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The Effects of Emotions on the Moral Judgments and Intentions of Accountants

Lynn H. Clements
Tara J. Shawver*

Unethical earnings management continues to exist. Pressures to meet analysts' expectations and to improve the bottom line are commonplace. While certain techniques are legal and ethical in managing earnings, it is easy to approach and descend the slippery slope between ethical and unethical behavior (Stice and Stice, 2006). For example, timing of advertising and other period costs to increase or decrease net income during a year is prudent and acceptable. But to make accounting changes without appropriate disclosures, to purposefully capitalize ordinary expenses, or to intentionally alter the year-end cutoff for purposes of managing earnings are violations of GAAP. The latter two actions, if there is harm, are fraudulent. Is it possible that reporting of wrongdoing may be avoided or decrease the effect of accounting scandals that resulted from inappropriate earnings management?

A significant stream of research has used Rest's (1986) model of moral action (described below) to explore the ethical decision making of accountants. Coughlan and Connolly (2008) extended the Rest (1986) model, and addressed the role of emotions which were shown to be an important part of the decision process. Greenfield (2007) posits that "…emotional responses to moral issues and dilemmas often influence our moral sensitivity and moral judgment and often motivate moral behavior." (2007, 15) We continue their research to explore the effects of emotions on moral judgment and intention to whistleblow using a sample of 220 professional accountants and four earnings management scenarios. We find that relief, satisfaction, and regret do have a certain effect on moral judgment, but not on whistleblowing intention.

* The authors are, respectively, Professor of Accounting at Florida Southern College, and Professor of Accounting at King's College.

The remainder of this paper is divided into the following four sections. The literature review section provides a theoretical foundation for the study, discussions on earnings management and emotions, and the hypotheses. The next section provides the methodology of the study. In the third section, the results are provided with discussion. The fourth section reports our conclusions, some of the limitations of the study, and suggestions for further research.

BACKGROUND AND HYPOTHESES

Ethical Decision-Making

Rest's Four Component Model of ethical decision-making (1986) describes a four step process comprised of: (1) moral sensitivity, (2) moral judgment, (3) moral intentions, and (4) moral behavior.

Moral sensitivity is the awareness that an ethical problem exists. An individual must first identify that there is an ethical dilemma before a moral decision can be made (moral sensitivity). According to the model, if an individual recognizes that a moral dilemma exists, there is the potential to influence moral judgments, moral intentions and moral behavior.

A moral judgment occurs when a person evaluates whether actions are morally wrong or morally right. Hundreds of studies show that moral judgment changes over time and with education (Rest, 1986). Prior studies about the moral judgment of professional accountants are mixed in their results. Some have found significant differences in levels of moral reasoning (Ponemon 1992; Ponemon and Gabhart 1990) while others found no difference (Abdolmohammadi and Ariail 2009; Bernardi and Arnold 2004; Scofield, Phillips, and Bailey 2004).

The third step is moral intention: individuals evaluate an intention to act ethically or not. Intention is based on an assessment of several factors, which may include available alternatives and one's own values.

The fourth and final step is a person's engagement in a moral behavior. In this final step, Rest posits that a person will choose to engage or not engage in moral behavior based upon his or her own moral attributes and courage (Rest 1986). This study extends the ethical decision making literature based upon Rest's model to instances of earnings management. We examine four scenarios of potentially unethical behavior and the ethical decision to whistleblow by professional accountants. Specifically, the study explores the effects of three emotions (relief, satisfaction, and regret) on the moral judgments to whistleblow and the intention to whistleblow by 220 professional accountants on these different cases of possible earnings management.

Earnings Management

Schipper (1989) states that earnings management is an intervention in the financial reporting process with the intent of obtaining private gain. Clikeman describes earnings management as "fraud's 'innocent' little brother – and notes that it is often overlooked" (2003, 75). Clikeman further defines earnings management as "the practice of choosing accrual estimates or timing operating decisions to move short-term earnings in a desired direction" (2003, 75). This study recognizes that not all earnings management is unethical and/or fraudulent. Rather, some earnings management is considered to be prudent in the course of business. We have adopted the Stice and Stice definition of earnings management for this study, "…a predictable tendency of managers to try to manipulate the reported numbers to be as favorable as possible (2006, 341)."

There are five levels of earnings management according to Stice and Stice (2006) which form a continuum (Figure 1 below). The first level of earnings management, savvy transaction timing, ensures that transactions are recognized in the most advantageous period. The second level, aggressive accounting, involves changing accounting methods or estimates with full disclosure, which is often perceived as legal and ethical. However, when accounting methods or estimates are changed for the sole purpose of manipulating net income, there is potential for the financial statements to misrepresent the company. Therefore, some actions classified as "level 2" may, in fact, be unethical and even fraudulent. Deceptive accounting is the third level of earnings management, and involves changes to methods or estimates with little or no disclosure. The fourth level of earnings management is fraudulent reporting, also referred to as "non-GAAP accounting." This reporting is not to be confused with reporting on other bases of accounting (OCBOA), but is construed as reporting in accordance with GAAP while, in fact, GAAP has been violated. Fraud (fictitious transactions) makes up the fifth level of earnings management.

