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The Effect of Ethical Orientation and Professional Commitment on Earnings Management Behavior

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ABSTRACT. The purpose of this study is twofold. The first objective is to examine the impact of an individual's ethical ideology and level of professional commitment on the earnings management decision. The second objective is to observe whether the presence of a personal benefit affects an individual's ethical orientation or professional commitment within the context of an opportunity to manage earnings. Using a sample of 375 undergraduate business majors, our results suggest a significant relationship between an individual's ethical orientation and decision-making. Further, participants with higher levels of professional commitment seem to be less likely to engage in earnings management behavior and less likely to behave opportunistically. These results have the potential to add to our understanding of certain behaviors in entry-level personnel and should be of interest to managers, practitioners, academicians, and researchers.

KEY WORDS: earnings management behavior, professional commitment, ethical orientation, decision-making, structural equation modeling

Introduction

Earnings management occurs when managers choose reporting methods and estimates that do not accurately reflect their firms' underlying economics (Healy and Wahlen, 1999). Rosenfield (2000) claims that GAAP permits earnings management in two ways. First, GAAP allows businesses to report income that has not yet been earned, and second, GAAP allows stability of income reporting (income smoothing). Examples of these types of accounting practices are: (1) shifting debt to offshore holding companies to inflate income (ENRON), (2) recording revenues earlier than allowed (Allied Carpet), and (3) recording the sale of products as revenue prior to actual shipment (Sunbeam).

However, not all companies engage in aggressive earnings management behaviors, at least not to the extent of the widely reported cases noted above. The obvious question is: Why do some managers choose to participate in egregious earnings management behaviors and others do not? The purpose of this study is twofold. Our first objective is to examine the impact of an individual's ethical ideology and level of professional commitment on the earnings management decision. Our second objective is to observe whether the presence of a personal benefit affects an individual's ethical orientation or one's level of professional commitment within the context of an opportunity to manage earnings. Using a sample of 375 undergraduate business majors, the current study proposes a causal model to explain an individual's decision-making with respect to earnings management behaviors.

The results of this research suggest a significant relationship between an individual's ethical orientation and decision-making. Further, the participants in our study who have higher levels of professional commitment are less likely to engage in earnings management practices and less likely to behave opportunistically. These results should be of interest to managers, practitioners, academicians, and researchers. The remainder of the paper proceeds as follows. In the next section, we provide a review of the appropriate literature and develop our hypotheses. In section three, we describe the methodology used for this study, and in section four we discuss the results. The final section summarizes and concludes the study.

Literature review and hypotheses development

Earnings management

Over the past several decades, a significant body of empirical research reports the fact that managers use a variety of techniques to manage earnings to accomplish different purposes. For example, Altamuro et al. (2005) studied accelerated revenue recognition practices. Thomas et al. (2004) found evidence of earnings management using transactions with affiliated companies. DeFond and Park's (1997) study results suggested that managers use earnings management to smooth earnings to increase job security. DeFond and Jiambalvo (1994) concluded that firms approaching debt covenant violations are more likely to manage earnings. And Healy (1985) demonstrated that bonus schemes create incentives for earnings management.

A number of studies focus on the mitigating influence auditors and audit committees might have on earnings management (e.g., Becker et al., 1998; Bédard et al., 2004; DeFond and Subramanyam, 1998; Krishnan, 2003). Other researchers use surveys and experiments to study the practice of earnings management (e.g., Clikeman and Henning, 2000; Bruns and Merchant, 1990; Elias, 2002; Kaplan, 2001; Merchant and Rockness, 1994).

However, research has produced scarce evidence regarding the impact that an individual's ethical position and professional commitment might have on the decision to manage earnings. Accordingly, the present study examines the impact of an individual's ethical ideology and level of professional commitment on the earnings management decision. We also investigate whether the presence of a personal benefit might affect an individual's ethical orientation or one's level of professional commitment within the context of an opportunity to manage earnings.

Ethical orientation

Forsyth (1980) developed the Ethics Position Questionnaire (EPQ) to identify an individual's ethical orientation, which can be described as a continuum with relativism at one end and idealism at the other. Relativism describes an individual's concern for a universal set of rules or standards. Idealism focuses on human welfare. An individual's ethical orientation (relativism vs. idealism) should affect business decision-making, such as the decision to manage earnings. Individuals who tend to be more idealistic should decide not to manage earnings since that could cause harm to others, an outcome they tend to avoid (Forsyth, 1982). These individuals should also judge the earnings management actions as more unethical (Elias, 2002). On the other hand, those who tend to be more relativistic consider the circumstances first rather than the potential harm a decision might cause. These individuals also tend to judge decisions more leniently, and as a group, tend to judge earnings management actions as more ethical than do the idealists (Elias, 2002).

