

It's What's Outside that Counts: Do Extracurricular Experiences Affect the Cognitive Moral Development of Undergraduate Accounting Students?

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ABSTRACT: This study applies the psychological theories of Kohlberg (1969, 1979) and Rest (1986) and explores existing literature that investigates factors affecting the cognitive moral development of accountants (see Jones et al. [2003] for a review of this literature), while advancing discourse regarding the contributing factors of external classroom activities on the development of accounting students' moral growth. Using a sample of 396 undergraduate accounting students from across the United States, we examine the affect that internship experiences, prosocial behavior exhibited through volunteerism, Beta Alpha Psi Honor Society membership, and student government involvement have on their level of ethical development. Our results indicate that undergraduate accounting students who have interned with a public accounting firm, or participated in extracurricular activities involving volunteerism or membership in Beta Alpha Psi, demonstrate higher levels of cognitive moral development. Results with respect to involvement in student government and cognitive moral development are inconclusive, possibly due to the small number of participants who were involved in student government activities. We provide evidence that extracurricular activities have a positive impact on the ethical development of future accountants in that these activities prepare them to enter the industry with integrity, morals, and a solid grasp of professional ethics.

Keywords: cognitive moral development; ethics; accounting education.

INTRODUCTION

The current parade of corporate accounting scandals (e.g., Enron, WorldCom, etc.) have demonstrated the risks associated with unethical conduct in the accounting profession. The consequences of these lapses in judgment and ethics have permeated corporate America

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and the capital markets. Accounting educators are confronting greater challenges as a result of the current “crisis in confidence” facing the public accounting profession. Further, academia is struggling to provide accounting students with the ability to reason effectively with respect to moral dilemmas in an attempt to minimize future lapses in ethics and judgment in accounting and auditing settings (Earley and Kelly 2004). Additionally, corporate accounting scandals have caused many to question the adequacy of ethics education in business schools (Madison 2002; Stape 2002) and the belief is that accounting programs have not sufficiently addressed the need for ethics education (PricewaterhouseCoopers 2003; Cohen and Pant 1989).

Solberg et al. (1995, 71) state “techniques for ethics instruction should allow the students to ‘live’ ethics rather than ‘learn’ ethics, which will cultivate the discovery process needed to truly produce greater integrity in a new generation of business leaders.” Given that a typical undergraduate student spends fewer than 20 hours a week inside a classroom, resulting in their experiences occurring *outside* the formal learning environment, we investigate extracurricular interventions that may affect the ethical development and potentially increase the moral reasoning abilities of undergraduate accounting students.

Traditionally, accounting ethics research examining educational interventions has examined the effectiveness of these interventions in promoting students’ moral development in classroom settings, i.e., review and discussion of ethics cases following a pedagogical framework (McNair and Milam 1993), and findings do not consistently demonstrate that classroom exposure to ethics results in significant differences in moral development after classroom intervention (LaGrone et al. 1996; Brandon et al. 2007). Considering the amount of time engaged in extracurricular activities, it is important to identify and understand other types of interventions that contribute to promoting cognitive moral development in undergraduate accounting students. We address this gap in ethics education research by investigating the influence of internship experiences, prosocial behavior exhibited through volunteerism, Beta Alpha Psi Honor Society membership, and student government involvement on the cognitive moral development of undergraduate accounting students. Additionally, in light of the strong institutional opposition to additional courses in accounting ethics,¹ this study attempts to identify types of external classroom experiences that may heighten the awareness of the importance of both the meaning of, and responsibilities associated with, a publicly responsible profession.

We gather survey data from 396 undergraduate accounting students to determine factors that influence their cognitive moral development. Specifically, we collect information about their internship experiences, level of volunteerism, membership in Beta Alpha Psi, and participation in student government. Additionally, we measure their cognitive moral development using the Defining Issues Test Revised (Rest et al. 1999a), hereafter referred to as the DIT2. We hypothesize that internship experience, increased levels of volunteerism, Beta Alpha Psi membership, and student government participation are positively related to higher levels of cognitive moral development. The findings largely support our hypotheses.