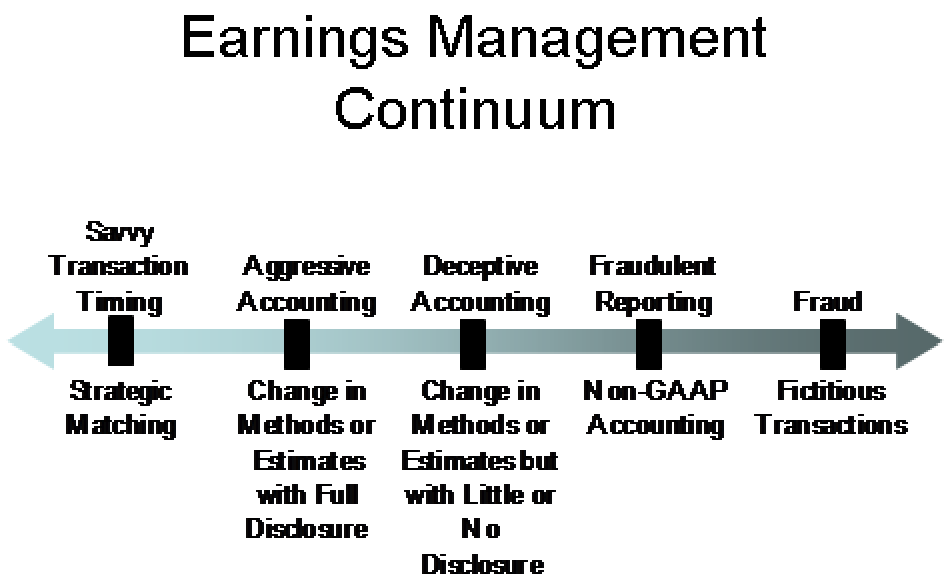
Stice and Stice clearly explain that not all levels of earnings management are fraudulent. Parfet (2000) makes a distinction between "good and "bad" earnings management. According to Parfet, the good kind of earnings management includes "reasonable and proper practices that are part of operating a well-managed business and delivering value to shareholder…[and] is the everyday process of running a business in a well-managed way..." (2000, 485). On the other hand, Parfet calls bad earnings management "improper earnings management' that is characterized by "intervening to hide real operating performance by creating artificial accounting entries or stretching estimates beyond a point of reasonableness." (2000, 485). At its worst, bad earnings management is fraud, and fraud involves intent. Actions in the last two levels on the

Stice and Stice continuum are fraudulent. Therefore, a definition of fraud is needed for this study.

A plethora of definitions of fraud are included in Crumbley, Heitger, and Smith (2011, 4-3). A recent fraud definition has been sponsored by the AICPA, IIA, and ACFE: "Fraud is any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving a gain" (AICPA 2008). We utilize this definition in our paper. Therefore, a fraudulent behavior has the following components: (1) intent to deceive, (2) a victim, and (3) a loss by the victim OR a gain by the perpetrator. The participants in this study were not instructed as to whether or not there was intent, a victim, and/or a gain or loss to be incurred if the action was taken. Instead, the participants were asked certain questions (please refer to Appendix A) and their own inferences were made as to the possible results of a particular action.

Moving from one level of earnings management to the next may be a "slippery slope" – and one that can be difficult to reverse (Clikeman 2003). Several frauds began as small earnings manipulations that eroded (Prentice 2007). Also, time may be a factor in moving from one level to another. Gino and Bazerman (2009) found that the element of time affects this slippery slope, as the acceptability of earnings management increases over time because the consequences are not immediately recognized. Determining when a behavior crosses the line from legitimate to fraudulent can be hard to distinguish.

Figure 1 – Stice and Stice Continuum



The pressures to manage earnings include (1) meeting analysts' expectations (Burgstahler and Eames 2006; Kasnik 1999), (2) anticipating a merger or buyout (DeAngelo 1988), (3) anticipating a company's first public offering (Teoh, Welch, and Wong 1998a), (4) preparing to make equity offers (Teoh, Welch, and Wong 1998b), (5) negotiating stock-financed acquisitions (Erickson and Wang 1999), (6) attempting to meet investor expectations (Bushee 1998), (7) income smoothing (Clikeman 2003), (8) meeting contractual obligations (Clikeman 2003), and (9) influencing the actions of government regulators (Clikeman 2003).

Managing earnings may take many forms. One common earnings management technique is the adjusting of accruals (Teoh, Welch, and Wong 1998a; Beaver, Eger, Ryan, and Wolfson 1989; Petroni 1992; Visvanathan 1998). A particular type of accrual adjustment is the period's bad debt expenses, which has been explored by Yoon, Miller, and Jiraporn (2006); Peasnell, Pope, and Young (2000); McNichols and Wilson (1988); and Clements and Shawver (2011).