Barnett et al. (1998) and Davis et al. (2001) used the EPQ in business contexts, and the results from each study were generally consistent with prior research in other disciplines, supporting the notion that the EPQ is relevant in business settings. Studies using the EPQ help explain a variety of decisions that individuals make in organizations. For example, Shaub et al. (1993) found that auditors who were more relativistic were less likely to recognize ethical issues in an auditing scenario than were those who were more idealistic. Douglas and Wier (2000) provide evidence that an individual's ethical position, given opportunity and other incentives, helps to explain budgetary slack creation behavior. Douglas et al.'s (2001) results suggest that ethical orientation is highly (modestly) correlated to ethical judgments in intense (low) moral conditions for CPAs. Douglas and Wier (2005) and Redfern and Crawford (2004) validated the cross-cultural efficacy of the EPQ, using Chinese managers. Based on this discussion, we test the following hypothesis and illustrate this predicted relationship in our research model for this study (Figure 1):

H1: There will be a positive (negative) relationship between relativism (idealism) and earnings management behavior.

As discussed earlier, managers might use earnings management techniques to increase their compensation (Healy, 1985) or to preserve their employment status (DeFond and Park, 1997). Both of these purposes result in personal benefit to the

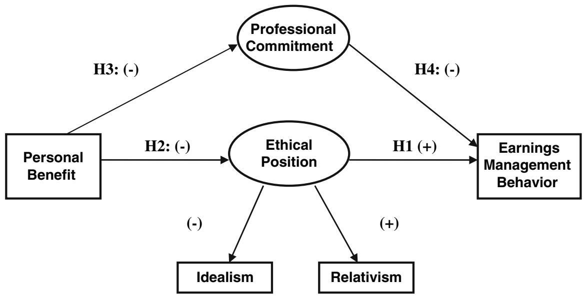

Figure 1. Research Model.

manager. What is uncertain is whether an individual's ethical position affects the decision to manage earnings to achieve personal benefit. Individuals with a relativistic ethical position would tend to view these decisions as acceptable (moral/ethical) based on the specific circumstances. Therefore, relativistic individuals who would personally benefit from a decision might be more inclined to manipulate earnings than those who would not personally benefit. Forsyth (1980) reported that individuals who were highly relativistic judged a person more favorably who produced a positive outcome (by violating a moral standard) than someone who produced a negative outcome (by following a norm). On the other hand, those who were categorized as highly idealistic were very critical of individuals who violated a moral standard, regardless of whether the person obtained a good or a bad outcome (Forsyth, 1980). This suggests that idealistic individuals should tend to reject an opportunity to achieve a personal benefit from an action that might be considered questionable. That is, when presented with an opportunity to achieve personal benefit, relativistic individuals should be more inclined to do so and idealistic individuals should be less inclined. Accordingly, we test the following hypothesis and include this relationship in our research model in Figure 1.

H2: There will be a negative relationship between personal benefit and ethical position.

Personal benefit and professional commitment

Professional commitment is the acknowledgment of (and trust in) the values and objectives of a profession, a willingness to exercise substantial effort on behalf of the profession, and an explicit goal to maintain membership in the profession (Porter et al., 1974). In general, society expects professionals to be more committed to their profession than to their personal gain. Shareholder expect managers and employees of an organization to protect the assets of the firm and to make decisions that increase firm value; all stakeholders expect certified public accountants to maintain the public's confidence by remaining independent of the client and objectively opining on the financial condition of a firm in the annual report.

However, in studies where a personal benefit is possible, the extant research reports that professionals tend to take advantage of the situation to enhance their personal wealth at the expense of the firm, suggesting that their professional commitment may be in question. Coffee (2005) explains that, during the 1990s, executive compensation abruptly shifted in the United States from a cash-based system to an equity-based system and "this shift was not accompanied by any compensating change in corporate governance to control the predictably perverse incentives that reliance on stock options can create (p. 202)." Coffee (2005) illustrates the impact of this change as follows. Assume that a CEO holds options on two million shares of his company's stock, which is trading at a price-to-earnings ratio of 30 to 1. If the CEO can cause the premature recognition of revenues that result in an increase in annual earnings by $1 per share, the CEO can cause a $30 price increase that would make him $60 million richer!

Indeed, a number of empirical studies support Coffee's (2005) illustration. For example, Bergstresser and Philippon (2006) find evidence that the use of discretionary accruals to manipulate reported earnings is more pronounced at firms where the CEO's potential total compensation is more closely tied to the value of stock and option holdings. Ronen et al. (2006) report that earnings management distorts the stock price of a firm and it reduces the firm's value because of its unfavorable effect on manager's efforts.

