DIMENSIONS OF ETHICS FOR MANAGEMENT ACCOUNTANTS

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Abstract

The current code of ethics, which was adopted in 1983, provides general guidance, however, it does not operationally define what specific behaviors are considered to be ethical or unethical. This study defines the operational dimensions of ethics for professional management accountants. Interviews were held with twenty-five certified management accountants (CMAs) and resulted in an empirical definition of ethics consisting of seven dimensions and 330 specific behaviors. Next, the content of the definition of ethics for management accountants was validated by a mail survey. Finally, this study's resulting definition was compared with the current code of ethics.

Introduction

This research study operationally identifies the dimensions of ethics for management accountants. For this purpose, ethics for management accountants were assumed to be made up of multiple dimensions and specific behaviors that operationally define each dimension. The methodology utilized in this research consisted of two phases: developmental and retranslation.

Developmental Phase

The developmental phase involved field research to obtain the dimensions of ethics for management accountants and the behaviors that make up the dimensions. This phase consisted of unstructured interviews with certified management accountants (CMAs). The procedure utilized in this phase was Flanagan's Critical Incident Technique [Flanagan, 1954], which is "a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles." [Flanagan, 1954, p. 327]

The most appropriate sources of information regarding ethics in management accounting are the professionals who are performing management ac-

counting functions. Therefore, for purposes of the developmental phase, several CMAs were selected for interviews. The exact number of interviews was determined by judgment based on the quality of the responses. After twenty-five interviews it was determined that additional interviews would not significantly add to the pool of data. The developmental phase resulted in a definition of ethics for management accountants which consisted of seven dimensions and 330 behaviors. Table I lists the seven dimensions.

Table I

Dimensions of Ethics
Obtained From Developmental
Interviews

- Dimension 1 - Supervision
- Dimension 2 - Confidentiality
- Dimension 3 - Objectivity
- Dimension 4 - Integrity
- Dimension 5 - Legality
- Dimension 6 - Competence
- Dimension 7 - Conflicts of Interests

Retranslation Phase

The retranslation phase of this research utilized Smith and Kendall's

Retranslation of Expectations [Smith, Kendall, 1964] methodology to allow for ". . . a cross validation of content validation results." The Smith and Kendall methodology relies on the judgment of practitioners closest to and most familiar with the job to make three judgments: the dimensions; specific behaviors that illustrate these dimensions; and the extent to which each behavioral illustration reflects ethical or unethical performance. [Wallace, Berger, Domer, Cooper, 1975]

The retranslation phase involved the mailing of survey instruments, which included the behaviors and dimensions obtained in the developmental phase, to a sample of CMAs in order to empirically assess the degree of agreement among the CMAs. The respondents were asked to match the behaviors to one of the dimensions. In addition, the respondents were asked to rate the extent to which each behavior is ethical or unethical using a seven interval scale.

The population consisted of members of the Institute of Management Accounting (holders of the Certificate in Management Accounting) on January 29, 1985. The population was stratified to assure a representative sample in the retranslation phase. The stratification was based on years of experience, and practicing versus non-practicing status. The samples were divided into strata proportionately.

A random stratified sample of 1200 CMAs from the roster of Certificates in Management Accounting was drawn for the mail survey. The 330 behaviors were randomly organized into six questionnaires (55 different behaviors per questionnaire). Six questionnaires were required due to the large number of behaviors. A single questionnaire with all 330 behaviors would not have been practical and research has found that long questionnaires reduce the response rate and contribute to the fatigue effect. [Tipgos, 1984]

After the six questionnaires were prepared, each was mailed to 200 CMAs. The CMAs were chosen at random from the list of members of the Institute of Management Accounting.

There were 65, 73, 61, 58, 61, and 69 respondents from the six questionnaires, respectively. The respondents were randomly divided into two groups. Finally, various statistical analyses were utilized to assess both within-group and between-group agreement.

Within-Group Statistical Analyses

The retranslation phase of the project was designed to evaluate the degree of agreement within the population of CMAs regarding the dimensions and specific behaviors acquired during the 25 developmental interviews. The questionnaires were designed to obtain judgments about the dimensions and specific behaviors. The statistical analyses assess the degree of agreement among respondents regarding (1) which dimension each behavior is assigned to, and (2) how ethical or unethical each behavior is perceived to be by the respondents.

