

**Ivory Tower Whistleblowers and Hotlines
Higher Education Institutions' (HEI) Voluntary Implementation of NACUBO-
recommended Sarbanes-Oxley (SOX) Act of 2002 Whistleblowing Best Practices
Provisions: A Web-Based Survey Instrument and Exploratory
Research to Determine HEI Level of Implementation,
Expectations, Effects and Barriers**

by

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Barriers]

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Abstract

The purpose of this exploratory study is to determine Higher Education Institutions' (HEIs) level of implementation, expectations and effects from voluntarily implementing National Association of College and University Business Officers' (NACUBO)-recommended Sarbanes-Oxley (SOX) Act of 2002 whistleblowing Best Practices (BP) provisions (Anti-Retaliation & CCM). Following a series of high-profile corporate financial scandals, the U.S. Congress enacted SOX for publicly traded companies. At present, SOX is not federally-mandated for public and private universities and colleges. However, data indicate fraud can be an even bigger issue in HEIs than in publicly traded corporations.

Utilizing a quantitative (Web-based survey) research method with a Modified Rational Actor Model (MRAM), I gained the following insight into key topical elements and policy implications. The level of HEI CCM implementation has risen from 65% (2007) to 81% (2013). Many HEIs expected Financial, Governance, and Ethics benefits in CCM implementation, despite the existence of significant Barriers. HEIs' assessment of whistleblowers' motivation was not found to be associated with their Institutional level of SOX BP implementation. Locally-tailored HEI SOX BP policy implementation resulted in positive self-assessed tangible/intangible results. There is a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI's satisfaction with voluntarily continuing CCM implementation. High-level decision maker involvement in CCM implementation is correlated to HEI self-assessed CCM program effectiveness.

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Our daughters, Meredith Brock and Madeline McMillan, and son, Bryan Brock, staunchly supported and encouraged me. My dear bride, Libba McMillan, has been a rock. Libba consistently inspired me to courageously deliver a salient message and faithfully complete the mission. She is the wife of noble character spoken of in Proverbs 31. I am truly blessed.

I hope practitioners will take the time to comprehend and apply the enclosed message. It came at a tremendous price. Please read Theodore Roosevelt's "Man in the Arena" excerpt in Chapter 5. Many loyal whistleblowers voluntarily jumped into the arena in order to disclose insider information about illegal activities. Countless whistleblowers have tangible and intangible scars associated with their courageous actions. At this point I too am dusty, bloody and worn. My intent has been to faithfully deliver this message. I trust my "place shall never be with those cold and timid souls who neither know victory nor defeat" (Roosevelt, 1910). Will future generations find us courageous with anti-fraud and whistleblower protection efforts?

Table of Contents

Abstract.....	ii
Acknowledgments.....	iii
List of Tables	ix
List of Figures.....	xiii
List of Abbreviations	xiv
Chapter 1. Introduction	1
Background of the Study	3
Fraud and Occupational Fraud.....	4
Sarbanes-Oxley Act of 20002 NACUBO Best Practices	5
Significance of the Study	6
Research Objectives and Questions	6
Research Question 1	7
Research Question 2	8
Research Question 3	9
Research Question 4	10
Research Question 5	11
Research Question 6	11
Organization of the Study	12

Chapter 2. Literature Review	13
Fraud	13
Impact of Resource Loss.....	14
Recovery of Funds	16
White-Collar Criminal (Fraudster) Mindset	16
Whistleblowers	17
Whistleblower Protections and Considerations	20
Organization’s Decision-making Process – Organization Theory	23
Rational Actor Model (RAM)	23
Rational Actor Model (RAM) Advocates and Critics	25
Organizational Behavior Model (OBM).....	27
Organization Behavior Model (OBM) Advocates and Critics	27
Governmental Politics Model (GPM).....	31
Governmental Politics Model (GPM) Information Asymmetry, Principals and Agents	32
Governmental Politics Model (GMP) Assets and Challenges	32
Reality Check: Organization’s Response to Fraud and Whistleblowers	36
Providing a Trustworthy Disclosure Environment	36
Whistleblower Disclosures and Management Retaliation	38
“Noise” Disclosures	40
Retaliation Viewed From an Employee’s Perspective.....	40
Organization’s Assessment of Whistleblower Motivation to Disclose ..	42
Whistleblower’s Disclosure Calculation – Principal-Agent Theory	45
The HEI Environment.....	47

Organizational Culture.....	47
A Complex, Challenging HEI Environment.....	48
Pressures, Incentives, and Challenges in HEIs	49
Engaged Leadership.....	50
HEI Policy Agenda and Stewardship.....	50
Research Model – Modified Rational Actor Model (MRAM)	51
Chapter 3. Research Hypotheses and Methodology	56
Research Questions and Hypotheses	57
Research Question 1	57
Research Question 2	58
Research Question 3	64
Research Question 4	66
Research Question 5	67
Research Question 6	70
Data Source.....	72
Study Impetus and Collaboration with NACUBO.....	72
Collaboration with ACUA	75
Management, Governance and Fraud Survey Overview	76
Survey Questions: An Overview	76
Hypotheses, Survey Instrument and Coding.....	79
Research Question 1	79
Research Question 2	79
Research Question 3	83

Research Question 4	84
Research Question 5	88
Research Question 6	90
Method of Analysis.....	92
Research Question 1	93
Research Question 2	93
Research Question 3	95
Research Question 4	95
Research Question 5	95
Research Question 6	96
Chapter 4. Research Findings	98
Research Questions, Hypotheses and Results	99
Research Question 1	99
Research Question 2	100
Hypothesis 2.1 Financial Expectations	101
Hypothesis 2.2 Governance Expectations.....	104
Hypothesis 2.3 Ethics Expectations	106
Hypothesis 2.4 Barriers	109
Research Question 3	133
Research Question 4	137
Hypothesis 4.1, Institutionally-supported CCM and CCM Makes Sense.....	152
Hypothesis 4.1, Whistleblower Protection and Discovering Fraud.....	161