Although these studies focus on very senior management positions, it is also the case that the "tone at the top" is very influential throughout the organization. As Zablow (2006, p. 26) points out, "Employees are very sensitive to situations that impact their workplace and base much of their perceptions of the organizational culture on what they hear senior management say and, more importantly, what they see senior management do." Thus, if mid-level and lower-level managers observe senior managers manipulating financial information for personal benefit, they too may be tempted to find opportunities at their level to personally benefit at the expense of the organization.

This discussion suggests that managers at any level of the organization, when presented with the possibility for personal gain, may sacrifice professional commitment. We use the following hypothesis to examine this viewpoint, and our research model (Figure 1) indicates the relationship that we predict between personal benefit and professional commitment (H3).

H3: There will be a negative relationship between personal benefit and professional commitment.

Professional commitment and earnings management

Jauch et al. (1978) tested professional commitment in an academic environment and found a positive relationship between the professional commitment (PC) of professors and the number of articles published. Aranya et al. (1981) adapted Porter et al.'s (1974) organizational commitment scale to examine PC[1] of accountants as that relates to organizational commitment and level of responsibility in the organization. Their results indicated that partners and sole practitioners possess the highest level of PC. Further, those individuals with the highest PC also had the highest organizational commitment.

Bamber and Iyer (2002) reported a positive relationship between an auditor's professional and organizational identification (commitment), and Leong et al. (2003) discovered the same results for a sample of Canadian chartered accountants. Hong Kong accountants with higher levels of professional commitment are more inclined to overcome issues associated with inter-role conflict and remain on the job (Lui et al., 2001), and are more inclined to observe the rules of the profession (Jeffery and Weatherholt, 1996).

Similarly, Shaub et al.'s results (1993) indicate that auditors whose ethical orientation was high in idealism had a higher level of professional commitment. The authors conclude that these individuals should be more likely to believe in and accept the values of the profession, exert considerable effort on behalf of the profession, and choose to remain in the profession. Further, their results suggest a strong relationship between the auditor's professional and organizational commitment.

This discussion suggests that professional commitment is an important factor in influencing an individual's behavior in a business context. That is, higher levels of professional commitment are associated with positive behaviors that are beneficial to an organization. Accordingly, individuals with higher levels of professional commitment should be less likely to engage in activities that are detrimental to a firm, such as earnings management behavior. We use the following hypothesis to test this possibility, and our research model (Figure 1) indicates the relationship that we predict between professional commitment (H4) and earnings management.

H4: There will be a negative relationship between professional commitment and earnings management behavior.

Research methods

Participants and task

Senior-level business students ($n = 376$) from one mid-Atlantic university and two mid-Atlantic liberal arts colleges in the U.S. participated in this study. To test for the effect of one's ethical orientation on earnings management behavior, we adapted the scenario used in the Clikeman and Henning (2000) study. Our adaptation resulted in two versions of the scenario, one has an opportunity to achieve a personal benefit while the other does not (see Appendix).

Variables of interest

Ethical Position (EP). We used the Ethical Position Questionnaire (EPQ), developed by Forsyth (1980), to measure each participant's ethical orientation. The questionnaire consists of twenty questions, ten each for idealism and relativism. Factor analysis of the twenty items resulted in two factors, and we used those factor scores in subsequent analyses. Cronbach's alpha reliability scores for the ten-item idealism and the ten-item relativism measures are 0.84 and 0.80, respectively.[2]

Professional Commitment (PC). The fifteen-item measure previously validated by Aranya et al. (1981) was adapted for this study to measure professional commitment (factor and reliability analyses resulted in a seven-item measure of the latent PC construct). We used a five-point Likert-type scale to denote the level of agreement or disagreement with each item. Reliability is acceptable (Cronbach's $\alpha = 0.81$).

Personal Benefit (PB). Our scenario had two versions – one version allowed participants to achieve a personal benefit by managing earnings, while the other version did not. That is, the personal benefit opportunity was either absent or present. The present condition included an opportunity to increase both personal income and company income. The absent condition only included the opportunity to increase company income.

Results

Manipulation checks and descriptive statistics

Pany and Reckers (1987) note that a manipulation check is important in between-subjects designs because insignificant results can occur for several reasons: (1) because a statistically significant effect does not exist, or (2) because participants did not understand, or realize, the information that the researcher was manipulating. Two questions were included in the exit questionnaire (Appendix, Part III, questions three and four) as manipulation checks for the present study. The first question checks whether the participants understood that maintenance expenses were (or were not) incurred in the present year, and the second question checks whether the participants understood that the decision regarding maintenance expenses affected their income. The results of the manipulation checks indicate whether respondents understood the issue of maintenance costs ($\chi^2 = 3.767$, $p = 0.048$), and whether they would personally gain from the decision to postpone maintenance expenses ($\chi^2 = 4.409$, $p = 0.036$).