The statistical problem of assessing the degree of agreement was divided into three types of criteria that had to be met within both the groups. Each dimension must consistently have the same behaviors assigned to it; each behavior must be consistently assigned to the same ethical dimension, and each behavior must consistently receive the same rating. The discussion that follows describes the results of the statistical analyses that were carried out to assess the degree of agreement within each group.

Agreement Over Dimensions

Each of the 7 dimensions survived the criteria set for within-group agreement over dimensions. The decision rule was that three or more behaviors must be consistently morally assigned

to a dimension, or that dimension would be eliminated. [Wallace, Berger, Domer, Cooper, 1975] If a behavior was assigned to different dimensions by the two groups, it was immediately eliminated. Eleven behaviors were initially eliminated. Forty-five behaviors were assigned to dimension 1, Supervision; fifty-seven to dimension 2, Confidentiality; fourteen to dimension 3, Objectivity; ninety-seven to dimension 4, Integrity; thirty-nine to dimension 5, Legality; thirty-four to dimension 6, Competence; and thirty-three to dimension 7, Conflicts of Interest.

Agreement Over Assignment of Behaviors to Dimensions

There was substantial agreement among the respondents regarding assignment of behaviors to all dimensions. The decision rule eliminated those behaviors with a difference between the modal frequency and the next most frequent dimension assignment of less than .20. With the exception of dimension 3, Objectivity, all the median modal frequencies of assignment of behaviors to each dimension were greater than .57.

After such eliminations, thirty-six behaviors remained assigned to dimension 1, fifty-one to dimension 2, none to dimension 3, seventy to dimension 4, twenty-five to dimension 5, twenty-nine to dimension 6, and twenty-eight to dimension 7. Because all the behaviors originally assigned to dimension 3, Objectivity, were eliminated, the dimension itself was omitted from further analysis.

Agreement Over Rating the Behaviors

Two tests were used to assess the degree of agreement over rating the behaviors. First, techniques designed by Fiske and Taylor [1966] were utilized to statistically assess the degree of agreement among the respondents regarding the rating of behaviors. Both the coefficients of group agreement

(rgg) and the average correlation between pairs of judges (rpp) were computed for this study.

A perusal of the rgg's and rpp's indicated varying agreement among the respondents within each ethical dimension. The rggs in the first group ranged from negative to .9942 (median = .9267). The first group's rpps ranged from negative to .8630 (median = .2964).

The rggs in the second group ranged from negative to .9977 (median = .9377). The rpps in the second group ranged from negative to .9344 (median = .3442), which indicate varying agreement by the pairs of judges. Combining both groups, overall, the range was from negative to .9946 (median = .9785) for rgg's and from negative to .9029 (median = .3841) for rpp's. Based on Fiske's experience, most of the pairs of judges in this study demonstrate high agreement regarding their ratings. Fiske stated that most tests in the past have had rpp's below .10.

The second test to assess within-group agreement regarding how ethical or unethical the behaviors were perceived to be by the CMA respondents involved computing the standard deviation of each behavior's mean rating. The standard deviations for the first group ranged from .3 to 1.9. The second group's standard deviations ranged from .3 to 2.0. The median standard deviations for both groups were 1.0.

Utilizing the traditional standard of 1.5, there were nine behaviors from dimension 1 that did not survive this phase of analysis and twelve behaviors were eliminated from dimension 2. Dimension 4 had fourteen behaviors that were eliminated based on the 1.5 criterion. Four behaviors from dimension 5 did not survive. Six behaviors from dimension 6 were eliminated and three behaviors from dimension 7 did not meet the criterion. There existed substantial agreement within the groups regarding the rating of all other be-

haviors.

Between-Group Agreement

In addition to within-group statistical analyses, the degree of agreement among the CMA respondents was assessed between the two randomly chosen groups. The analyses determine the degree of agreement between groups regarding (1) which dimension each behavior is assigned to, and (2) how ethical or unethical each behavior is perceived to be by the respondents. It was necessary that both groups consistently assigned behaviors to dimensions and consistently rated the behaviors. The following discussion describes the results.

Agreement Over Assignment of Behaviors to Dimensions

The absolute difference in modal frequencies of assignment of behaviors to dimensions between groups was computed for each behavior. The smaller this value, the greater the agreement.

There was substantial agreement between groups regarding the assignment of behaviors to dimensions. The percent differences range from .00 to .41. The median absolute difference was .06. This low median difference suggests substantial agreement.