Hypothesis 4.1, Whistleblower Protection and Results (CCM Makes Sense)	177
Hypothesis 4.1, Whistleblower Protection, CCM Implementation and CCM Makes Sense	186
Research Question 5	200
Hypothesis 5.1.....	212
Research Question 6	218
Chapter 5 Research Implications	232
The Future Path.....	255
References.....	260
Appendix 1 “Other” Independent Investigator Method.....	265
Appendix 2 Management, Governance, and Fraud Survey	266
Appendix 3 IRB Protocol 13-033 EX 1301 and Information Letter	281
Appendix 4 IRB Protocol 13-033 EX 1301 Modification.....	293

List of Tables

Table 1	Common Fraudster Red Flags	19
Table 2	Cross-section of Whistleblower Protection Considerations	21
Table 3	Theoretical Model Summary (RAM, OBM, and GPM).....	34
Table 4	Negative Responses to Whistleblower Disclosures.....	39
Table 5	Retaliation against Whistleblowers.....	42
Table 6	Modified Rational Actor Model (MRAM) Summary.....	54
Table 7	NACUBO Member Institution Demographics	73
Table 8	Population by Region, Representation, and Response Rate (All %)	75
Table 9	Level of CCM Implementation.....	100
Table 10	Expectations of Financial Benefits from CCM Implementation	102
Table 11	Implementers' and Non-Implementers' Expected Financial Benefits from CCM Implementation (%)	104
Table 12	Expectations of Governance Benefits from CCM Implementation (%).....	105
Table 13	Implementers' and Non-Implementers' Expected Governance Benefits from CCM Implementation (%)	106
Table 14	Expectations of Ethics Benefits from CCM Implementation	107
Table 15	Implementers' and Non-Implementers' Expected Ethical Benefits from CMM Implementation (%)	109
Table 16	CCM Implementers' and Non-Implementers assessed Barriers Likert Scale (%) .	113

Table 17	CCM Implementers' and Non-Implementers' Expectation Scales Summary	114
Table 18	ANOVA Summary: Financial Expectations and CCM Implementation	116
Table 19	CCM Implementers and Non-Implementers Governance Expectations.....	120
Table 20	CCM Implementers and Non-Implementers Ethics Expectations	124
Table 21	CCM Implementers and Non-Implementers Assessed Barriers, Significant.....	129
Table 22	CCM Implementers and Non-Implementers Assessed Barriers, Not Significant..	130
Table 23	HEI's Perceived Whistleblower Motivation to Disclose	135
Table 24	Implementers' Institutionally-supported CCMs	138
Table 25	Implementers' Third-party Vendor-supported CCMs	139
Table 26	Method by which Whistleblower's Confidentiality is Protected.....	140
Table 27	How Implementers Measure CCM Success (%)	142
Table 28	HEIs' Aggregate Funds Affected by Fraud in Past Three Years.....	143
Table 29	HEIs' Fraud Case Disposition within the Past Three Years.....	144
Table 30	HEIs' Aggregate Fraud Funds Returned to the Institution	145
Table 31	Non-CCM Source of Fraud Discovery	146
Table 32	Does CCM Make Sense for the Institution – HEI's Self-Assessment.....	148
Table 33	Chi-Square: CCM Implementers and Results.....	151
Table 34	Crosstab CCM Implementers and Results (CCM makes sense) by Percent.....	152
Table 35	Institutionally-supported CCM and Categorized Results (CCM Makes Sense) (%).....	155
Table 36	Crosstab Whistleblower Protectors and Results (CCM Discovered Fraud)	162
Table 37	Discovery Source for Five Implementers with Fraud who did not Protect Whistleblowers	163

Table 38	Discovery Source for Eight Non-Implementers with Fraud who did not Protect Whistleblowers	164
Table 39	Non-CCM Source of Fraud Discovery, Rank Ordered by Percent Use	166
Table 40	Aggregate Fraud Funds Affected versus Was CCM Source of Discovery (%).....	167
Table 41	CCM Implementer Aggregate Fraud Funds Affected versus Was CCM Source of Discovery (%).....	168
Table 42	CCM Non-Implementer Aggregate Fraud Funds Affected versus Was CCM Source of Discovery (%).....	170
Table 43	Aggregate Funds Returned (Q43) regarding Aggregate Fraud Funds Affected (Q41) vs. Source of Discovery (Q45).....	171
Table 44	CCM Implementer Aggregate Funds Returned regarding Aggregate Fraud Funds Affected versus Source of Discovery	172
Table 45	CCM Non-Implementer Aggregate Funds Returned (Q43) regarding Aggregate Fraud Funds Affected (Q41) vs. Source of Discovery	173
Table 46	CCM Non-Implementer Aggregate Funds Returned versus Source of Discovery, Rank-ordered by % Aggregate Returned	174
Table 47	Whistleblower Protectors and Results (CCM makes sense).....	177
Table 48	HEIs With and Without at least One Whistleblower Protection Method versus CCM Makes Sense	180
Table 49	Crosstab CCM Implementation and Whistleblower Protection by %	188
Table 50	Crosstab CCM Implementation, WB Protection and Results (CCM makes sense) by %	189

Table 51	HEIs With and Without at least One Whistleblower Protection Method versus Categorized Results (CCM Makes Sense) by %	191
Table 52	Method by which HEI Investigates/Resolves Allegation/Complaint	201
Table 53	Crosstab HEIs with at least one Impartial Investigator and Results (CCM makes sense) by %	204
Table 54	HEIs With and Without at least One Impartial Investigator versus Satisfaction with CCM (%).....	207
Table 55	Crosstab HEIs with at least One Impartial Investigator and Results (Discover Fraud) by %	213
Table 56	Discovery Source for Four Implementers with Fraud who did not provide Impartial Investigators (HEIs selected all that apply).....	215
Table 57	Discovery Source for 8 Non-Implementers with Fraud who did not provide Impartial Investigators (HEIs selected all that apply).....	216
Table 58	Frequencies of CCM Implementing HEIs' Decision-Making Process Leaders	219
Table 59	HEIs with at least One CCM Leader and Results (Satisfaction with CCM) by %	222
Table 60	Crosstab HEIs with at least one CCM Leader and Results (CCM makes sense) by %	224
Table 61	Hypothesis 2 Confirmation Summary	238

Note: All Tables are from the 2012 NACUBO Survey.