This study makes an important contribution to our understanding of factors outside of the classroom that affect the cognitive moral development of accounting students. The ability to understand more comprehensively how prospective accountants reach higher levels of cognitive moral growth will play a key role toward addressing the accounting profession’s ethics crisis (Allen and Chee 2001). It is critical to the profession that future accountants enter the industry with integrity, morals, and a solid grasp of professional ethics. Given the strong competition for

¹ The National Association of State Boards of Accountancy (NASBA) has recommended that CPA candidates successfully complete three college ethics courses: one college course in philosophical ethics, one college course in business ethics, and one in accounting ethics. Most accounting professors are opposed to this proposal by the NASBA because of curriculum constraints and the sense that these courses have little effect (Shaub et al. 2005).

classroom time from traditional topics (Cohen and Pant 1989) as well as new requirements (e.g., 404 requirements or the impending adoption of IFRS), faculties will benefit from greater understanding of how extracurricular activities may support moral development. This study also contributes to the understanding of this important topic by utilizing a newly enhanced measurement of cognitive moral development, the DIT2, which is increasingly being used in accounting ethics research (e.g., Abdolmohammadi and Ariail 2009; Pope 2005; Scofield et al. 2004).

The remainder of this paper is divided into four sections. The next section provides a review of the relevant literature and develops the research hypotheses. This section is followed by a description of the method and presentation of the results. The final section is devoted to a discussion of the major findings and their implications for practice and future research.

THEORETICAL BACKGROUND AND HYPOTHESES

Cognitive Moral Development Theory

The theory of cognitive moral development was proposed and developed by Kohlberg (1958, 1969) who theorized that individuals advanced through three levels of cognitive moral development which are defined by the type of reasoning used to rationalize moral preferences.² Specifically, Kohlberg (1958, 1969) examined the cognitive processes used by individuals when deciding right from wrong, as opposed to the behavioral aspects. Kohlberg's theory is the most prominent theory in moral reasoning research (Rest 1986; Lovell 1997) and is widely used in auditing research on ethical decision making (Jones et al. 2003).

Prior ethical decision-making research demonstrates that cognitive moral development influences the process of ethical judgment (for an overview, see O'Fallon and Butterfield [2005]). The focus of prior research generally examines constructs that influence Rest's (1986) ethical decision-making framework, such as individual (i.e., gender) (e.g., Bass et al. 1999; Cohen et al. 2001), organizational (i.e., code of ethics) (e.g., Trevino et al. 1998), and moral intensity (i.e., social consensus) (e.g., Jones 1991) factors. Rest (1986) developed a comprehensive cognitive model of ethical decision making to examine development of an individual's moral thought processes and behavior.³ O'Fallon and Butterfield (2005) suggest that in order to advance our understanding of the ethical decision-making process, it is important to move beyond Rest's (1986) framework and consider other factors that influence and moderate the ethical decision-making process.

Accounting studies, largely based on Kohlberg's theory of moral reasoning, provide some insights into the ethical reasoning and judgment of future accountants, as well as the effects of ethics education, employment experiences, and moral/prosocial behaviors on accounting students and professional accountants (see Jones et al. [2003] for a review of the literature). These studies have focused on cognitive moral development impacting accountants' professional behavior, and generally find auditors with more principled moral development (highest stage of cognitive moral development) make better ethical judgments than auditors with less principled moral development.

² Kohlberg (1969, 1979) identifies three basic levels of moral development: *preconventional stage*; individuals at this level define the moral acceptability of alternate ways to resolve a moral dilemma by the rewards and punishments they attach to various outcomes. The *conventional stage*; individuals at this level resolve dilemma outcomes based on their interpretations of group norms. The *post-conventional or principled stage* (highest stage of cognitive moral development) is reached when individuals consider complex notions of universal fairness and an internal sense of responsibility and justice to resolve a moral dilemma.

³ Rest's (1986) four-component framework posits that to behave morally, an individual must have performed at least four basic psychological processes: (1) *moral sensitivity* (interpreting the situation); (2) *moral judgment* (judging which action is morally right or wrong); (3) *moral motivation* (prioritizing moral values relative to other values); (4) *moral character* (having courage, persisting, overcoming distractions, in order to carry out the moral action).

Specifically, auditors with higher cognitive moral development are less likely to violate independence rules (Bernardi and Arnold 1997; Bernardi 1994; Ponemon and Gabhart 1990), underreport time (Ponemon 1992; Bay and Greenberg 2001), or give in to client pressures to not report sensitive audit findings (Ponemon 1990) relative to auditors with lower cognitive moral development.