Agreement Over Rating the Behaviors

To assess the degree of agreement between the two groups the average ratings calculated for each behavior by each group were compared. The degree of agreement was based on the magnitude of the differences. None of the differences were more than .8. The median differences were .2, .1, .2, .1, .2, and .2, for categories one through seven, without three, respectively. This analysis reveals close agreement.

In addition to the previous analysis, between-group agreement over ratings was assessed using Spearman

rank-order correlations (ρ). The mean ratings assigned to each behavior by the two groups were computed earlier within each dimension. The behaviors were then ordered by rank according to the magnitude of the mean ratings. Next, Spearman rank-order correlation coefficients were computed to assess the degree of agreement between groups in the ordering of behaviors within each dimension.

The coefficients range from .758 to .954 with a median of .881. Based on these high coefficients one can conclude that the two groups are in substantial agreement regarding the rating of the remaining behaviors in this study.

Nonresponse Bias

The response rate ranged from 29% to 36.5%. Even though the response rate obtained was typical, nonresponse bias must be considered. This study utilized a procedure to minimize nonresponse bias and statistically tested for nonresponse bias.

To limit nonresponse bias, second requests were forwarded to the original sample of CMAs fifteen days after the first mailing. The second mailing stimulates those who would not have responded otherwise. The inclusion of respondents who would otherwise not be included reduces the probability of the returned questionnaires being nonrepresentative of the original sample of CMAs.

Nonresponse bias was statistically tested by comparing the early respondents with late respondents. The test is based on the assumption that late respondents are similar to nonrespondents. [Oppenheim, 1968] The analysis consists of a three way comparison of responses. Similar results would suggest a lack of nonresponse bias.

The responses from the first mailing, second mailing, and overall, regar-

ding the determination of dimensions, assignment of behaviors to dimensions, and rating the behaviors, were compared. The results of the test did not reveal any significant differences in responses from the first mailing and responses from the second mailing of the survey questionnaires.

Research Results

Again, the developmental phase consisted of field research to obtain the dimensions and behaviors that operationally define ethics for management accountants. After synthesis, there were seven dimensions and 330 behaviors. The retranslation phase tested the validity of the data obtained in the development phase. The dimensions and behaviors gathered in the developmental interviews were assembled into six mail survey questionnaires. The responses to the survey instruments were statistically analyzed to assess the degree of agreement among the population of CMAs regarding the dimensions and behaviors that constitute an operational definition of ethics for management accountants. The results are the dimensions and behaviors which the CMA respondents highly agreed represent the content valid definitions of the dimensions of ethics for management accountants. These operational definitions are displayed in Exhibit 1 through 6 at the end of the article.

The definitions consist of ethical dimensions and their related behaviors. In addition, the CMAs rated the behaviors. Such ratings provide information regarding how ethical or unethical the behaviors were perceived to be by the CMA respondents.

Utilizing statistical analyses in the retranslation phase, high agreement among the CMA respondents was discovered regarding six ethical dimensions and 191 specific behaviors. All six ethical dimensions had twenty-one or more specific behaviors assigned to

them. A large number of behaviors assigned to a dimension suggests a high degree of justification for the dimension. The six ethical dimensions along with a brief description of each, are presented in Table II.

Table II

Dimensions of Ethics After Retranslation Phase

- Supervision - Behaviors related to the way a management accountant treats subordinates.
- Confidentiality - Behaviors concerning proprietary information.
- Integrity - Behaviors involving company policies.
- Legality - Behaviors related to violations of law.
- Competence - Behaviors regarding one's ability to perform effectively.
- Conflicts of Interest - Behaviors involving potential conflicts.

Six Dimensions of Ethics

The dimension "Supervision" was assigned twenty-seven behaviors. The behaviors revolved around the management accountant's role as manager. The behaviors concerned the handling of subordinates. The most unethical behaviors depicted the management accountant giving an employee a bad evaluation based on reasons not related to the employee's performance on the job, such as personal conflict. The most ethical incidents were when the management accountant helped an employee improve his/her performance on the job.

The "Confidentiality" dimension included thirty-nine behaviors regarding the unauthorized release of proprietary information. Included in the behaviors were breaches of confidentiality inside as well as outside the organization. The respondents indicated that the most unethical action a management accountant could do, with regard to confiden-

tiality, was to give confidential information to a competitor.

