cdschm@wm.edu or Dr. Michael Deschenes, the chair of the Protection of Human Subjects Committee at the College of William and Mary at 757-221-2778 or mrdesc@wm.edu.

My acceptance below indicates that I am at least 18 years of age, understand this form, and that I consent to participating in this study.

Signature: _________________________________ Date: ________________

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3966) ON 2006-09-01 AND EXPIRES ON 2007-05-01.
APPENDIX C

Instructions to the Students

Introduction of researcher:

Alongside the normal coursework for this class, we are conducting a research study over the course of the semester through the joint efforts of the School of Education and the School of Business. The focus of the research is on individual stage of moral development and ethical reasoning skills. The measurement instruments used will be given at the beginning (today) and end of the course and are being utilized to evaluate the effectiveness of certain elements of this course.

Today we will ask you to read and complete:
1. The informed consent form
2. The Defining Issues Test-2
3. The Multidimensional Ethics Scale

The informed consent gives a brief description of the study and reviews your rights to involve or not involve yourself in it. You will need to sign this form in order to proceed and complete the measures. This research study is meant to be beneficial for the School of Business as well as adding to the body of knowledge concerning these types of classes. Your participation is very valuable for these purposes.

You will first receive the informed consent form. After reading and signing the form, you will be given the first instrument. After everyone has turned in the DIT II, we will take a brief break. Professor Adkins will then touch on some relevant information pertaining to class. Then, you will receive the MES instrument for completion.

We'd like to thank you in advance for your participation. Should you choose not to participate in the study after reading through the informed consent, please let one of us know. ((You will be able to read through the measurements during the time; however, your measure will be purged and not analyzed with the rest of the class’ data.))) No judgment whatsoever will be made on those who choose not to participate. Again, your participation is voluntary yet is requested for the benefit of this course, the business program, and the research study being conducted. It is not mandatory.

Pass out Informed Consent

As you receive the informed consent form, please read through and sign to indicate your willingness to participate. Then, please pass those forms down to the end of each row for collection.

DIT II Instructions:

You should have both an answer sheet and a questionnaire for the DIT II.
Anyone not have both?

Of primary importance:

- Please do not fill in the blanks for the identification number
- Instead, please write the section of BUAD 300 in which you are enrolled, your initials, and your student ID number (date of birth- if you don’t’ know #) on the top left of the answer sheet. You will need to write this ABOVE the line ABOVE where it says DIT II.
- Are there any questions at all about which section you are in? Where to write this?
- Please do this now.

This instrument should take you around 45 minutes to complete. Although times may vary, please try to complete it within an hour. You are not under any particular time pressure, but should nevertheless, move along quickly.

Professor Adkins has also given you a reading assignment, which, should you finish early, you can begin to look at.

The instructions on the booklet are fairly self explanatory, however it is very important that you read through them before beginning.

Again, these instruments do not have any impact on your grade in this class, nor will Professor Adkins or myself know of individual results. However, your concentrated participation will be extremely helpful.

Questions?

Please begin.

---

The Multidimensional Ethics Scale

- Another measure which is specifically focused on business ethics.
- On the first page, please indicate: the section of BUAD in which you are enrolled, your initials, and your student ID number (date of birth)

There are only three scenarios given. Please read the scenario first. Then, you are asked to evaluate the action the individual in the scenario takes. You are given eight different items or categories in which you are asked to evaluate this action. For example, was the action “just” or “unjust.” If you feel the action taken was very just, indicate that by putting a check mark on the closest blank to the word just. The five lines in between the two extremes allow for gradation in judgment and should be checked accordingly.

Please be sure to check ONE blank on EACH of the eight items.

(Could we write an example of this on the board?)
Post-test Instructions to the students

As you are aware, we are conducting a research project involving this class. You might recall the two instruments we used at the beginning of the semester. Today, we are asking that you complete those instruments one last time.

Although it is the last day of classes for the fall semester and I’m sure you are all looking forward to not having to go to class for a few weeks, we do ask that you take your time with these two instruments today. Your concentrated effort— for not too long!—will be greatly beneficial for this course and any adaptations to it... as well as other business ethics courses taught at other colleges and universities. So please, take your time, and utilize elements of what you have learned as you complete the items.