This paper extends earnings management research by considering whether the emotions of relief, satisfaction and regret affect moral judgment to whistleblow and the intention to whistleblow in situations of potentially unethical behavior. The methodology includes four vignettes describing earnings management (included as Appendix A), one vignette for each of the last four levels of the continuum suggested by Stice and Stice (2006). The level two vignette concerns inventory obsolescence. The subject of the level three vignette is a change in the method of depreciation. The level four vignette focuses on inappropriate capitalization of expenses. The level five vignette includes concealing customer returns. Because level one is neither unethical nor fraudulent, we did not include a vignette for that first level.

Sadly, unethical behavior may be observed but not reported, which may allow the effects to increase in magnitude. However, when unethical earnings management is reported and discontinued, it is conceivable that the effects of those behaviors may be reduced before the company suffers terminal loss. In order to report those unethical reactions, Rest's model suggests that the behavior must first be recognized as an ethical problem (moral sensitivity). The second step involves evaluating whether one should complete the action (moral judgment). Then, the observer must evaluate whether or not to blow the whistle on the perceived unethical behavior (intention). Lastly, the observer may blow the whistle and report the wrongdoing (engagement). This study focuses on the second and third steps in the Rest model: ethical evaluations ("should you blow the whistle?") and whistleblowing ("would you blow the whistle?".

Ethical Evaluations and Whistleblowing

There are several definitions that describe whistleblowing and whistleblowers. Whistleblowers "sound an alarm from within the very organization in which they work, aiming to spotlight neglect or abuses that threaten the public interests" (Bok 1980, 277). Alford (2001, 402) considers whistleblowers to be good examples of people who have "acted ethically." According to Hersch (2002, 243), "Whistleblowing involves the deliberate disclosure of information about non-trivial activities which are believed to be dangerous, illegal, unethical, discriminatory or to otherwise involve wrongdoing, generally by current or former organisation members." The definition of whistleblowing by Miceli and Near is, "the disclosure by organizational members of illegal, immoral, or illegitimate organizational acts or omissions to parties who can take action to correct the wrongdoing" (Miceli and Near 1992, xv). Other definitions exist, most of which include some type of reporting of questionable morality or wrongdoing.

Some prior research has focused on the whistleblower (i.e., the characteristics of one who will blow the whistle) and the motivation to blow the whistle (Miceli and Near 1984; Miceli, Roach, and Near 1988; Alpern 1982; Pletta 1986; Ahern and McDonald 2002; and others). Another stream of research focuses on "effective whistleblowing." For example, Near and Miceli (1995) propose five factors that influence the termination of wrongdoing, including the characteristics of the whistleblower, the characteristics of the complaint recipient, the characteristics of the wrongdoer, the characteristics of the wrongdoing, and the characteristics of the organization.

Blowing the whistle on accounting fraud usually does not involve life or death, but may have a significant disastrous effect on a company's financial health. Oftentimes, it is the professional accountants who observe unethical behaviors, and are faced with the decision to report the wrongdoing. CPAs "have a continuing responsibility to cooperate with each other to improve the art of accounting, maintain the public's confidence, and carry out the profession's special responsibilities for self-governance" (AICPA 1997). Also, members of the IMA are expected to behave ethically and commit to ethical professional practice and to "discuss the issue with [the] immediate supervisor except when it appears that the supervisor is involved" (IMA). There is a stream of whistleblowing research in the area of accounting (Xu and Ziegenfuss 2003; Dozier and Miceli 1985; Miceli and Near 1991; Shawver 2009; Shawver and Clements 2012; Clements and Shawver 2011; and others) and this study contributes to that literature.

Emotions

According to Callahan (1988, 10), emotions are "distinctly patterned human experiences that, when consciously felt produce qualitatively distinct subjective feelings and redispositions….Emotions and thinking are, in sum, complementary, synergistic, parallel processes, constantly blending and interacting as a person functions."

Emotions affect ethical decision-making (Gaudine and Thorne 2001; Klein 2002), shape the choices of individuals (Gilbert and Wilson 2000; Mellers, Schwartz, and Ritov 1999), have powerful effects on choice (Mellers, Schwartz, and Ritov 1999), and affect the real and anticipated emotions of decision-makers (Brief and Weiss 2002; Cacioppo and Gardner 1999). Mellers, Schwartz, and Ritov articulated two influences of emotions, "experienced emotions" and "anticipated emotions" (1999, 332). Experienced emotions were found to affect many levels of cognitive processing, and anticipated emotions were found to prepare us for the future (1999, 332). The importance of emotions in ethical decision-making has been reported by Baron (1992), Mellers and McGraw (2001) and Klein (2002).