List of Figures

Figure 1 Modified Rational Actor Model Conceptual Framework	55
Figure 2 HEIs' Significant Expected Benefits from CCM Implementation.....	235
Figure 3 HEIs' Significant Barriers to CCM Implementation.....	237
Figure 4 HEIs' Significant Locally-tailored Policies Related to Results	244
Figure 5 HEI Impartial Investigator Related to Results.....	247
Figure 6 Engaged Leadership Related to Results	249

List of Abbreviations

ACUA	Association of College and University Auditors
CCM	Confidential Complaint Mechanism
IRB	Institutional Review Board for Research Involving Human Subjects Research
NACUBO	National Association of College and University Business Officers
HEI	Higher Education Institution
SOX	Sarbanes-Oxley Act of 2002

CHAPTER 1. INTRODUCTION

Fraud is not a victimless crime – just ask the former Enron and WorldCom employees, investors and creditors whose world was turned upside down by deception. The effects of fraud span worldwide – consider all of the individuals whose lives were rocked by the financial markets’ tumultuous response to billions in assets precipitously vaporizing. This borderless parasite named fraud drains scarce resources – estimated at 5% annually on average – from all institutional sectors – private and public companies, governmental, and not-for-profit (Report to the Nations on Occupational Fraud and Abuse, 2014). The frequency and extent of fraud can be mitigated – as a review of the literature establishes. However, fraud continues to occur, organizations do not implement published anti-fraud measures, and individuals with knowledge of suspected or observed fraudulent activities (labeled potential “whistleblowers”) do not timely disclose their insider information to prevent and/or mitigate the adverse effects of fraud. One could wonder, “Given the preponderance of evidence that fraud can be prevented or its effects mitigated, *why* does this cycle of anti-fraud non-implementation continue?” In other words, why do some organizations voluntarily implement anti-fraud measures while other organizations do not? Likewise, why do some individuals disclose perceived or observed wrongdoings while other individuals do not disclose? Addressing these questions can provide generalizable insight into what Confidential Complaint Mechanism (CCM) implementers found to be worthwhile, why implementation was worth the cost, and what barriers inhibited implementation and/or program success. Understanding and sharing gained insight can help implementers and non-

implementers learn from each other, potentially encouraging both parties to re-examine their fraud prevention policy approach, and protect their scarce resources and institutional reputation.

A subset of the institutional sectors affected by fraud includes post-secondary Higher Education Institutions (HEIs). HEIs have endured excruciating budgetary strains due to the nation's sharp economic downturn and slow recovery. At the same time, the American public increasingly demands transparency in the accountability of scarce public resources. The study's unit of analysis is 2- and 4-year degree-granting public and private United States Universities. The purpose of this exploratory study is to determine HEIs' level of implementation, expectations and effects from voluntarily implementing National Association of College and University Business Officers' (NACUBO)-recommended Sarbanes-Oxley (SOX) Act of 2002 whistleblowing Best Practices (BP) provisions.

Mentally place yourself as an incoming freshman's parent attending a group orientation session in the following hypothetical scenario prior to the first day of class, as a distinguished institutional administrator states:

A warm welcome and congratulations on your graduating high school senior's admission to Sullied University! As you settle into your seat, we need to update you on a recent change to our tuition/fees schedule and the estimated cost of undergraduate attendance. Unfortunately, we recently discovered several incidents of occupational fraud amounting to \$45 million. The combined incidents of asset misappropriation, corruption schemes, and financial statement fraud could have been avoided and/or significantly mitigated with an effective confidential complaint mechanism and anti-retaliation policies, but our Institution chose to disregard NACUBO Best Practices recommendations as well as those well-publicized lessons learned and recommendations from the Association of Certified

Fraud Examiners. We do not anticipate being able to recover any of the fraudulently-obtained funds. We sincerely apologize for any inconvenience to you this loss entails. Your student's estimated cost of attendance has resultantly increased 5%, effective immediately. You will receive a revised Bursar bill this afternoon. If your child graduates on time and no additional frauds or inflation adjustments occur, your total outlay should be approximately \$111,502. Likewise, out-of-state students' total outlay should increase to approximately \$177,626. These are estimates only. Your personal outlays could further increase if anticipated adverse publicity results in decreased state appropriations, a loss of benevolent donor contributions, and/or decreased student enrollment. Please timely pay your revised bill; otherwise, your child's class schedule will be dropped on the first day of class. Again, welcome to Sullied University!

Background of the Study

Following a series of high-profile corporate financial scandals, the U.S. Congress enacted SOX for publicly traded companies. At present, SOX is not federally mandated for public and private universities and colleges. The effects of fraud are far-reaching, as illustrated in the preceding vignette. A highly respected worldwide survey of 1,483 cases of occupational fraud indicates organizations worldwide could potentially lose nearly \$3.7 trillion annually (Report to the Nations on Occupational Fraud and Abuse, 2014). However, it may be possible to reap numerous benefits from selectively implementing locally appropriate SOX whistleblowing provisions while mitigating the adverse effects from full-scale SOX implementation. In light of cutback budgets and potential sustainable SOX benefits, a review of the literature indicates HEIs should consider voluntarily selecting and implementing applicable SOX principles and NACUBO recommendations tailored to their specific circumstances. As frauds are occurring,

risk-neutral Principals (organizations) must adequately address risk-averse Agents' (whistleblowers) concerns to gain access to the latter's shrouded, asymmetric information (Shapiro, 2005). Forms of information asymmetry can include insider information of retaliation and fraud. Whistleblowers are the Agents who possess insider-information on alleged fraudulent activities and/or retaliation, while the organization's management team is the Principal. "Glazer and Glazer (1989, pg. 4) define a Whistle-blower as one who (a) acts to prevent harm to others, not him or herself, (b) while possessing evidence that would convince a reasonable person" (Heyes, 2008). Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud as,

Tips are consistently and by far the most common detection method. Over 40% of all cases were detected by a tip – more than twice the rate of any other detection method.