Panel A of Table I presents the demographic data. There were 203 male respondents (54.0%) and 173 female participants (46.0%). Accounting majors comprised 38.7% (145) of the sample while their counterparts, the non-accounting majors, accounted for 61.3% (230) of the participants. We believe that these participants are an appropriate proxy for entry-level accountants and managers, based on the age and experiences of many of our participants. The average age is 24.0 years with a range of 18 to 51 years. For work experience, 47.1% had five or more years of experience; however, 50 participants had 10 or more years. Seventy-five participants indicated that they have been in their current position for five or more years. This is not surprising, given the fact that one of the schools in this study is a large, urban university with a very large, non-traditional age student population (many work full-time and take classes only in the evenings). The participants reported that 31.3% work for a small firm, 28.6% are employees in a medium-sized firm, and 32.4% are employed by a large firm. The type of businesses in which they work also varied; 23.2% in a retail firm, 63.5% in a service firm, and 5.6% in a manufacturing firm.

Descriptive statistics for the variables appear in Panel B of Table I. Earnings management behavior is the dependent variable and was measured using a seven-point Likert-type scale with a minimum response of one, denoting strong opposition to postponement of the expenses and a maximum of seven, denoting strong support for postponement. The mean response was 4.05 and the standard deviation was 1.73.

Since the participants attended three different schools (75% from a large mid-Atlantic university and 25% from two small mid-Atlantic colleges), we used a dummy variable for university to test whether our results were influenced by differences inherent in the educational institutions. Using ANOVA, no significant differences in the mean responses of the participants for earnings management behavior existed (F-statistic = 0.398, $p = 0.218$). In addition, we examined a structural equation model to ensure that no differences existed based on the differences in universities (large/small university). The path analysis results of the two structural equation models were qualitatively similar.

Model fit

We evaluated ten goodness-of-fit indices for the structural equation model used in this study, as well

TABLE I

Summary information

Panel A: Demographic Information	
Mean (Std. Dev.):	
Age	24 (5.8)
Years experience in current position	2.94 (3.4)
Total years work experience	5.10 (4.6)
Percent in each category:	
Male/Female	54.0/46.0%
Accounting/Non-accounting majors	38.7/61.3%
Work experience <5 years/≥5 years	52.9/47.1%
Retail/Service/Manufacturing firm	23.2/63.5/5.6%
Small/Medium/Large firm	31.3/28.6/32.4%

Panel B: Variables

Variables	Min.	Max.	Mean	Std. Dev.
Earnings management behavior	1	7	4.05	1.73
Professional commitment	13	33	24.93	3.48
Idealism	13	50	37.04	6.86
Relativism	10	46	31.30	6.79

as the χ^2-ratio. Figure II presents those indices as well as acceptable criteria for each index. According to Joreskog and Sorbom (1989), a χ^2-ratio less than 5 indicates a moderate fitting model, while ratios that approach 1 indicate good fitting models. The ratio for our model is 1.525 ($p = 0.017$). The unexplained variance in the model is denoted by the Average Absolute Standardized Residuals (AASR) (Bentler, 1990). For a model to be considered a good fit, the AASR should be less than 0.05, as is the case in this study (AASR = 0.03). The Root Mean Square Error of Approximation (RMSEA) allows for the calculation of confidence intervals, and a score of less than .05 indicates a good fitting model. The observed RMSEA for our model is 0.04. The Standardized Root Mean Square Residual (SRMR) should be used in conjunction with RMSEA and CFI (Hu and Bentler, 1999). A score of .08 or less indicates a good fitting model, as is the case in this study (SRMR = 0.04). The Comparative Fit Index (CFI) is less sensitive to both sample size and sampling error, ranging from 0 to 1 (Hu and Bentler, 1999). This test requires a score greater than 0.80 for the model to be deemed a moderate fit, and 0.90 is considered a good fit. In this study, the observed CFI is 0.97. The Bentler–Bonett Normed Fit Index (NFI) and the Bentler–Bonett Non-Normed Fit Index (NNFI) are more sensitive to sampling error but less sensitive to sample size. These indices require a minimum score of 0.90 for a good fit (for our study, NFI = 0.92, NNFI = 0.96). Other goodness-of-fit tests from the SEM literature include: Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), and Bolen Incremental Fit Index (IFI). Each of these tests requires a score greater than 0.80 to indicate a moderate fit and a minimum score of 0.90 to indicate a good model fit (Hu and Bentler, 1999). The indices for this study were GFI = 0.97, AGFI = 0.95, and IFI = 0.97.