Emotions and Rest's (1986) Model of Ethical Decision Making

Guadine and Thorne (2001) were among the first to explore whether emotions influence the ethical decision process. They published a cognitive-affective model of ethical decision-making which posits that two dimensions of emotion (feeling state and arousal) influence each of the four components of Rest's (1986) model of moral action. Of the seven propositions stated by Guadine and Thorne, the fourth and fifth propositions relate to moral judgment (step two of the Rest model) and the sixth proposition relates to intention (step three of the Rest model). The fourth proposition states, "Arousal is positively associated with an individual's tendency to formulate a prescriptive judgment consistent with his or her level or moral development." The fifth proposition states, "Positive affect is positively associated with an individual's tendency to formulate a prescriptive judgment at a level of moral reasoning consistent with his or her level of moral development." (Guadine and Thorne 2001, 181) Their sixth proposition states that, "Positive affect increases an individual's tendency to select an ethical decision choice consistent with his or her prescriptive judgment." (Guadine and Thorne 2001, 182) This current study extends the work of Guadine and Thorne by exploring certain emotions (regret, relief, and satisfaction) and their effects on the decision-making process (Rest's second and third steps, and Gaudine and Thorne's fourth, fifth, and sixth propositions.)

Using the Rest (1986) model, Greenfield (2007) reported that the role of emotions affects ethical decision making in certain moral dilemmas. He reported that "all emotions are responses to perceived changes, threats, and opportunities that may alert us to a moral issue" for a selected group of physical therapists (2007, 15).

Relief, Satisfaction and Regret

The emotion of relief was explored by Sweeny and Vohs (2012). They posit two distinct situations: the narrow avoidance of an aversive outcome (near-miss relief) and completion of an onerous or aversive event (task-completion relief). Their findings suggest that near-miss relief prompts people to contemplate how to avert similar future experiences, and that task-completion relief serves to reinforce endurance during difficult tasks (2012, 169). We therefore propose the following hypotheses:

H1a: A professional accountant will feel relief when making a moral judgment to report the action.

H2a: A professional accountant will feel relief when intending to report the action.

Decisions are affected by the satisfaction expected after a decision is made according to Oliver (1997). There are few empirical studies in business ethics which have included measures of expected satisfaction with possible outcomes. Although Coughlan and Connolly suggested that the role of anticipated satisfaction should not be ignored, they were not able to support the hypothesis that the emotion of satisfaction affected the decision to choose an ethical alternative (2008, 350). Shawver and Clements (2012) were unable to find support that satisfaction affects ethical evaluations. We therefore propose the following hypotheses:

H1b: A professional accountant will feel satisfaction when making a moral judgment to report the action.

H2b: A professional accountant will feel satisfaction when intending to report the action.

The emotion of regret has been explored in a variety of settings. Fredin studied students in a 2 x 2 x 2 between-subjects experiment designed to test a variety of hypotheses. Fredin (2011) explored how one's predicted regret may differ between blowing the whistle or staying silent and found that "individuals think about regret differently in a whistleblowing context as opposed to a silent observer context." (2011, 404) Jurasova and Spajdel found that regret emerges from the single act of decision making rather than from the type of inference which precedes the choice, and that the intensity of regret decreases with passing time (2011, 169). Reb and Connolly (2010) found support that there was greater anticipated regret when the action was abnormal (as opposed to normal), and that there is a mediating effect with perceived justifiability. They also found that anticipated regret was higher for careless (as opposed to careful) decisions. We therefore propose the following hypotheses:

H1c: A professional accountant will not feel regret when making a moral judgment to report the action.

H2c: A professional accountant will not feel regret when intending to report the action.

Coughlan and Connolly (2008) examined the effects of justification and three emotions, relief, satisfaction, and regret on hypothetical decision situations. They found "that both the anticipated emotions associated with choosing each option and the judged relevance of particular justifications to each specific situation help shape the choices made by individuals facing ethical dilemmas. "(2008, 354) Coughlan and Connolly (2008) found that anticipated emotions of relief and regret (but not satisfaction) were associated with choosing between options and the perceived relevance of each option's justifications affect the choices business students make when facing ethical dilemmas (2008, 354). This study extends their study (which used business students) by exploring the emotions of relief, satisfaction and regret on the ethical decision-making decisions of professional accountants.

Shawver and Clements (2012) found support that accountants feel regret when choosing an unethical decision alternative. This study extends the Shawver and Clements (2012) research on the emotion of regret and adds the emotions of relief and satisfaction.

RESEARCH METHOD

Measuring the Variables

Accounting professionals attending state society-sponsored continuing education classes in Florida were invited to participate in this pencil-and-paper study completed during the refreshment breaks of the continuing education sessions. Any professional who completed the survey was entered into a drawing for a small financial prize valued at $25. There were 1,127 attendees, of which 220 agreed to participate (a 20% response rate). Included in the survey were demographic questions, and 71% of the participants identified themselves as male, 74% as older than 50, and 82% as accountants. Nearly half (49%) of the participants had fewer than 30 years of experience, and the remainder had 30 years of experience or more. The majority of participants (62%) had between 20 and 39 years of experience. Table I includes the demographic information for gender, age and experience.