Employees accounted for nearly half of all tips that led to the discovery of fraud. (Report to the Nations on Occupational Fraud and Abuse, 2014).

Obtaining whistleblower's asymmetric information concerning fraud lies within three realms: the whistleblower's disclosure calculation, the HEI's decision-making process, and the HEI environment.

Fraud and Occupational Fraud

Fraud has been defined as "the crime or offense of deliberately deceiving another in order to damage them – usually in order to obtain property or services unjustly" (Robinson, 2012).

Occupational fraud has been defined as "the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets" (Report to the Nations on Occupational Fraud and Abuse, 2014).

Sarbanes-Oxley Act of 2002 NACUBO Best Practices

Congress enacted the Sarbanes-Oxley Act of 2002 (SOX) in response to high-impact frauds to regain the public's trust and "calm the raging crisis of confidence in American capitalism" (Frank & Fink, 2008). In so doing, publicly traded companies received onerous oversight and extensive internal control requirements that "addressed numerous items including management responsibilities, punishment for fraud, financial reporting, disclosures, and recordkeeping" (Smith, 2006). However, SOX requirements only apply to publicly traded corporations. SOX implementation is not federally mandated for public and private universities and colleges. SOX directs that publicly-traded companies must meet far-reaching requirements. Salient to preventing and mitigating fraud, SOX includes requirements to establish a confidential complaint mechanism to facilitate disclosure and enact a whistleblowing policy to protect whistleblowers from retaliation. Related SOX mandates include requirements to strengthen internal controls, formalize a code of conduct/code of ethics policy, increase accountability over expenditures, reduce conflict of interest, establish independent auditor limitations, formalize audit committee oversight and rotation policy, establish CFO/Controller prior auditor policy, establish an independent audit committee, require at least one audit committee member to be a financial expert and periodically rotate the role, retain audit documents and associated records for seven years, and consider securities fraud convictions relevant in new employees' background checks (Menditto, NACUBO Advisory Report 2003-3, 2003; Smith, 2006). Although SOX has numerous other provisions, this synopsis summarizes NACUBO SOX Best Practices.

Significance of the Study

Data indicate the public domain in which HEIs reside can be more conducive to fraud than entities outside the public realm (such as publicly traded corporations – which have garnered great attention from politicians, the press and shareholders) (Kranacher, 2005). In its latest study, the Association of Certified Fraud Examiners’ survey “estimated that the typical organization loses 5% of its annual revenues to occupational fraud”; to make matters worse, 58% of victim organizations do not recover any of their fraud losses, which is up from 49% in 2012 (Report to the Nations on Occupational Fraud and Abuse, 2014). Applied to 2007 total annual revenues, HEIs could readily lose an average of \$13.4 billion per year due to occupational fraud. This loss would have been sufficient to replace all of the Public HEI combined revenues for Alabama, Colorado and Mississippi during the 2007 academic year. Classified by industry, Education had the fifth-highest percent of fraud cases [5.9%] investigated by Certified Fraud Examiners within the last two years, which is the same ranking in the 2012 Report and is up from seventh place in the 2010 Report (Report to the Nations on Occupational Fraud and Abuse, 2014). In short, the negative occupational fraud trend for HEIs is consistently challenging and can adversely amount to a substantial financial-, governance-, and ethics-issue.

Research Objectives and Questions

Peer-reviewed SOX whistleblower research over the last twelve years has mainly dealt with corporate entities. The last NACUBO study found an increase in Public/Private HEI Confidential Complaint Mechanism (CCM) implementation from 47% (2004) to 65% (2007). CCMs can be defined as the process (Hotline, Fax, Website, E-mail, Postal mail, Physical Drop Box, etc.) by which whistleblowers can report perceived/observed wrongdoings. While the 18% CCM implementation level increase from 2004–2007 can be viewed as an improvement, three

overarching questions remain. First, “Has the level of HEI CCM implementation changed since 2007?” Second, “Why are 35% of responding institutions still choosing to not implement CCM?” Third, “Are responding institutions implementing effective whistleblowing protection provisions?” The last two questions address key Structural Model and Anti-Retaliation Model issues, respectively. The Confidential Complaint Mechanism, also known as the “Structural” Model, is optimally geared towards providing an internal “direct and legitimate” disclosure channel (Moberly, 2006). This confidential complaint mechanism can be designed to mitigate and/or overcome two historically significant roadblocks to effective disclosure: the entity’s norm of silence and organization/peer employee blocking/filtering efforts (Moberly, 2006). The whistleblowing policy, also known as the “Anti-Retaliation” Model, is geared towards protecting the whistleblower after disclosure (Moberly 2006). Generalizable data indicating whether voluntarily implementing SOX whistleblowing Best Practices benefits HEIs do not exist. Generalizable HEI data concerning what whistleblowing policies were implemented and why they were chosen is non-existent. Likewise, generalizable data indicating what factors (i.e., barriers) were present with non-implementing HEIs do not exist. This quest for insight led to the following research questions and resultant hypotheses.

Research Question 1: Has CCM implementation level changed?

Has the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels? Hypothesis 1: The level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels. This question ascertains if the institution has a Confidential Complaint Mechanism for employees; the chosen answer branches survey instrument participants into CCM “Implementers” and “Non-Implementers.”

Research Question 2: Why has the implementation level changed?

If the level of SOX Best Practices whistleblowing policy implementation changed (increased or decreased) from 2007 NACUBO survey levels, why has this change occurred?