Sensitivity analyses

One reason for the pervasive use of structural equation modeling is that it provides researchers a comprehensive method for the quantification and testing of competing theories (Raykov and Marcoulides, 2000). Accordingly, we performed sensitivity analysis (Anderson and Gerbing, 1988; Byrne, 1994) to determine whether superior models would obtain from plausible alternative paths not hypothesized in this study. These models included a direct path from the benefit manipulation to earnings management behavior, a direct path from ethical position to professional commitment, a direct path from professional commitment to ethical position, and combinations of these non-hypothesized paths. Based on the studies reported in our literature review (e.g., DeFond and Park, 1997; Healy, 1985), we anticipated that we would find a significant path between personal benefit and earnings management behavior, but this was not the case. Furthermore, although the present study operationalized ethical position differently than Shaub et al. (1993), we anticipated a significant path between ethical position and professional commitment but did not find one. None of these alternative models was superior to the hypothesized model.

In addition, we partitioned the participants by the treatment group of personal benefit and then compared the resulting models: one for personal benefit present and one for personal benefit absent.[3] Each model has a direct path from ethical position to earnings management behavior and a direct path from professional commitment to earnings management behavior. We evaluate the separate models using the same fit statistics as for the full model. The SEM model results for the no personal benefit treatment are: χ^2-ratio = 1.68; AASR = 0.04; RMSEA = 0.06; SRMR = 0.06; CFI = 0.94; NFI = 0.87; NNFI = 0.91; GFI = 0.95; AGFI = 0.91; and IFI = 0.94. Similar results are obtained for the personal benefit treatment. Model statistics include: χ^2-ratio = 0.63; AASR = 0.03; RMSEA = 0.06; SRMR = 0.05; CFI = 0.96; NFI = 0.91; NNFI = 0.94; GFI = 0.96; AGFI = 0.92; and IFI = 0.96.

Next, we tested the difference between the corresponding path coefficients to determine whether the results per treatment group were consistent with the full model. There was no significant difference between the professional commitment to earnings management behavior path ($p = 0.45$). However, there was a significant difference between the no treatment group and the treatment group in the positive path coefficients between ethical position to earnings management behavior ($p = 0.03$) with that for the personal benefit treatment group being stronger. Finally, the coefficient for the relativism-measured variable was significantly higher than that for idealism ($p = 0.002$). As in the full model, the observed earnings management outcome is significantly related to the individual's ethical position.

As an additional analysis, we tested an ANOVA model with personal benefit as an independent variable and found that this variable was not significant; however, the ethical orientation of relativism was significant ($t = 3.67$, $p < 0.001$). These sensitivity analyses suggest that, although prior studies did not consider the effect of one's ethical position on earnings management, ethical position might offer an important perspective in understanding earnings management.[4]

Tests of hypotheses

We assess the first four hypotheses based on their respective coefficient path values in the structural model and present those results in Figure 2. All hypothesized paths were significant ($p < 0.05$). Hypothesis 1a predicts that an individual with a more idealistic ethical orientation will be less likely to engage in earnings management behavior, and the observed path coefficient (−0.04) is significant and supports this hypothesis. Similarly, Hypothesis 1b predicts that an individual with a relativistic ethical orientation will be more likely to engage in earnings management behavior, suggesting a positive relationship between relativism and earnings management behavior. The significant path coefficient (0.33) supports hypothesis 1b. These results are consistent with Douglas and Wier (2000) who found that individuals with a relativistic (idealistic) ethical orientation were more (less) likely to engage in budgetary slack creation.

We also found support for Hypothesis 2 that predicted a negative relationship (−0.08 coefficient) between personal financial benefit and ethical orientation. Practically speaking, this result suggests that the individual who tends to be more idealistic will, in the presence of an opportunity to personally benefit from a business decision, tend to move toward a *more strongly idealistic position*. That is, the idealistic person seems to sense the ethical dilemma inherent in the decision and adopt a stronger

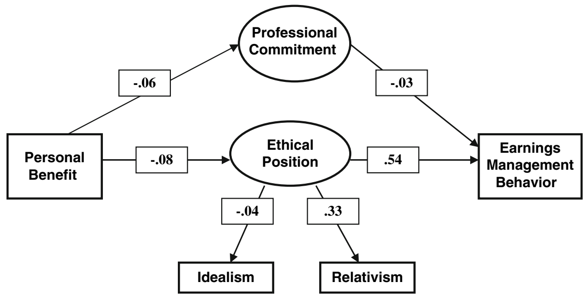

Figure 2. Structural equation model results (All path coefficients are significant at $p < 0.05$).