[Insert Table I here]

The Stice and Stice Earnings Management Continuum (2006, 348-349) was selected as the basis for the various vignettes in the survey. The Continuum was chosen due to its concise nature (i.e., there are only five discrete levels of earnings management) and the fact that it is comprehensive (i.e., it begins with ethical earnings management and ends with the most egregious form of fraudulent earnings management.)

One vignette was developed to correspond to each of the Stice and Stice (2006) earnings management levels 2, 3, 4, and 5. Vignette 1 focuses on managing earnings by manipulating the inventory obsolescence adjustment. Because it includes the wording, "and provided justification and disclosure for the change," it corresponds to the Stice and Stice continuum level 2 (2006, 348). Vignette 2 is focused on managing earnings by manipulating depreciation expense by changing the depreciation method and increasing the useful life of production machinery. The wording, "without providing additional justification or disclosure for the change" was included to classify this action in level 3 of the Stice and Stice continuum (2006, 348.) Vignette 3 focuses on capitalizing expenses for routine maintenance of production machinery, which is a clear violation of GAAP resulting in fraudulent reporting and therefore is an action classified in the Stice and Stice continuum level 4 (2006, 349). Vignette 4 is focused on managing earnings by recording customer returns in the period subsequent to occurrence, and corresponds to the Stice and Stice continuum level 5 (2006, 349).

Each participant received either vignettes 2 and 4 (inventory obsolescence and capitalization of expenses, respectively) or vignettes 3 and 5 (changing depreciation methods and ignoring customer returns, respectively). Since the survey was completed during a scheduled break in the continuing education program, the participants were not asked to evaluate all four scenarios. We were concerned that there would not be sufficient time to complete the survey. Appendix A presents the four vignettes. In addition to demographic questions, each vignette was followed by a series of questions, and the same questions were asked for each vignette. Appendix B presents the group of statements about each vignette used in this study, with classification as to the independent and dependent variables. The questions utilized a 7-point Likert scale rated from 1, "strongly disagree," to 7, "strongly agree."

There were two dependent variables in the study: moral judgment to whistleblow ("should blow the whistle") and intention to whistleblow ("would blow the whistle"). Each participant was asked to evaluate moral judgment to whistleblow by responding to, "The staff accountant in the scenario should report this request." Each participant was also asked to evaluate intention to whistleblow on the wrongdoing by responding to, "Most staff accountants would report the request made by the controller." As the scenarios change by level in the Stice and Stice (2006) continuum, the action is expected to be seen as more unethical and, therefore, more likely that it should be reported, and more likely to be reported (with responses closer to 1). There were also three independent variables, one for each of the three emotions studied. The participants were asked the following questions: (1) "Most staff accountants would feel relief if they reported this action", (2) "Most staff accountants would feel satisfaction if they reported this action", and (3) "Most staff accountants would feel regret if they reported this action."

Since social desirability response bias is a concern when evaluating ethical dilemmas, these five statements were worded in the third person. The means and standard deviations for all variables used in this study are provided for each level in Tables II and III.

[Insert Tables II and III here]

RESULTS AND DISCUSSION

Table II presents the sample statistics (the means and the standard deviations) for the variables in this study. As the level of earnings management increases, this sample of professional accountants indicates that each action should be reported (with responses increasing closer to 7). Responses also indicate that most professional accountants would report the request as the action moves higher on the Stice and Stice earning management continuum (with responses increasing closer to 7). For the emotions variables, as the level of earnings management increases, relief and satisfaction increase while regret decreases. Results of MANOVA tests shown in Table 2 reveal that the means of each of the variables are statistically different between scenarios, indicating that the type of earnings management will influence the perceived importance of emotions on the ethical decision-making process.

In Table III, we report the correlation matrix for the two dependent variables (moral judgment to whistleblow and intention to whistleblow) and the three independent variables (relief, satisfaction, regret) used in this study. An increase in the relief and satisfaction variables correlates to an increase in the moral judgment and intention to whistleblow variables while an increase in regret corresponds to a decrease in moral judgment and intention to whistleblow, as shown in the negative correlations.

In every level from 2 to 5, moral judgment to whistleblow is correlated to the emotions of relief, satisfaction, and regret. In levels 3 and 5, moral judgment to whistleblow is correlated to the emotions of relief and satisfaction. These correlations of moral judgment and intention to whistleblow with the emotions of relief, satisfaction and regret are consistent with prior suggestions that emotions affect ethical decision-making (Gaudine and Thorne 2001; Klein 2002),

H1a, H1b, and H1c

Table IV presents the results of the regression analyses of the independent variables of relief, satisfaction, and regret upon our first dependent variable, moral judgment. The table is arranged by the four vignettes, one for each of the last four levels of the Stice and Stice (2006) Continuum, as presented above. Appendix A provides the vignettes, which focus on inventory obsolescence (Level 2), change in depreciation method (Level 3), capitalization of routine expenses (Level 4), and improperly postponing the reporting of customer returns (Level 5).