There is a gap in the literature concerning why HEIs have implemented CCM. Possible motivations explaining HEIs' CCM implementation could be that the organizations found sufficient value-added in the financial, governance, and/or ethics benefits of implementation to justify the cost of so doing. Therefore, Hypothesis 2.1 states: As HEIs have assessed financial cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels. Did HEIs expect financial benefits from CCM implementation? Possible financial benefits include decrease fraud, gain insider's knowledge on alleged fraud, improve confidence in institution's stewardship of public funds, enhance grant proposals and funding solicitations, provide competitive edge over non-implementers, and lower operating costs. Another area of potential benefits relates to governance issues.

Closely related Hypothesis 2.2 states: As HEIs have assessed governance cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels. Did HEIs expect governance benefits from implementation? Possible governance benefits include proactively protect the institution's reputation, improve internal information flow, and improve institution's decision-making. A third area of potential benefits relates to ethics matters.

Similarly, Hypothesis 2.3 states: As HEIs have assessed ethics cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels. Did HEIs expect ethics benefits from implementation? Possible ethics

benefits include attract students, recruit and retain ethical employees, build local capacity for self-governance, and improve culture and signal that institution supports ethical conduct and accountability.

Conversely, the next hypothesis attempts to discern if HEIs experienced barriers to CCM implementation and/or success. Thus, Hypothesis 2.4 states: As HEIs have assessed cost-benefit disadvantages (i.e., “Barriers”), the level of SOX Best Practices whistleblowing policy implementation has decreased or remained level from 2007 NACUBO survey levels. Did HEIs expect barriers to implementation? Possible barriers include perceived costs outweigh benefits, stakeholder disagreements, CCM program more complex than originally perceived, and policy disagreement. Additional barriers could include Institutional pushback from faculty, Institutional pushback from Office of the President/Chancellor, time constraints, too many decision makers and/or unanticipated decision points, CCM incompatible with institutional culture, anticipated too many “noise” disclosures would overwhelm institutional capacity, Institutional pushback from Central Administration, Institutional pushback from Board of Trustees, program administration/responsibility issues, low sense of urgency, external pushback/resistance, and CCM advocate support waned. Besides assessing HEIs’ CCM implementation expectations and barriers, it could be insightful to glean whether HEIs’ assessment of whistleblowers’ motivation to disclose is correlated to their institutional level of SOX Best Practices (Anti-Retaliation & CCM) implementation, which is addressed in Research Question 3.

Research Question 3: HEI assessment of whistleblower motivation and implementation level.

Does HEIs’ assessment of whistleblowers’ motivation affect their Institutional level of SOX Best Practices (Anti-Retaliation & CCM) implementation? Hypothesis 3.1 states: HEIs

that assess whistleblowers as “Welfarists” have higher levels of SOX Best Practices (Anti-Retaliation & CCM) implementation than HEIs who assess whistleblowers as “Conscious clearing” or “Punitive.” This follows an Economic Theory in which the institution’s view of the whistleblower’s primary motivation to disclose perceived/observed illegal acts influences the organization’s level of Anti-Retaliation and Confidential Complaint Mechanism (CCM) policy implementation. Besides assessing whistleblowers’ motivation to disclose, HEIs can selectively implement locally tailored policies, which is addressed in Research Question 4.

Research Question 4: Locally tailored Anti-Retaliation and CCM policy implementation and tangible/intangible results.

One of the major complaints publicly traded companies have of SOX is that full-scale implementation is too costly. One feasible option is for organizations to selectively implement CCM elements that, given the HEI’s unique circumstances, add sufficient value to be worthwhile. In essence, does locally tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation result in positive self-assessed tangible/intangible results? Hypothesis 4.1 states: Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results. This concept addresses the type of CCM and whistleblower protection implemented and the institution’s assessment of the bottom line tangible/intangible results. Besides locally tailored policies, HEIs can assign impartial investigators of alleged retaliation and fraud complaints, which are addressed in Research Question 5.

Research Question 5: Impartial investigators and HEI's satisfaction with voluntarily continuing CCM implementation.

Similar to HEI's cost-benefit calculation regarding locally tailored CCM policies, is there a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI's satisfaction with voluntarily continuing CCM implementation?

Hypothesis 5.1 states: HEIs with impartial investigators of alleged retaliation and fraud complaints find the SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their institution at a higher level than HEIs without impartial investigators. This concept addresses what type of independent investigator of allegations/complaints was implemented and the institution's assessment of the bottom line tangible/intangible results. Moving from assessing the effects of impartial allegation/complaint investigators, the final research question assesses the effects of engaged leadership.

Research Question 6: Leadership and program effectiveness.

The final research question discerns whether involved HEI leadership matters with respect to results. Is high-level decision maker involvement in CCM implementation correlated to HEI self-assessed CCM program effectiveness? Hypothesis 6.1 states: HEIs with high-level decision-maker involvement in Anti-Retaliation & CCM policy implementation had greater self-assessed program effectiveness than HEIs without executive leadership/governance support. This concept addresses whether engaged leadership/governance was involved and the institution's assessment of the bottom line tangible/intangible results.

Organization of the Study

This study includes five chapters. Chapter 1 offers an introduction, background, significance, and organization. Chapter 2 provides a literature review of fraud, whistleblowers, the organization's decision-making process, organization's response to fraud and whistleblowers, the whistleblower's disclosure calculation, the HEI environment, and the research model. Chapter 3 discusses the research hypotheses and methodology. Chapter 4 examines the survey responses and research findings. Chapter 5 concludes with applicable research implications.

With these research questions and corresponding hypotheses in mind, it is first helpful to review the literature concerning factors which enter into organizations' and whistleblowers' decisions (both of which are found in Principal-Agent Theory): namely, the nature of fraud, the whistleblower's disclosure calculation, the organization's decision-making process as found in Organization Theory, and the HEI environment in which these decisions and calculations reside.

CHAPTER 2. LITERATURE REVIEW

This chapter provides a thorough background on salient concepts to this study, including fraud, whistleblowers, the organization's decision-making process – Organization Theory, organizations' response to fraud and whistleblowers, the whistleblower's disclosure calculation, and the HEI environment. The concluding section presents a Modified Rational Actor Model, a lens through which the study was conducted.