The "Integrity" dimension consisted of fifty-six ethical behaviors confronting management accountants. There was not a central theme which dominated this dimension. The ethical dilemmas included discovery of violations within the organization, stealing from the company, and working on personal affairs during company time. The majority of the highly unethical behaviors in this dimension concerned the reporting of incorrect data on various financial reports. The most ethical action by a management accountant occurred when management wanted to file an inaccurate report. The CMA respondents indicated that it would be highly ethical for the management accountant to refuse.

Behaviors which may be violations of law were assigned to the "Legality" dimension. There were twenty-one behaviors associated with this dimension. Virtually all the behaviors in this dimension obtained highly unethical ratings. Filing incorrect data with the IRS or SEC was considered unethical. Using inside information to benefit from stock transactions also was considered unethical. It was considered highly ethical for the management accountant to confront management regarding the discovery of illegal payments by the company.

The dimension "Competence" had twenty-three behaviors assigned to it. The behaviors associated with this dimension related to the management accountant's ability to perform his/her job effectively. The issue of continuous education was included in this dimension. There were not any behaviors rated either highly unethical or highly ethical within this dimension. The behavior considered most unethical was not doing one's job in the appropriate way. Other behaviors considered unethical concerned the management accountant assuming responsibil-

ity for a task he's incapable of handling. There were no behaviors clearly rated ethical.

The last dimension "Conflicts of Interest" had twenty-five behaviors assigned to it. This dimension included a variety of behaviors such as conducting business with a friend, working for a competitor part-time, having a personal relationship with a co-worker, accepting gifts, and owning stock. The most unethical behaviors within this dimension depicted the management accountant working parttime during his/her off hours for a competitor. This dimension did not have any behaviors which were clearly rated ethical.

Compared with Current Code

The results of this study strongly support the current code of ethics. Table III provides an illustrative comparison of the dimensions obtained in this study with the categories in the current code of ethics. A perusal of the standards within each category of the current code of ethics allowed the matching of dimensions found in this study with the categories of the current code. For instance, the category "Competence" of the present code includes standards regarding legality such as "perform their professional duties in accordance with relevant laws..." This suggests that both the "Competence" and "Legality" dimensions obtained in this study can be matched to the category "Competence" of the current code.

Similarly, the category "Integrity" of the current code includes standards involving conflicts of interest. One of the standards explicitly states "avoid actual or apparent conflicts of interest . . ." Therefore, the dimensions "Integrity" and "Conflicts of Interest" of this study were matched to the "Integrity" category of the current code of ethics. This study found a lack of agreement among CMAs regarding the category "Objectivity" which is included

Table III

Comparison of Results
with Current Code of Ethics

<u>Dimensions found in this study</u>	<u>Dimensions in the current code</u>
Competence Legality	Competence
Confidentiality	Confidentiality
Integrity Conflicts of Interest	Integrity
--	Objectivity
Supervision	--
in the present code of ethics.	over subordinates may be confronted with such ethical dilemmas. Perhaps the authors of the current code assumed the "Supervision" issues were not sufficiently unique to management accountants to warrant inclusion of such standards.
The dimension "Supervision" which was found to be a dimension of ethics in this study could not be matched to any part of the current code. This dimension included twenty-seven specific behaviors related to management accountants' responsibilities to their subordinates. Discrimination was the topic of concern in several of the behaviors illustrated. Professional growth of the subordinates was also discussed. The management accountant was depicted as helping or hindering a subordinate's progress on the job.	In summary, the findings of this study supported the current code, with the exception of Objectivity. In other words, for the most part the current code of ethics does reflect the ethical concerns of practicing management accountants. Additional research is needed to investigate the lack of agreement among CMAs regarding the category "Objectivity" of the current code.
A possible reason for the absence of the "Supervision" dimension could be the topic's commonality. Ethical issues surrounding supervision of subordinates is not unique to management accountants. All employees with authority	The additional dimensions obtained in this research and the 191 behavior illustrations provide a more detailed analysis into ethical issues currently

addressed by the existing code. The behaviors supply greater detail to the code of ethics. Specific examples of unethical behavior should make the current code more operationally meaningful.

dimension, "Supervision," which is not covered in the present code of ethics. The dimension "Supervision" includes important ethical considerations which warrant further consideration. Perhaps the current code should be revised to include supervisory standards.

Finally, this study discovered a

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