Relief is significant at the 0.05 level for the Level 2 and Level 5 vignettes. Satisfaction is significant at the 0.05 level for the vignettes of Levels 2, 3, and 5. Regret is significant at the 0.01 level for vignette Level 2, and at the 0.05 level for vignette Level 3. Therefore, H1a, H1b, and H1c are partially supported. These professional accountants have indicated they will feel relief for two of the vignette situations (Levels 2 and 5) when making a moral judgment to report the action. They also have indicated they will feel satisfaction in three of the vignette situations when making a moral judgment to report the action (all except Level 3). Finally, they indicated they will feel regret when making a moral judgment to report the actions in vignettes 1 and 2, which is not surprising since these actions are at the lowest levels of earnings management. In fact, vignette 1 (Level 2) represents an ethical and, most likely, a common practice, which explains the high (0.01) level of significance and negative t-value for regret if the action were to be reported. Professional accountants would strongly regret the reporting of this Level 2 situation. There is no evidence that these professional accountants would feel regret for the reporting of earnings management at the higher levels of unethical behavior (Levels 4 and 5).

Table V presents the results of the regression analyses of the independent variables of relief, satisfaction, and regret upon our second dependent variable, intention to whistleblow. The table is again arranged by the vignettes. Only the satisfaction variable is significant, at the 0.05 level, and only for the second vignette of Level 3. Therefore, neither H2a nor H2c are supported, and there is limited support of H2b. With one exception, the professional accountants would not feel relief, satisfaction, or regret if the intention was to blow the whistle on these four actions.

That one exception is a feeling of satisfaction from the intention to whistleblow about a change in depreciation method without disclosures (the Level 3 vignette).

[Insert Table V here]

There are at least four significant observations. First, these professional accountants indicate that their peers would feel relief and satisfaction in reporting certain earnings management requests. Second, the same accountants indicate that their peers would regret reporting certain earnings management actions for aggressive accounting and deceptive accounting (Levels 2 and 3) but there would not be regret in the reporting of fraudulent reporting or fraud (Levels 4 and 5). Third, the emotions of relief, satisfaction, and regret were not significant in the capitalization of expenses vignette (Level 4) for either moral judgment or for intention to whistleblow. One possible explanation is that there were two different groups of professional accountants who took the surveys, and different participants took the surveys for the vignettes for Level 4 and Level 5. Fourth, a most interesting observation can be made by comparing the results of Tables IV and V: these three emotions do in fact affect moral judgment, but do not impact the intention to whistleblow.

To investigate these hypotheses further, Table VI presents several multivariate multiple regression analyses. Multivariate regression estimates a single regression model with multiple dependent variables (moral judgment to whistleblow and intention to whistleblow) and one or more predictor variables (relief, satisfaction, regret). The results of the multivariate regression analysis are similar to previously presented tables and analyses. Generally, the emotions examined in this study have more of an impact on moral judgments to whistleblow than they do on intentions to whistleblow. It is possible that emotion incrementally explains moral judgments to whistleblow while other factors may become important when considering whistleblowing intentions.

[Insert Table VI here]

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study contributes to the literature by exploring the effects of three emotions (relief, satisfaction, and regret) upon certain earnings management situations at four of the five levels in the Stice and Stice (2006) Continuum. However, several limitations are noted. First, accounting professionals may respond differently to the way in which they responded in this survey when confronted with similar problems in a business environment. Secondly, this sample of professional accountants may not represent all accountants, especially since the participants include a significant number of males over the age of 50. Thirdly, the third vignette (Level 4) did not provide results comparable to the other three vignettes. Fourthly, there were two different groups of participants, and only half of the participants answered questions about each of the vignettes. A fifth limitation is that we did not randomize the vignettes when administering the survey.

Therefore, future research may wish to attempt to increase the sample size, sample a different geographic area (e.g., different states), consider different situations (vignettes) that might impact ethical evaluations, evaluate different emotions than were considered in this study, randomize the vignettes and consider additional factors that may impact intentions to whistleblow.

CONCLUSIONS

We asked professional accountants to evaluate several situations using the Rest Four Component Model of ethical decision-making (1986) to investigate whether certain emotions affect the evaluation of accounting situations involving earnings manipulations and the reporting of those potentially unethical actions. This study provides evidence that the moral judgment to report certain unethical actions provides relief and satisfaction. Second, we find that there is a feeling of regret in deciding to report earnings management that is not absolutely unethical. Third, we find no evidence that there is relief or regret from the intention to whistleblow on earnings management, and very limited evidence that there is satisfaction from the intention to whistleblow. Therefore, relief, satisfaction, and regret do have a certain effect moral judgment, but not on whistleblowing intention.