Fraud

Fraud is a borderless parasite that drains scarce resources worldwide – estimated at 5% annually on average – from all institutional sectors – private and public companies, governmental, and not-for-profit (Report to the Nations on Occupational Fraud and Abuse, 2014). Fraud has been defined as “the crime or offense of deliberately deceiving another in order to damage them – usually in order to obtain property or services unjustly” (Robinson, 2012). Occupational fraud has been defined as “the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets” (Report to the Nations on Occupational Fraud and Abuse, 2014). A sample of several recent HEI fraud cases helps illustrate the extent and severity of this cancerous challenge. First, the University of Tennessee president resigned after being accused of misusing university credit cards, misleading internal auditors, failing to provide credit card receipts, altering documents, making personal trips on university funds, purchasing extravagant items for his private home with university funds, personal use of the university's airplane, and awarding a

\$300,000 no-bid consulting contract to a friend. Second, consider the unauthorized diversion of nearly \$1 million at the University of North Carolina, as well as consulting and expenditure payments to a former administrator, which violated University policies. Third, a Central Connecticut University CFO was fired and accused of fraudulently circumventing the competitive-bidding process, including funneling a \$40 million, 10-year contract to a company from which he personally received benefits. Fourth, the Alabama A&M University president was forced to leave amid accounting irregularities and allegations his wife falsified payroll documents as a university employee (Kranacher, 2005). The breadth and depth of frauds inside and outside of higher education institutions are extensive, damaging and seemingly pervasive.

Impact of Resource Loss

A highly-respected worldwide survey of 1,483 occupational fraud cases indicates organizations worldwide could potentially lose nearly \$3.7 trillion annually (Report to the Nations on Occupational Fraud and Abuse, 2014). A subset of the institutional sectors affected by fraud includes post-secondary Higher Education Institutions (HEIs). HEIs receive scarce resources. In 2007, while conferring over 3 million degrees, Public HEIs received revenues totaling over \$268 billion from multiple sources (including state appropriations, Federal intergovernmental transfers, taxes, charges and miscellaneous general revenues, interest, assessments, sales of property and liquor, utilities, and insurance trust revenues) (I. N. Statistics 2010). These funds for public higher education are a significant outlay, even when compared to all state and local government revenues, which totaled over \$3 trillion in 2009 (excluding duplicative intergovernmental transactions). Students and their supportive parents/guardians have endured a 32% rise (after adjustment for inflation) in the cost for HEI undergraduate tuition, room and board between academic years 1998–1999 and 2008–2009 (D. o. Statistics

2009). As stewards of these sizeable resources, university and college administrators answer to a broader constituency (general public, alumni, donors, foundations, governmental agencies and grantors), than do publicly traded corporations, who primarily answer to their stockholders (Mattie, 2004). It would be easy to believe that HEIs are not susceptible to fraudulent activities like Enron and WorldCom. However, according to the Association of Certified Fraud Examiners (ACFE),

All types of organizations are susceptible to fraud – even colleges and universities.

According to articles in the Chronicle of Higher Education and other print media, universities are sometimes quite different from the bastions of ethics they preach... In fact, because of concerns about the effect of ‘bad press’ on public relations and fundraising, higher education has frequently sought to negotiate ‘back-room deals’ as opposed to rooting out the problem. Therefore, the cases that do reach the public eye could be just the tip of the iceberg. [This] exacerbates the problem [because] others in the organization observe the manner in which this activity is handled and may perceive that the school condones this type of behavior because of the lack of appropriate consequences for the fraudulent act. (Kranacher, 2005)

Higher Education Institutions (HEIs) are the fifth highest organizations where fraud is reportedly occurring (up from seventh place in 2010), according to the Association of Certified Fraud Examiners (Report to the Nations, 2014). This negative trend (from seventh highest to fifth highest collective organizations with fraud) exacerbates organizations which could readily experience annual losses up to \$13.4 billion. To make matters even more challenging, background checks and investigating previous convictions is unlikely to severely mitigate the threat, as “only about 7% of fraudsters had previously been terminated by another employer for

fraud; the vast majority (84%) of occupational fraudsters had never been punished or terminated by an employer for a fraud-related offense before the frauds in question” (Report, 2014).

Recovery of Funds

In its latest Report, the Association of Certified Fraud Examiners’ survey “estimated that the typical organization loses 5% of its annual revenues to occupational fraud”; to make matters worse, 58% of victim organizations do not recover any of their fraud losses, which is up from 49% in 2012 (Report to the Nations on Occupational Fraud and Abuse, 2014). Applied to recently available [2007] total annual revenues, HEIs could readily lose an average of \$13.4 billion per year due to occupational fraud. This loss would have been sufficient to replace all of the Public HEI combined revenues for Alabama, Colorado and Mississippi during the 2007 academic year. Classified by industry, Education had the fifth-highest number of fraud cases [88] investigated by Certified Fraud Examiners within the last two years, which is up from seventh highest in the 2010 Report (Report to the Nations on Occupational Fraud and Abuse 2014). In short, the occupational fraud trend for HEIs is getting worse and occupational fraud can amount to a substantial issue, even for HEIs.

White-Collar Criminal (Fraudster) Mindset

It is important to understand the typical fraudster’s mindset, since doing so enhances one’s ability to establish adequate control mechanisms and appropriately observe/report red flag behaviors (Marks, 2012). Common white-collar criminal behaviors include the lack of a moral compass, as well as troubling friends, family and relationships; other common white-collar criminal behaviors include deception, arrogance, and cleverness and creativity (Marks, 2012). Equally important is identifying the environment susceptible to white-collar crime. Characteristics of an environment ripe for fraud include a weak tone from the top, a vulnerable

culture in which whistleblowing is not supported, and compensation structures that reward unethical and/or excessively risky behavior (Marks, 2012). Each of these factors has one common theme: whistleblowing. An organization which establishes a structural reporting mechanism (such as a confidential complaint mechanism) and protects whistleblowers (through anti-retaliation measures) is in a better position to gain insight into fraudster's red flag behaviors and/or organizational gaps through employees' timely observations and disclosures.