Goodness-of-fit indices for structural equation model

Goodness-of-fit index	Score	Minimum
Chi-square ratio	1.525	<5.0
Average Absolute Standardized Residuals (AASR)	0.03	<0.05
Root Mean Square Error of Approximation (RMSEA)	0.04	<0.05
Standardized Root Mean Square Residual (SRMR)	0.04	<0.08
Comparative Fit Index (CFI)	0.97	>0.80
Bentler-Bonett Non-Normed Fit Index (NNFI)	0.96	>0.90
Goodness-of-Fit Index (GFI)	0.97	>0.90
Adjusted Goodness-of-Fit Index (AGFI)	0.97	>0.90

conviction to avoid this potential problem. Given the same set of circumstances, the individual who tends to be more relativistic will apparently tend to favor the positive consequences (personal benefit) that are possible, which tends to *strengthen their relativistic position*. These results are generally in line with the findings that Forsyth (1980) reports, and these results are intuitively appealing based on prior research (e.g., Shaub et al., 1993, Douglas and Wier, 2000), where individuals, when confronted with other business dilemmas, tended to reinforce their ethical orientation.

Hypothesis 3 predicted a negative relationship between the level of professional commitment and earnings management. The significant path coefficient (−0.03) for the professional commitment to earnings management behavior path supports the hypothesis. Practically speaking, this result suggests that the lower an individual's professional commitment, the more likely is the person to engage in earnings management behavior. Similarly, Hypothesis 4 predicted that an individual's level of professional commitment is negatively related to personal benefit, which implies that an individual's level of professional commitment suffers in the presence of a potential personal benefit. Hypothesis 4 is supported as revealed by a significant path (−0.06) coefficient.

Additional analysis – Years of experience and age[5]

This study assumes that participants are suitable proxies for "entry-level" managers. However, the standard deviation for years of work experience and age of these students prompted us to examine comparisons of these two demographic variables to determine what (if any) differences might be apparent. Accordingly, we split our sample into two groups based on *years of experience* and compared those with less than five years of experience ($n = 200$) to those with greater than or equal to five years of experience ($n = 166$). The results are qualitatively similar to the results reported in Figure 2, with one exception. The path coefficient between Professional Commitment and Earnings Management Behavior is positive and significant (0.10) for those with less than five years of experience, but is negative and significant (−0.17) for participants with five years or more of work experience. This interesting result is not apparent in our analysis of the full sample. This finding suggests that participants who have more years of work experience, and higher Professional Commitment scores, are less likely to participate in earnings management relative to those participants who have less than five years of work experience. This is intuitively appealing in that we would anticipate more seasoned employees, who are committed to their profession, would be more conscientious about performance of their responsibilities relative to more junior employees. We obtained nearly identical results when we split the sample based on age (0.12 for those who were less than 22 years of age, and −0.21 for the older group), which is not surprising since years of work experience and age are often highly correlated.

Discussion and conclusions

The purpose of Generally Accepted Accounting Principles (GAAP) is to identify acceptable accounting and reporting procedures for managers to use when they prepare accounting information for parties external to the firm. While these principles offer managers a measure of latitude in the choices they may make to present financial information to interested, outside parties, the clear expectation is that company management will use professional discretion and integrity to select the principles and standards that most accurately reflect the financial condition of the firm.

The extant research on earnings management reports that managers use a variety of techniques to manage earnings to accomplish different objectives. Those objectives may be categorized as a personal benefit or a company benefit (or both). By adapting Clikeman and Henning (2000), we make the distinction of whether the benefit is only for the benefit of the company or both. This offers us the opportunity to isolate personal benefit in our study and focus on this incentive to observe how personal benefit might impact ethical orientation and ultimately earnings management behavior. That is, do ethical orientation mediate the impact of personal benefit on the decision to manage earnings? Prior research (e.g., Bruns and Merchant, 1990) suggests that managers have a high tolerance for operating manipulations, but they exhibit no consensus regarding which ones are acceptable (moral or ethical), which suggests that one's ethical judgment may have an important impact on the decision to manage earnings.

The purpose of our study was to examine factors that may help explain earnings management behavior of certain individuals. In particular, we designed an experiment to investigate three areas of interest regarding earnings management. First, might an individual's ethical ideology have an impact on decisions to engage in earnings management behavior? Second, is it possible that an individual's level of professional commitment might affect his or her decision to manage earnings? And third, in the presence of a personal benefit, do ethical orientation and the level of professional commitment affect an individual's inclination to participate in earnings management?

The primary contributions of this study were the discovery that one's ethical orientation mediates the impact of personal benefit on earnings management behavior. Although prior research (e.g., Healy (1985) and DeFond and Park (1997)) suggest that personal benefit mostly explains an individual's inclination to participate in earnings management, we find that one's ethical position might be equally, if not more, important in understanding earnings management behavior. In particular, the more relativistic an individual's ethical orientation, the more likely he/she is to engage in earnings management practices. Conversely, the more idealistic an individual's ethical orientation, the less likely he/she is to engage in earnings management behavior. Further, individuals with a higher level of professional commitment are less likely to engage in earnings management practices while individuals with a lower level of professional commitment are more likely to engage in earnings management behavior.