Appendix A – Vignettes

Level 2
A staff accountant prepared the annual schedule of estimated inventory obsolescence and sent it to the controller for approval. The controller asked that the staff accountant reduce the estimate and provided justification and disclosure for the change. The adjustment will result in a 2% increase in reported net income, which allows this publically traded company to reach expected financial targets. The staff accountant agreed to make the adjustment.

Level 3
A staff accountant prepared a schedule to calculate depreciation on production machinery and sent it to the controller for approval. The controller asked that the accountant change the depreciation method and increase the useful life of the production machinery without providing additional justification or disclosure for the change. The adjustment would result in a 3% increase in reported net income for this publically traded company. The accountant agreed to make the adjustment.

Level 4
A staff accountant prepared the preliminary financial statements for the fourth quarter and sent it to the controller for approval. After review, the controller asked the staff accountant to capitalize expenses for routine maintenance of production machinery. In the past, these costs were expensed. The adjustment would increase net income by 4% for this publically traded company. The accountant agreed to make the adjustment.

Level 5
A staff accountant prepared the preliminary financial statements for the fourth quarter and sent it to the controller for approval. After review, the controller asked that the accountant ignore all customer returns received during the last week of the fourth quarter in order to increase reported net income by 5%. The accountant agreed to make adjustments to the financial statements and record these transactions in the first quarter of the next year.

Appendix B – Sample Survey, Selected Questions and Variables

Vignette 1a

A staff accountant prepared the annual schedule of estimated inventory obsolescence and sent it to the controller for approval. The controller asked that the staff accountant reduce the estimate and provided justification and disclosure for the change. The adjustment will result in a 2% increase in reported net income, which allows this publically traded company to reach expected financial targets. The staff accountant agreed to make the adjustment.

Please indicate how strongly you agree or disagree with the following statements by circling one answer for each of the following statements using the following scale:

	Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
The staff accountant in the scenario should report this request.* (MJ)	1 2 3 4 5 6 7
Most staff accountants would report the request made by the controller.* (WH)	1 2 3 4 5 6 7
Most staff accountants would feel relief if they reported this action. ** (RL)	1 2 3 4 5 6 7
Most staff accountants would feel satisfaction if they reported this action. ** (S)	1 2 3 4 5 6 7
Most staff accountants would feel regret if they reported this action. ** (RG)	1 2 3 4 5 6 7

*Dependent variables = Moral Judgment to Whistleblow (MJ), Intention to Whistleblow (WH)
**Independent variables = Relief from whistleblowing (RL), Satisfaction from whistleblowing (S), Regret from whistleblowing (RG)

TABLE I
Demographics

Panel A: Gender of Participants

Gender	Number of Participants	Percent of Total
Female	62	28%
Male	157	71%
Prefer Not to Answer	1	0%
Total	220	

Panel B: Age of Participants

Age	Number of Participants	Percent of Total
20-29	4	2%
30-39	12	5%
40-49	41	19%
50-59	89	40%
60-69	74	34%
Total	220	

Panel C: Experience of Participants

Experience in Years	Number of Participants	Percent of Total
0 – 10	21	10%
11-19	24	11%
20-29	62	28%
30-39	75	34%
40-49	30	14%
50-59	7	3%
Blank	1	0
Total	220	

TABLE 2
Sample Statistics

	Level 2 Variables (n = 88)		Level 3 Variables (n = 119)		Level 4 Variables (n = 88)		Level 5 Variables (n = 111)		MANOVA	
Variable	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**	**F-stat**	**Sig**
Moral Judgment to Whistleblow	4.784	1.956	4.924	1.856	5.705	1.525	5.676	1.652	7.435	.000
Whistleblowing Intention	3.337	1.616	3.547	1.595	3.864	1.669	4.205	1.606	5.629	.000
Relief	4.528	1.645	4.372	1.598	5.352	1.241	4.885	1.608	7.528	.000
Satisfaction	4.584	1.573	4.339	1.563	5.125	1.239	4.884	1.643	5.102	.000
Regret	4.472	1.531	3.339	1.464	3.398	1.369	3.807	3.269	5.427	.000

TABLE III

Correlation Matrix

Panel A: Correlations	Moral Judgment	Intention	Relief	Satisfaction	Regret
Moral Judgment to Whistleblow	1.000				
Intention to Whistleblow	0.209*	1.000			
Relief	0.497**	0.020	1.000		
Satisfaction	0.504**	-0.042	0.706**	1.000	
Regret	-0.447**	-0.138	-0.163	-0.181	1.000
Panel B: Correlations	Moral Judgment	Intention	Relief	Satisfaction	Regret
Moral Judgment to Whistleblow	1.000				
Intention to Whistleblow	0.411**	1.000			
Relief	0.398**	0.261**	1.000		
Satisfaction	0.419**	0.318**	0.760**	1.000	
Regret	0.229*	0.088	0.063	0.026	1.000
Panel C: Correlations	Moral Judgment	Intention	Relief	Satisfaction	Regret
Moral Judgment to Whistleblow	1.000				
Intention to Whistleblow	0.178	1.000			
Relief	0.286**	0.195	1.000		
Satisfaction	0.227*	0.114	0.770**	1.000	
Regret	(0.059)	(0.006)	(0.192)	(0.172)	1.000
Panel D: Correlations	Moral Judgment	Intention	Relief	Satisfaction	Regret
Moral Judgment to Whistleblow	1.000				
Intention to Whistleblow	0.505**	1.000			
Relief	0.611**	0.465**	1.000		
Satisfaction	0.594**	0.443**	0.848**	1.000	
Regret	0.109	(0.003)	0.083	0.088	1.000