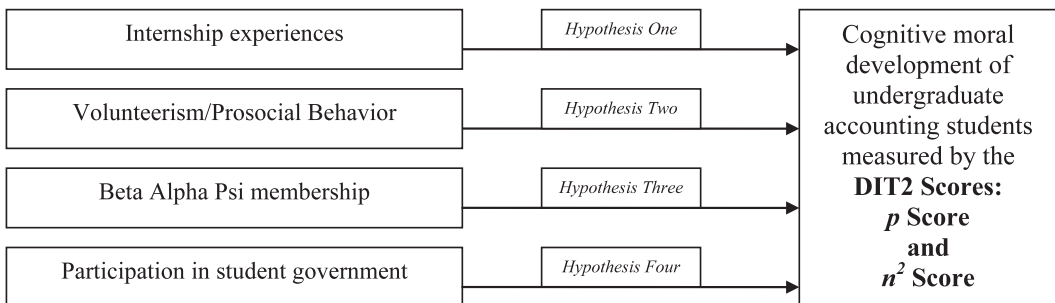
This study extends previous research examining cognitive moral development. Specifically, we apply the psychological theories of Kohlberg (1958, 1969) and Rest (1986) and explore existing literature that investigates factors affecting the cognitive moral development of future accountants while advancing dialogue regarding the contributing factors of external classroom activities on the development of accounting students' moral growth (see Figure 1).

Internship Experience: Public Accountancy Exposure

Organizational socialization is the process by which an individual comes to understand the values, abilities, expected behaviors, and social knowledge that are essential for assuming an organizational role and for participating as an organizational member (Louis 1980). The organizational socialization process entails mastery of critical skills required for effective performance, as well as the assumption of the attitudes that must accompany these activities. Experienced organization members selectively provide reinforcement, communicate the approved range of action, and serve as examples of achievement (Fogarty 2000). As a result, the organization plays a vital part in the new members' learning and adjustment; in this case, accounting students (Fisher 1986). Effective socialization inspires individuals to think and act in accordance with organizational interests (Reichers 1987). Further, when an individual believes that there is an expectation that they behave in a certain way, the individual will conform their behavior to the perceived expectations (Ajzen 1985). In the case of public accounting firms, Wilkinson et al. (2003) find that the socialization process begins even before new accounting graduates become members of the organization (e.g., through internships, on-campus recruiting activities).

Several studies have examined the relationship between moral development and social influence pressures within public accounting firms (i.e., Abdolmohammadi et al. 2003; Sweeney and Roberts 1997; Ponemon 1992; Ponemon and Gabhart 1990). Findings suggest that an auditor's moral development is influenced by the firm's moral atmosphere, i.e., the collective organizational norms or ethical culture (Ponemon 1994; Ponemon and Gabhart 1993). For example, Ponemon and

FIGURE 1
Research Design for Hypotheses



Gabhart (1990) find auditors with higher levels of moral development were less concerned with personal penalties in ethical dilemmas involving independence judgments than auditors with lower levels of moral development. Ponemon (1992) studies accountants at various position levels in public firms and finds public accounting managers tend to positively evaluate and promote those individuals who hold an ethical reasoning capacity comparable to their own. Abdolmohammadi et al. (2003) also find that auditors tend to recruit and retain individuals who have similar levels of moral reasoning.

Additionally, ethical values encouraged by management are inconsistent with higher levels of ethical reasoning. Sweeney and Roberts (1997) examine the influence of cognitive moral development on auditors' independence judgments and find that an auditor's level of moral development affected their sensitivity to ethical issues and independence judgments. The results of these studies seem to be consistent with research findings suggesting that the ethical development of those entering and remaining in the accounting profession is stymied (Armstrong 1987; Blank 1986; Mautz 1975). For example, prior research examining the cognitive moral development of accountants at various levels finds that certified public accountants demonstrate lower stages of moral development than the population of college-educated adults (Shaub 1994) and that public accounting experience has an *inverse* relationship to the moral cognition of its firm members (Shaub 1994; Ponemon 1990). However, Ponemon (1992) suggests that this inverse relationship occurs in the more senior levels in that he finds the moral development scores (as measured by the DIT) increase from the staff to senior levels, but decrease in the manager and partner levels.