This study extends our understanding of earnings management behavior by investigating the impact that an individual's ethical position might have on the decision to engage in managing earnings, within the acceptable limits defined by GAAP. The present study also examines the complex combination of ethical orientation and professional commitment, in the presence of a personal benefit, to extend the boundaries of our current knowledge of the likelihood of managers to engage in earnings management.

Overall, these results may be helpful to managers, practitioners, academicians, and accounting researchers. With a better understanding of the potential impact of an individual's ethical orientation and professional commitment on earnings management behavior, all interested parties are in a better position to suggest possible remedies and solutions to mitigate these behaviors. Senior managers might consider their organizational architecture (decision-right assignment, performance-evaluation system, and reward system) and whether these factors minimize agency problems. Further, managers might wish to review their policies and procedures with respect to ethics, codes of conduct, and acceptable behavior within the firm. Business professors might wish to include more classroom examples and homework assignments that focus on ethical situations and appropriate decision-making choices; researchers should consider including ethical position in future studies of earnings management.

The results of this study should be interpreted within the context of the following limitations. One such limitation relates to the participants used in this experiment. The undergraduate students who participated in this experiment came from three mid-Atlantic universities in the U.S. Although these educational institutions have diverse student bodies, they are all located in the same region and may not be representative of students from other geographical areas or countries. Further, this study suggests that the participants proxy for entry-level accountants and managers. Although we believe that the demographics of our participants help mitigate this concern, we acknowledge that entry-level personnel (who are not currently undergraduate students) might differ in their decision-making. The experimental case used in this study may also be a limitation in that we asked the participants to place themselves in the role of the vice president of the company. Since the study participants did not make the decisions in an actual business environment, the possibility exists that they did not take the situation seriously. Thus, when faced with a real-life situation the respondents may or may not act in the same manner.

Some of the limitations in the present study offer possibilities for future research. Due to the limited geographical region of the sample, an extension might be to replicate the study using students from other geographic regions as proxies for entry-level managers. The ability to generalize the results of this study could be further strengthened by testing entry-level managers as well as experienced managers to examine possible differences in level of professional commitment and ethical orientation, based on years of work experience or on the level of professional responsibilities in the firm. The results of such a study could inform future research studies and enlighten the socialization process that occurs as individuals progress in their profession. Another potential area of interest for future research is to examine a variety of different groups of managers, based on differences such as public and private accountants, corporate and governmental (or not-for-profit) managers, or other similar combinations of professionals. Finally, future research might continue to explore the link between ethical position and professional commitment.

Notes

[1] Porter et al.'s (1974) organizational commitment scale contains 15 items that are designed to measure the degree to which an individual feels committed to his/her organization. Aranya et al. (1981) modified this 15-item scale by substituting profession or professional for organization so that the scale measures professional commitment rather than organizational commitment.

[2] Relativism and idealism are opposite ends of a continuum, and ethical position is based on the relationship between the two dimensions. We reverse scored the relativism questions to allow for a single measurement of reliability of the ethical position latent construct. The overall ethical position reliability measurement (Cronbach's alpha = .7526) confirms the construct's reliability.

[3] We gratefully acknowledge an anonymous reviewer for suggesting this test.

[4] We also performed ANOVAs using age ($F = 1.961$; $p = 0.070$), gender ($F = 1.046$; $p = 0.395$), and experience ($F = 1.483$; $p = 0.183$). For our sample, none of these are significant at the .05 level although we could argue a modest age effect. Post hoc comparisons for age revealed no significant differences using either Bonferroni or Scheffé multiple comparison procedures.

[5] We thank an anonymous reviewer for this helpful suggestion.

Appendix

PART I: Please read the following information and then answer the related questions. There are no right or wrong answers; we are only interested in your decision as well as your opinions.

Case Material

You are the executive vice president of a publicly held manufacturing company. Your company closes during the last two weeks of December each year for a winter holiday. During these two weeks extensive maintenance is performed on the manufacturing equipment. The maintenance is expensive, but has always been recorded as a normal operating expense in the past because of its recurring nature.

Due to a downturn in the economy, your company's profits are significantly lower than previously released earnings forecasts. The chief executive officer is worried that failure to achieve forecasted profits will severely hurt the company's stock price and bond ratings.

This year in an effort to achieve forecasted profits, the company is considering postponing all maintenance scheduled during the last two weeks of December until March of the following year. The cost of the maintenance will be about the same, but current year income *and your compensation* will be increased because no expenses will be incurred during December. (We modified the Clikeman and Henning (2000) scenario to manipulate personal benefit. In the narrative above, we included the words in bold (and your compensation). The alternate scenario was worded as follows: *Although current year income will be increased because no maintenance expenses will be incurred during December, this will have no effect on your compensation.*)

Please indicate your support for or opposition to the proposal to delay the maintenance until the following year.