First you will receive the DIT-II. Once you receive it, I’ll go over how to fill out the identification numbers at the top—this is extremely important! Once you complete the DIT-II, you can begin reading the article being passed out. Please wait until everyone has completed this instrument before getting up to turn yours in.

Everyone has the DIT-II... answer sheet and booklet. At the top right of the answer sheet, there are five spaces for your identification number.

- Enter a “2” in the first space
- Enter the number of the “block” you are in... “1” “2” “3” or “4”
- Lastly, for the last three spaces, write in the last three digits of your Student ID number.

The instructions on the booklet are fairly self-explanatory, however it is very important that you read through them before beginning.

Next- the MES.

The Multidimensional Ethics Scale

- Another measure which is specifically focused on business ethics.
- On the first page, please indicate: the section of BUAD in which you are enrolled, your initials, and your student ID number (date of birth)

There are only three scenarios given. Please read the scenario first. Then, you are asked to evaluate the action the individual in the scenario takes. You are given eight different items or categories in which you are asked to evaluate this action. For example, was the action “just” or “unjust.” If you feel the action taken was very just, indicate that by putting a check mark on the closest blank to the word just. The five lines in between the two extremes allow for gradation in judgment and should be checked accordingly. Please be sure to check ONE blank on EACH of the eight items.

Scenario 1—the car dealer
Scenario 2—“his boss”
Scenario 3—“the retailer”
In an effort to further investigate the impact of this course, the researcher asks your permission to utilize your journal entries as additional data during assessment. Your journals can offer additional information, in a qualitative format, and be very beneficial for understanding and describing your experiences this semester. No names or identifying information will link you to the information used or presented. Strict confidentiality will be upheld.

Please indicate below whether or not you will assist this process by offering your consent:

_____ The anonymous use of my journal entries is acceptable.

_____ The anonymous use of my journal entries is not acceptable.

Name (printed): __________________________

Signature: _______________________________

Date: ________________________________
APPENDIX E

Defining Issues Test-II

Please refer to The Center for the Study of Ethical Development as the University of Minnesota for more information as this test is copyrighted.
APPENDIX F

Multidimensional Ethics Scale
(Reidenbach & Robin, 1990)

Moral Equity

Just
Fair
Morally Right
Acceptable to my Family

Unjust
Unfair
Not Morally Right
Not Acceptable to my Family

Relativism

Culturally Acceptable
Traditionally Acceptable

Culturally Unacceptable
Traditionally Unacceptable

Contractualism

Does Not Violate an
Does Not Violate an

Violates an Unspoken Promise
Violates an Unwritten Contract

Promise Unspoken Promise
Unwritten Contract

Auto Scenario:

A person bought a new car from a franchised automobile dealership in the local area. Eight months after the car was purchased, he began having problems with the transmission. He took the car back to the dealer, and some minor adjustments were made. During the next few months he continually had a similar problem with the transmission slipping. Each time the dealer made only minor adjustments on the car. Again, during the thirteenth month after the car had been bought the man returned to the dealer because the transmission still was not functioning properly. At this time, the transmission was completely overhauled.
Action: Since the warranty was for only one year (12 months from the date of purchase), the dealer charged the full price for parts and labor.

Sales Scenario:

A young man, recently hired as a salesman for a local retail store, has been working very hard to favorably impress his boss with his selling ability. At times, this young man, anxious for an order, has been a little over-eager. To get the order, he exaggerates the value of the item or withholds relevant information concerning the product he is trying to sell. No fraud or deceit is intended by his actions, he is simply over-eager.

Action: His boss, the owner of the retail store, is aware of the salesman’s actions but he has done nothing to stop such practice.

Retail scenario:

A retail grocery chain operates several stores throughout the local area including one in the city’s ghetto area. Independent studies have shown that prices do tend to be higher and there is less of a selection of products in this particular store than in the other locations.

Action: On the day welfare checks are received in the area of the city the retailer increases prices on all of his merchandise.
References


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Kracher, B., Chatterjee, A., & Lundquist, A. R. (2002). Factors related to the cognitive moral development of business students and business professional in India and the


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Moral Development in Business Education

VITA

Christopher Drees Schmidt

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