The aforementioned studies concentrate on accounting professionals and the effect of the organizational socialization process on moral development, but have not specifically examined the effect of pre-professional experience on the moral development of college students. While he does not examine pre-professional experience, Ziegenfuss (1999) finds significant differences between the personal ethical philosophies of accounting students and accounting practitioners. His findings imply that the socialization process that takes place when accounting students gain work experience may negatively influence their personal ethical philosophy. Therefore, the preparation of individuals for service as participants in business enterprises and the recent trends in longer and more extensive pre-professional experience raise new questions pertaining to the effect of internships on college students' moral growth. For example, since more and more students are becoming immersed in lengthy internship experiences (Hiltebeitel et al. 2000, 76), we can infer that extensive public accounting exposure presumably influences the moral development of undergraduate accounting students similarly as entry-level positions. Given the findings from the socialization literature which suggests that organizations play a vital part in the learning and adjustment of new members and the findings from the accounting studies that suggest public accounting experience diminishes cognitive moral development, we make the following hypothesis:

- H1:** Students with internship experiences demonstrate *lower* stages of cognitive moral development than students without internship experience.

Volunteerism: Prosocial Behavior

Prosocial behavior is positive social behavior that is intended to benefit others, but individuals can gain from their actions as well (Staub 1978). Trevino and Youngblood (1990) report that as the individual moves through each of the six stages of moral development, he/she moves from a self-centered interpretation of what is morally correct to a more socially conscious and responsible perspective. Volunteerism provides encounters that can change students' frame of reference or perspective on people and their problems (Reed 2001). The underlying purpose of the volunteerism

is to provide students with the opportunity to reflect on their own ethical values with a view to developing their ethical awareness; emotional skills and their abilities to identify, engage with, and analyze ethical issues (McPhail 2001, 2005). Post-conventional moral development (i.e., highest stage of moral development) is characteristic of the ability to consider the needs of others. Thus, encouraging volunteerism among accounting students, regardless of egotistic or altruistic sources of motivation, should logically have a positive impact on their moral cognition.

Research examining the correlation between cognitive moral development and prosocial behavior generally finds a positive correlation (e.g., Eisenberg et al. 1995; Murphy et al. 2002). For example, individuals with strong prosocial tendencies are at the higher levels of moral development, as reflected by their standards of justice and social responsibility (Brief and Motowidlo 1986). Consistent with this finding, Graham (1986) finds that cognitive moral development often results in the individual developing a sense of responsibility for society and its welfare. Gorman and Duffy (1994) find that students with volunteer service experience showed a significantly higher level of cognitive moral growth than students who reflected on ethical issues only in a classroom setting. Although the findings of Gorman and Duffy (1994) are significant, they were cautious with the effects of volunteerism on moral development. Additionally, early researchers such as Kohlberg (1979) and Rest (1979) have disputed that moral reasoning influences individuals' moral decisions and social behavior. However, Hoffman (2000) suggests that advanced stages of cognitive moral development provide the motivational force to act in a prosocial manner, thus stimulating the development of internalized moral reasoning reflecting concern for others' welfare. Therefore we make the following hypothesis:

- H2:** Students with higher levels of volunteerism experiences demonstrate *higher* stages of cognitive moral development than students with lower levels of volunteerism experiences.

Beta Alpha Psi Membership

Beta Alpha Psi is a national fraternity for business professionals and students. The purposes of this organization are to recognize "outstanding academic achievements in the field of accounting, finance and information systems; promote the study and practice of professional fields related to these disciplines; provide opportunities for self-development and association among members and practicing financial professionals; and encourage a sense of ethical, social, and public responsibilities" (Beta Alpha Psi 2006). As the premier professional accounting and financial information fraternity, Beta Alpha Psi complements its members' formal education by providing interaction among students, faculty, and professionals, while fostering lifelong growth and ethical conduct. Identifying future accountants with advanced moral development through Beta Alpha Psi membership can play a critical role in addressing ethics issues confronting the accounting profession. Additionally, Beta Alpha Psi promotes prosocial behavior by requiring its members to regularly participate in public service activities (e.g., Volunteer Income Tax Assistance, tutoring) through some form of volunteerism (as opposed to *voluntary* volunteerism).⁴