(Please Circle One)

Strongly oppose postponement	Oppose postponement	Slightly oppose postponement	Neither oppose nor support postponement	Slightly support postponement	Support postponement	Strongly support postponement
1	2	3	4	5	6	7

PART II: You will find a series of statements listed below. Answer these questions based on your own experience and opinions. You will probably disagree with some items and agree with others. We are interested in the extent to which you agree or disagree with these statements. Please read each statement carefully, then indicate the extent to which you agree or disagree by circling the number corresponding to your feelings, where:

Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree
1	2	3	4	5

1.	I am willing to put in a great deal of effort beyond that normally expected in order to make my profession successful.	1	2	3	4	5
2.	I talk up this profession with my friends as a great profession to be associated with.	1	2	3	4	5
3.	I feel very little loyalty to this profession.	1	2	3	4	5
4.	I would accept almost any type of job assignment in order to keep working in areas that are associated with my profession.	1	2	3	4	5
5.	I find that my values and the profession's values are very similar.	1	2	3	4	5
6.	I am proud to tell others that I am part of this profession.	1	2	3	4	5
7.	I could just as well be associated with another profession as long as the type of organization in which I worked was similar.	1	2	3	4	5
8.	Being a member of this profession really inspires the very best in me in the way of job performance.	1	2	3	4	5
9.	It would take very little change in my present circumstances to cause me to work in areas that are not associated with this profession.	1	2	3	4	5
10.	I am extremely glad that I chose this profession over others I was considering at the time I joined.	1	2	3	4	5
11.	There's not too much to be gained by sticking with this profession indefinitely.	1	2	3	4	5
12.	Often, I find it difficult to agree with this profession's policies on important matters relating to its members.	1	2	3	4	5
13.	I really care about the fate of this profession.	1	2	3	4	5
14.	For me this is the best of all professions to be a member of.	1	2	3	4	5
15.	Deciding to be a member of this profession was a definite mistake on my part.	1	2	3	4	5

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree
	1	2	3	4	5
16. A person should make certain that their actions never intentionally harm another even to a small degree.	1	2	3	4	5
17. Risks to another should never be tolerated, irrespective of how small the risks might be.	1	2	3	4	5
18. The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.	1	2	3	4	5
19. One should never psychologically or physically harm another person.	1	2	3	4	5
20. One should not perform an action which might in any way threaten the dignity and welfare of another individual.	1	2	3	4	5
21. If an action could harm an innocent other, then it should not be done.	1	2	3	4	5
22. Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences of the act is immoral.	1	2	3	4	5
23. The dignity and welfare of people should be the most important concern in any society.	1	2	3	4	5
24. It is never necessary to sacrifice the welfare of others.	1	2	3	4	5
25. Moral actions are those which closely match ideals of the most "perfect" action.	1	2	3	4	5
26. There are no ethical principles that are so important that they should be a part of any code of ethics.	1	2	3	4	5
27. What is ethical varies from one situation and society to another.	1	2	3	4	5
28. Moral standards should be seen as being individualistic; what one person considers to be moral may be judged to be immoral by another person.	1	2	3	4	5
29. Different types of moralities cannot be compared as to "rightness."	1	2	3	4	5

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree
	1	2	3	4	5
30. Questions of what is ethical for everyone can never be resolved since what is moral or immoral is up to the individual.	1	2	3	4	5
31. Moral standards are simply personal rules which indicate how a person should behave and are not to be applied in making judgments of others.	1	2	3	4	5
32. Ethical considerations in interpersonal relations are so complex that individuals should be allowed to formulate their own individual codes.	1	2	3	4	5
33. Rigidly codifying an ethical position that prevents certain types of actions could stand in the way of better human relations and adjustment.	1	2	3	4	5
34. No rule concerning lying can be formulated; whether a lie is permissible or not permissible totally depends upon the situation.	1	2	3	4	5
35. Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action.	1	2	3	4	5

PART III: Demographic section

ID # ___________

1. In what year were you born? ___________
2. Gender: __M __F
3. In the scenario you just read, were maintenance expenses incurred in December?

   ____ Yes ____ No _____ Don't remember

4. In the scenario you just read, was your income affected by the maintenance expense decision?

   ____ Yes ____ No _____ Don't remember

5. What is the highest degree you've attained: _______________
6. What was/is your undergraduate major: ____________________
7. How many years of experience do you have in your current position: _________
8. How many total years of experience do you have: _________
9. Industry classification of present employer: __ Retail __ Service __Manufacturing
10. What is the size of the entity for which you work (based on the typical criteria for your industry)?

    _____ Small _____ Medium _____ Large

Is there anything you would like to comment on? Use the space below for your comments.

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