Considering the adverse impact fraud can have on all organizations, one could logically ponder how fraud can be mitigated and/or avoided. This inquiry leads us to a key source of unknown information frequently underutilized by organizational decision makers: whistleblowers.

Whistleblowers

Whistleblowers oftentimes possess insider information on alleged fraudulent activities and/or retaliation. "Glazer and Glazer (1989, pg. 4) define a Whistle-blower as one who (a) acts to prevent harm to others, not him or herself, (b) while possessing evidence that would convince a reasonable person" (Heyes, 2008). Whistleblowers' insider information is a form of information asymmetry – knowledge the whistleblower possesses of which others (often times including management and/or governance entities such as Trustees) are unaware. Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud as,

Tips are consistently and by far the most common detection method. Over 40% of all cases were detected by a tip – more than twice the rate of any other detection method.

Employees accounted for nearly half of all tips that led to the discovery of fraud. (Report to the Nations on Occupational Fraud and Abuse, 2014)

This insider information, which whistleblowers are uniquely positioned to perceive and/or observe, can include so-called “red flags” fraudsters historically exhibit. While these “red flags” do not irrefutably indicate fraud is definitely occurring, oftentimes such conduct is significantly associated with fraudsters’ shrouded behavior. These red flags include the fraudster living beyond their means, experiencing exceptionally challenging financial stressors, an unwillingness to share their duties with fellow workers, and a refusal to take vacations (Report to the Nations on Occupational Fraud and Abuse, 2014). The study found that “at least one red flag was identified in 92% of cases and, in 64% of cases, the fraudster displayed two or more behavioral red flags” (Report to the Nations on Occupational Fraud and Abuse, 2014). While some of these behaviors may commonly be found in various environments, in other settings such behaviors may seem out of place and warrant administration’s increased attention. However, frequently these behavioral red flags fly under management’s radar coverage while such conduct is glaringly obvious to potential whistleblowers. Rank ordered (highest to lowest), these red flags (shown in Table 1) are oftentimes best observed and known by entity insiders.

Table 1

Common Fraudster Red Flags

Ranking (Highest to Lowest)	Red Flag
1	Living beyond means
2	Financial difficulties
3	Unusually close association with Vendor/Customer
4	Control issues – unwillingness to share duties
5	Wheeler-dealer attitude
6	Divorce/Family problems
7	Irritability, suspiciousness or defensiveness
8	Addiction problems
9	Past Employment-related problems
10	Complained about inadequate pay
11	Past employment-related problems
12	Refusal to take vacations
13	Excessive pressure from within organization
14	Social isolation
15	Complained about lack of authority
16	Excessive family/peer pressure for success
17	Instability in life circumstances
18	Past legal problems

Source: Report, 2014.

To know these red flags are present, management and trustees need access to insider's (i.e., employees') information. Whistleblower's insider information is also a key element of the perception of detection, which the Association of Certified Fraud Examiners (ACFE) identified as the most significant aspect of mitigating fraud damages. According to their most recent report, organizations that utilized internal controls, such as anti-fraud controls like hotlines and proactive data monitoring/analysis, experienced a significant reduction in fund losses and detected their frauds at least twice as quickly as organizations lacking such controls (Report to the Nations on Occupational Fraud and Abuse, 2014). We have seen the nature and extent of fraud. Additionally, we realize whistleblowers are uniquely positioned to mitigate (through the perception of detection) and disclose red flags as well as perceived and/or observed fraudulent activities. It would be logical to review available whistleblower protection resources and considerations.

Whistleblower Protections and Considerations

Federal and State Whistleblower Protections provide a dizzying array to potential whistleblowers. For instance, under federal law, whistleblowers could potentially seek protection through constitutional protections, consumer product safety provisions, corporate protections, criminal prohibitions, environmental protection, federal contractor provisions, and rewards and Qui tam statutes. Additional whistleblower protection avenues include federal court witness protections, federal employee whistleblower protections, food safety protections, health care protections, IRS tax whistleblower protections, Military/DoD/National Security whistleblower protections, Nuclear Safety/Occupational Health and Safety, Privacy Act, transportation, and workplace discrimination provisions (EEO, Labor Rights) (Kohn, 2011). State laws compound the landscape, as the fifty states have varying degrees of whistleblower

protections and anti-retaliation provisions. Potential whistleblowers must wade through the expansive, oftentimes confusing collection of possible protection mechanisms. Each of these provisions has their own procedures, requirements and timelines, any of which can readily thwart successful completion if violated. Highlights of several whistleblower protection considerations are included in Table 2.

Table 2

Cross-section of Whistleblower Protection Considerations

Whistleblower Protection Consideration	Comment
Sources	
U.S. Constitution First Amendment	Protection for Public Employees who blow the whistle on matters of Public Concern.
Civil Rights Act of 1871	Statutory protection for state and local government employee whistleblowers whose speech is protected under First Amendment. Law permits federal court lawsuit for damages and other relief. Compensatory and punitive damages permitted. Cases heard by jury trial.
Civil Rights Attorney Fee Act	Provision in law permitting award of statutory attorney fees in employment discrimination and retaliation cases filed under Title VII of the Civil Rights Act and the Civil Rights Act of 1871
Consumer Product Safety Act of 2008	Protection for employees who blow the whistle on covered consumer safety hazards and violations
Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010	Contained three new whistleblower protection provisions and amended the SOX and False Claims Act whistleblower laws

Whistleblower Protection Consideration	Comment
Sources	
Obstruction of Justice, Retaliation against whistleblowers	Federal felony to harm an employee's livelihood in retaliation for providing truthful information about potential crimes to federal law enforcement
Common law	Under common law, 45 states and the District of Columbia now protect whistleblowers under a "public policy" exception to the "at will" doctrine
Common law rejected	Four states have rejected a common law public policy remedy for whistleblowers
Comprehensive whistleblower protection act	Ten states have a comprehensive whistleblower protection act
States' whistleblower statutes	States have other whistleblower statutes for specific areas (occupational safety, nurses, state employees, libel, and intentional interference)
False Claims Acts	Many states and major cities have False Claims Acts
"Preclusion" doctrine	In many states, employees must sue under both the common law and a federal or state whistleblower protection statute to avoid having a case thrown out under the "preclusion" doctrine
One lawsuit	Additionally, there is a judicial policy of requiring employees to include all potential causes of action in one lawsuit