Previous research examining the effects of service learning on undergraduate students indicates that it has generally positive but modest effects on cognitive, psychological, and social development (e.g., Conrad and Hedin 1982; Luchs 1981). Importantly, for the purpose of this study, the findings indicate that involvement in service leads to greater increases in social responsibility and moral

⁴ Specific requirements for Beta Alpha Psi membership may vary from school to school (e.g., GPA level), yet all chapters require at least a minimum GPA of 3.0 and regular performance of volunteerism for a member to be in good standing.

reasoning for students who have completed a service learning component of their undergraduate education (Cognetta and Sprinthall 1978; Conrad and Hedin 1982, 1991; Newmann and Rutter 1983; Hamilton and Fenzel 1988). Additionally, Reed (2001) suggests that an intelligent mandatory community service system can also build character. Boss (1994) directly tests the effect of community service work on the ethics of college students and finds that community service work, along with discussion of relevant moral issues, is an effective means of moving students into the post-conventional stage of principled moral reasoning. Specifically, she finds that students who engage in community service work as part of their class requirement make greater gains in their moral reasoning than those who do not. The results of her study are consistent with the claims of Kohlberg (1979) and Dewey (1939), as well as Gardner (1991), regarding the importance for moral development of real-life experience in confronting actual moral dilemmas. Given the findings of the aforementioned studies, we make the following hypothesis:

H3: Students who are members of Beta Alpha Psi (BAP) demonstrate *higher* stages of cognitive moral development than students who are not members.

Student Government Participation

Previous research on student leadership and moral development suggests that leadership may have an effect on moral development. For example, students who are leaders in student government show increased moral awareness that can be entirely attributed to their leadership roles (Kuh and Lund 1994), and students' leadership experiences in college significantly affect their values (Pascarella et al. 1988). Haan et al. (1968), one of the first to study moral development and political activism, demonstrates that Kohlberg's theory of moral development is related to political ideology and activism. They survey over 500 college students of varying political persuasions and classify them into groups based on Kohlberg's Moral Judgment Scale (1969). They find principled moral reasoners to be more active in political-social issues as compared to the conventionally moral reasoners. Fishkin et al. (1973) show an association between moral reasoning and political ideology. In a study of 75 college students from politically diverse backgrounds, they find that conventional moral judgment (i.e., focus is on group norms) is associated with political conservatism, particularly for the law and order orientation, as compared to post-conventional reasoners. Considering the aforementioned research on moral development and political activism, we make the following hypothesis:

H4: Students with higher levels of student government participation levels⁵ demonstrate *higher* stages of cognitive moral development than students with lower levels of participation.

METHOD

Instrument

During the last few decades, a number of business ethics researchers have turned to moral psychology theory, construct, and measures, employing Rest's Defining Issues Test (DIT), to conduct social scientific research in the business ethics domain (e.g., Bay and Greenberg 2001; Shaub 1994; Trevino 1992; Loeb 1988; Armstrong 1987). The Defining Issues Test (DIT) has been revised and entitled the DIT2. In a comparison of the DIT2 with the DIT, Rest et al. (1999a) state

⁵ Levels of student government participation were tested using a Likert scale with the following measurement levels: 1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Regularly, and 5 = Frequently.

the DIT2 uses contemporary ethical scenarios and has demonstrated slightly greater reliability and validity than the original DIT (Rest et al. 1999b; Rest and Narváez 1998). The DIT2 also offers advantages in efficiency: it contains only five scenarios, versus six in the full DIT, it has streamlined instructions, and the purge rates due to validity checks are lower. The political content criticisms were based on the original DIT instrument; therefore, the ethical scenarios of the DIT2 are more up-to-date and not politically focused (Rest and Narváez 1998).

The most used measure from the DIT instrument has been the P score, which is the percentage of preferred arguments that are at the highest (principled) level of reasoning. Concurrent with the introduction of the DIT2, the Center for the Study of Ethical Development introduced an additional metric, *N2* score, where the *N* denotes “new.” *N2* incorporates more information than P (Bailey et al. 2005). While P uses only subjects’ ranking of the importance of ethical decision factors, *N2* also considers the related rating that respondents have developed during the decision-making process in making their rankings (Rest et al. 1999b). *N2* is adjusted to the same mean and standard deviation as the P score of databases of past studies, and it has a similar meaning, i.e., the relative importance given to “principled” items when evaluating the scenarios. Bailey et al. (2005) state the *N2* metric generally represents an incremental improvement over the P scores. Considering the extensive use in existing accounting literature of the P score, we provide analyses for both statistical measurements⁶ to analyze the cognitive moral development in the sample.