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

TABLE IV

Effects of Emotions on Moral Judgment to Whistleblow

Panel A: Vignette with Level 2 Stice and Stice Continuum

Variable	t-value	Significance	
Relief	2.214	0.030	*
Satisfaction	1.996	0.049	*
Regret	(4.266)	0.000	**
Adj. R^2 = .396			

Panel B: Vignette with Level 3 Stice and Stice Continuum

Variable	t-value	Significance	
Relief	1.040	0.301	
Satisfaction	2.307	0.023	*
Regret	2.552	0.012	*
Adj. R^2 = .211			

Panel C: Vignette with Level 4 Stice and Stice Continuum

Variable	t-value	Significance	
Relief	1.667	0.099	
Satisfaction	0.088	0.930	
Regret	(0.034)	0.973	
Adj. R^2 = .049			

Panel D: Vignette with Level 5 Stice and Stice Continuum

Variable	t-value	Significance	
Relief	2.202	0.030	*
Satisfaction	2.285	0.024	*
Regret	0.700	0.485	
Adj. R^2 = .367			

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).

TABLE V

Effects of Emotions on Intention to Whistleblow

Panel A: Vignette with Level 2 Stice and Stice Continuum			
Variable	**t-value**	**Significance**	
Relief	0.587	0.559	
Satisfaction	(0.867)	0.388	
Regret	(1.357)	0.178	
Adj. R^2 = (.007)			
Panel B: Vignette with Level 3 Stice and Stice Continuum			
Variable	**t-value**	**Significance**	
Relief	0.272	0.786	
Satisfaction	2.117	0.036	*
Regret	0.951	0.344	
Adj. R^2 = .086			
Panel C: Vignette with Level 4 Stice and Stice Continuum			
Variable	**t-value**	**Significance**	
Relief	1.601	0.113	
Satisfaction	(0.527)	0.599	
Regret	0.278	0.782	
Adj. R^2 = .008			
Panel D: Vignette with Level 5 Stice and Stice Continuum			
Variable	**t-value**	**Significance**	
Relief	1.471	0.144	
Satisfaction	1.534	0.128	
Regret	(0.601)	0.549	
Adj. R^2 = .193			

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).

TABLE VII
Multivariate Multiple Regression

Panel A: Vignette with Level 2 Stice and Stice Continuum			
Dependent Variable: Judgment to Whistleblow	**F**	**Significance**	
Relief	1.863	0.111	
Satisfaction	2.116	0.073	
Regret	6.409	0.000	**
Adj. R^2 = .495			
Dependent Variable: Whistleblowing Intention	**F**	**Significance**	
Relief	0.705	0.647	
Satisfaction	0.712	0.642	
Regret	0.733	0.626	
Adj. R^2 = .026			
Panel B: Vignette with Level 3 Stice and Stice Continuum			
Dependent Variable: Judgment to Whistleblow	**F**	**Significance**	
Relief	0.647	0.692	
Satisfaction	2.356	0.041	*
Regret	2.044	0.072	
Adj. R^2 = .263			
Dependent Variable: Whistleblowing Intention	**F**	**Significance**	
Relief	2.503	0.031	*
Satisfaction	3.825	0.003	*
Regret	1.479	0.200	
Adj. R^2 = .362			
Panel C: Vignette with Level 4 Stice and Stice Continuum			
Dependent Variable: Judgment to Whistleblow	**F**	**Significance**	
Relief	2.959	0.028	*
Satisfaction	0.318	0.865	
Regret	1.060	0.398	
Adj. R^2 = .162			
Dependent Variable: Whistleblowing Intention	**F**	**Significance**	
Relief	0.824	0.516	
Satisfaction	0.325	0.860	
Regret	0.547	0.770	

TABLE VI
Multivariate Multiple Regression

Panel A: Vignette with Level 2 Stice and Stice Continuum

Dependent Variable: Judgment to Whistleblow	F	Significance	
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Satisfaction	2.116	0.073	
Regret	6.409	0.000	**
Adj. R^2 = .495			

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Dependent Variable: Whistleblowing Intention	F	Significance	
Relief	0.824	0.516	
Satisfaction	0.325	0.860	
Regret	0.547	0.770	

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