A two-part instrument entitled Decisions, Internship, and Volunteerism⁷ Assessment (DIVA)⁸ was distributed to accounting students in seven universities throughout the country during accounting class time. The DIT2 instrument determined the level of accounting students’ cognitive moral development⁹ measured by DIT2 scores, and the questionnaire collected information about students’ demographics, internship experiences, volunteerism level, Beta Alpha Psi membership, and student government participation level. We also include gender, year of study (i.e., sophomore, junior, etc.), and grade point average as covariates.

Design and Administration

The data for this study were gathered at different universities throughout the United States, with a majority of the surveying occurring at seven colleges. The original sample size was 482 students; however, after analyzing the data, 86 DIVA surveys were purged.¹⁰ After the removal of the 86 surveys, the sample size was reduced to 396 for analyzing the hypotheses. The DIVA survey was distributed at AACSB-accredited institutions with traditional accounting licensure programs. Furthermore, each school had a Beta Alpha Psi chapter that has been awarded superior status¹¹

⁶ The Scoring Service of the Center for the Study of Ethical Development at the University of Minnesota calculated the P Score and the *N2* Score from DIT2 instruments for this study.

⁷ Levels of volunteerism were tested using a Likert scale with the following measurement levels: 1 = Never; 2 = Rarely; 3 = Occasionally; 4 = Regularly; 5 = Frequently.

⁸ The DIVA instrument is comprised of the DIT2 and a questionnaire developed for this study.

⁹ Cognitive moral development levels were derived by the Defining Issues Test Revised (DIT2) (part one of the DIVA) through the calculation of the P score and the *N2* score. Both scores represent measurements of the different stages (see footnote 1 for stages) of cognitive moral development, as defined by Kohlberg (1979). The P score is the sum of scores from Stages 5 and 6, converted to a percent. The P percent score can range from 0 to 95. It is interpreted as the extent to which a person (student) prefers post-conventional moral thinking (Rest et al. 1999a, 18).

¹⁰ The purged DIVAs were eliminated for the following reasons: (1) Student indicated that English was not his/her primary language, (2) Student indicated that he/she was a nontraditional undergraduate student because of part-time matriculation and/or being over 25 years of age, (3) Student did not meet the validity tests of the DIT2 or did not complete it, and (4) Student indicated that he/she was not an accounting major.

¹¹ Superior status is awarded to chapters whose student members exemplify the characteristics desirable for the incoming professional entering the financial service industry.

within the last five years. The students of the universities selected are actively recruited by the major international and national public accounting firms for full-time employment. Last, a mix of secular and nonsecular schools were selected to yield data that best demonstrate any possible relationship between students' responses from both types of educational philosophies. Students were administered the DIVA during upper-level accounting class time. Faculty members who supported this research allowed the students 45 minutes to complete the survey and instructed the student with a one-page instruction sheet provided by the researchers.¹²

RESULTS

Tables 1 and 2 provide descriptive analyses of the demographic data collected. Because moral growth occurs from a multifaceted set of factors, multiple regression was used to evaluate which of the characteristics tested are significantly associated with the DIT2 scores. Multiple regressions naturally controls for covariates; thus, the use of regression is recommended in order to handle difficult problems with analysis of variance and analysis of covariance, and the use of nonexperimental data (Shaub 1994).

Results of the regressions are statistically significant ($p = 0.000$), with adjusted R^2 s ranging from 27 to 30 percent (Tables 3 and 4 for the P and N2 scores, respectively). The first hypothesis (H1) proposes that an inverse relationship exists between a student who has experienced an internship with an accounting firm and cognitive moral development. Results indicate that there is a significant *positive* relationship ($p < 0.05$) rather than a negative relationship between pre-professional experiences and cognitive moral development of undergraduate accounting students. Therefore, H1 is not supported. This result is potentially due to that fact that the literature in this area focuses mainly on professional experience affects rather than pre-professional experiences (e.g., Shaub 1994; Ponemon 1992, 1990; Ponemon and Gabhart 1990). Our result suggests that the internship experience of undergraduate students may not completely indoctrinate them into the firm culture, especially given the short tenure of most internship experiences. This finding is consistent with Ponemon (1992), which finds that the inverse relationship between experience and cognitive moral development occurs during the more senior levels (i.e., partner) of accounting practitioners, but increases in the earlier years of experience (i.e., staff-level). Thus, it appears that the cognitive moral development of students with internship experience is similar to the cognitive moral development of staff-level auditors.

For the second hypothesis (H2), we predict that higher levels of volunteerism will be positively related to higher stages of cognitive moral development, and the results support our hypothesis. Students with higher levels of volunteerism exhibit significantly higher levels of cognitive moral development ($p = 0.000$). The third hypothesis (H3) predicts that students who are members of Beta Alpha Psi (BAΨ) will demonstrate higher stages of cognitive moral development. The results of analyses determine BAΨ membership is significantly and positively related to cognitive moral development ($p = 0.000$). The final hypothesis (H4) predicts a positive relationship between student government participation and cognitive moral development. Regression results are not significant.¹³

¹² Responses were collected after the 45-minute period; thus, the return rate of distributed DIVA instruments was not an issue for this study. The DIVA was distributed during course classroom periods at institutions whose accounting faculty expressed a willingness to assist the researcher. The courses were selected to ensure the following: (1) Students were not duplicated in the study. (2) Students were of mixed gender. (3) Students who were Beta Alpha Psi members and students who were not Beta Alpha Psi members. (4) Students who did and did not have internship experiences.

¹³ Because the frequency and percent of students participating in student government indicate that nearly 89.6 percent (355) are "rarely" or "never" involved in campus government, the results are inconclusive to this predicted relationship.

TABLE 1
Summary of Demographic Information

Variable	Percent 100%	Frequency 396
Gender		
1 = Female	66.7	264
2 = Male	33.3	132
Year of Study		
2 = Sophomore	4.0	16
3 = Junior	37.6	149
4 = Senior	58.3	231
Grade Point Average (GPA)		
1 = < 2.50	2.8	11
2 = > 2.59 < 2.99	17.4	69
3 = > 3.00 < 3.25	42.4	168
4 = > 3.26 < 3.49	23.0	91
5 = > 3.50 ≥ 4.00	14.4	57

CONCLUSION AND LIMITATIONS OF THE STUDY

This study provides evidence on the influence of extracurricular interventions on the cognitive moral growth of accounting undergraduates. Results indicate that pre-professional exposure, volunteerism, and membership in Beta Alpha Psi have a positive impact on the moral growth of college students. However, the relationship between student government participation and cognitive moral development could not be drawn. Our findings suggest opportunities for both academia and the accounting profession to engage in interventions that help to foster the cognitive moral growth of undergraduate accounting students. From an academic perspective, we provide evidence of interventions outside of the classroom that can enhance the student's learning experience as it pertains to ethics education. For example, educators, researchers, and policy makers believe that volunteerism provides valuable experiences for students. Since prosocial activities carry the experience beyond the classroom, it is critical to the education of the college student. Educators can encourage students to engage in these types of activities by perhaps allowing class credit for participation. Although community projects do not strictly represent ethical considerations, involvement in the community is the first step in creating an environment receptive to acting in the best interests of society, which lies at the heart of ethical conduct (Venezia 2005). Future research could examine whether continued participation in community service activities supported and encouraged by public accounting firms helps to counteract earlier findings that indicates the public accounting experience stymies the ethical development of accounting professionals (Mautz 1975;

TABLE 2
Summary of P Score and N2 Score

	P Score	N2 Score
n	396	396
Mean	37.0664	36.7304
Std. Deviation	12.53511	12.23444

TABLE 3
Regression Model for P Score

Model	Sum Squares	df	F-Factor	Significance
Regression	17438.96	7	21.66	0.000
Residual	44626.98	388		
Total	620653.94	395	R ² Adj. R ²	0.281 0.268

Parameter Estimates					
	Term	Coefficient	Std. Error	t-stat	p-value
	Intercept	12.835	4.311	2.978	0.003
H1	Internship Experience	1.089	0.374	2.913	0.004**
H2	Volunteerism	3.551	0.553	6.421	0.000***
H3	BAΨ Membership	5.929	1.409	4.209	0.000***
H4	Government Participation	-0.124	0.620	-0.201	0.841
DV1	Year of Study	0.618	0.968	0.638	0.524
DV2	Gender	0.732	1.155	0.634	0.527
DV3	Grade Point Average	-0.055	0.597	-0.093	0.926

** , *** Significant at the 0.01 and 0.000 levels, respectively.

H# = hypothesis.

DV# = demographic variable.

Blank 1986; Armstrong 1987). Additionally, although no relationship between student government participation and cognitive moral growth could be drawn, future research could explore the reasons accounting students appear disinterested in extracurricular activities of a political nature and ways in which they might obtain exposure to this important skill set.¹⁴

With respect to the accounting profession, our findings demonstrate that accounting professionals have the ability to make a difference in the moral growth of future accountants. Therefore, public accounting firms should continue to expand their current efforts to train their interns. If accounting firms accept the additional responsibility of pre-full-time employment, they should attempt to further advance their positive influence on accounting students through professional education and expanded community service opportunities. Through the combination of volunteerism and exposure to ethical public accounting practices, accounting internships will provide accounting students with a memorable and enriching experience.

The transformation process that occurs during the college years carries over into professional life and enhances an individual's ability to function with integrity and self-confidence. Innovative teaching techniques and more instructional time required for licensing are changing the kind of accounting instruction offered in colleges and universities (Wyer 1993). Although the role of educators has become more difficult, universities have a unique opportunity to develop and nurture greater ethical awareness of future accounting professionals both inside and outside the classroom

¹⁴ Reckers (2006, 38) states, "the professoriate is not without political power if we systematically organize ourselves and our alumni in a meritorious cause." This observation is made in an argument for greater political activism. Just as such involvement is needed in the academy to manage in the new environment; it is also needed in practice. The very low level of political activities on campus found in these results could ultimately give the profession a disadvantage in participating in future legislative developments affecting accountants. Whether in the academy or practice, the accountants of the future will need enhanced political skills.

TABLE 4
Regression Model for N2 Score

Model	Sum Squares	df	F-Factor	Significance
Regression	17741.83	7	23.765	0.000
Residual	41382.32	388		
Total	59124.15	395	R ² Adj. R ²	0.300 0.287

Parameter Estimates

	Term	Coefficient	Std. Error	t-stat	p-value
	Intercept	10.652	4.151	2.566	0.011
H1	Internship Experience	0.821	0.360	2.280	0.023*
H2	Volunteerism	3.843	0.533	7.216	0.000***
H3	BAΨ Membership	5.707	1.357	4.207	0.000***
H4	Government Participation	-0.623	0.597	-1.044	0.297
DV1	Year of Study	2.614	0.933	2.803	0.005**
DV2	Gender	-1.182	1.112	-1.062	0.289
DV3	Grade Point Average	-0.597	0.575	-1.038	0.300

*, **, *** Significant at the 0.05, 0.001, and 0.000 levels, respectively

H# = hypothesis.

DV# = demographic variable.

during a time of overwhelming changes in technology, globalization, and technical pronouncement proliferation and, most importantly, the ethical crisis.

The results of this study are subject to several limitations, including standard self-reporting biases of demographic information (e.g., GPA). Also, we do not measure whether the extracurricular interventions changed the cognitive moral development scores of the participants and, therefore, we do not know if participation in these interventions will cause cognitive moral development scores to change. Future research could examine whether these extracurricular interventions in fact lead to higher cognitive moral development scores after participation. Further, we surveyed students using categorical data for internship experience levels, year of study, and grade point averages. Utilization of metric data rather than nominal data converted by indicator coding may have allowed for different forms of statistical analysis. In addition, the DIT is subject to certain limitations despite its wide usage in research. [Shaub \(1994, 19\)](#) noted that the DIT may be “insensitive to respondents capable of reasoning at higher levels, but who choose to make decisions based on codes that are reflective of Stage 4 reasoning.” Additionally, earlier studies ([Clouse 1979](#); [Emler et al. 1983](#)) found evidence of positive relationships between political liberalism and the DIT score. Yet, [Bailey et al. \(2005\)](#) considered the political bias in the DIT and the DIT2 and reported the effect is small; thus, the cognitive moral development scores may not be seriously threatened.

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