(Kohn, 2011)

Even if a whistleblower successfully navigates the myriad of complaint and protection options, they must also gather sufficient evidence of fraud to support their disclosure actions. Gathering such evidence has many potential obstacles. "There are privacy rules, 'trade secret'

rules, rules governing the use of company computers, telephones, e-mail accounts, and even the use of copying machines” (Kohn, 2011). Additionally, laws regarding taping conversations, removing documents from the workplace, and destruction of evidence must be strictly followed (Kohn, 2011). A potential whistleblower would be well-served to seek and obtain legal counsel well-versed in whistleblower case law.

We have seen the nature and extent of fraud. Additionally, we realize whistleblowers are uniquely positioned to mitigate (through the perception of detection) and disclose red flags as well as perceived and/or observed fraudulent activities. We subsequently reviewed a portion of available whistleblower protection resources. We also surveyed several considerations whistleblowers must balance while gathering sufficient evidence to support their complaint. The next step is discovering how organizations make decisions.

Organization’s Decision-making Process – Organization Theory

Allison and Zelikow (1999) analyzed how large entities, such as an organization or government, can be seen to approach decision making through three distinct theoretical lenses: the Rational Actor Model (RAM), the Organizational Behavior Model (OBM), and the Governmental Politics Model (GPM). I use Allison and Zelikow’s framework to develop my model of HEI’s response to fraud mitigation and prevention through confidential complaint mechanism implementation and whistleblower protection. The first theoretical lens is known as the Rational Actor Model.

Rational Actor Model (RAM)

The first theoretical lens through which one can view organizational decision making concerns a rational decision maker. Decisions have not always been considered as rational. In fact, “Rational problem solving was the Enlightenment’s answer to the increasingly complex

social problems and interactions created by slowly emerging demands for political emancipation and by the combined effects of industrialization, urbanization, and population growth” (Fry & Raadschelders, 2008). Through the years, several approaches were unveiled as scholars and public administrators attempted to analyze and explain organizational decision-making and public policy. One of the models closely tied to Classical Approach tenets is the Rational Actor Model (RAM). In RAM, Allison and Zelikow described modern rational decision making as an agent finding their preferred utility function by rank-ordering and then selecting from a set of alternatives with associated consequences and side effects. The entity is seen as a purposive actor who consistently makes “intendedly rational”, value-maximizing calculations and speaks for the entire organization with one unified voice (Allison & Zelikow, 1999). This unitary actor can be a large organization such as a robust higher education research institution, a newlywed couple, or an individual. A RAM includes numerous assumptions. First, an intended action (behavior) must be explained. Second, the actor is a unitary entity. Third, the chosen action is a calculated solution to a perceived problem.

A RAM explains the actor’s choice by documenting how the entity’s goal, objectives, and actions align. First, the agent assesses interests and values via a “payoff” or “utility” function representing the level of desirability for each possible set of consequences/side effects. This assessment allows for rank ordering the consequences. Second, from the possible agent-identified alternatives, the rational actor simply chooses the highest ranking course of action. In a RAM, “rationality refers to consistent, value-maximizing choice within specified constraints” (Allison & Zelikow, 1999). This “comprehensive rationality assumes nothing about the content of the actor’s objectives, only that whatever those objectives, the actor has reviewed *all* alternatives and accurately assesses *all* consequences in making *the* value-maximizing choice”

(Allison & Zelikow, 1999). While this simplification provides the researcher an opportunity to possibly dissect an organization's choices like that of a purposive individual, it is vital to note that the researcher's choice of theoretical lens can vastly affect the researcher's assumptions, categorization of problems, types of evidence collected and/or considered relevant, and determination of occurrences when explaining and/or predicting phenomenon (Allison & Zelikow, 1999).

Reviewing the wide assortment of available Rational Actor Models, Elster proffers several key elements explaining the intentional nature of an agent's behavior. He includes behavior (actions), cognitions (beliefs) and desires (Elster, 1986). Using an actor's assessed relationships between behavior, cognitions, and desires with an eye on the optimal amount of evidence to collect before making a final decision, Elster's Rational Actor Model provides adherents a linear checklist approach to analyzing and explaining an actor's decision making. Social scientists practice the rational-choice model on groups placed in similar external circumstances (rather than to explain individual behavior) due to the impracticality of collecting and analyzing masses' mental states. The author finds that "if many similarly placed people do the rational thing, we can assume that with few exceptions they do it because it is rational" (Elster, 1986).

Rational Actor Model (RAM) advocates and critics. Rational Actor and Rational Choice model academic audiences have included staunch advocates and critics spanning the social sciences and humanities – from economists, sociologists, and political scientists to philosophers (Van den Berg & Meadwell, 2004). While proffering that rational models must consistently address stringent scientific principles, Terry Moe acknowledged such "models still represent powerful mechanisms for saying something useful about behavior and for facilitating

the development of theories that can explain” (Moe, 1979). Rational Choice has been successfully used to help explain some phenomenon, such as when Chris Manfredi shed light on the Canadian Supreme Court’s strategic, calculated transition from judicial restraint to judicial activism in merely ten years (Van den Berg & Meadwell, 2004). Criticism of the Rational Choice model includes wide-spread verificationist tendencies amongst many ontologically-oriented rational choice scholars (Van den Berg & Meadwell, 2004). Charles E. Lindblom found the linear model was “too tidy ... [failing] to describe the messy business that constitutes real-life decision- and policymaking” (Fry & Raadschelders, 2008). Ian Shapiro finds researchers oftentimes cherry pick specific cases to showcase how utilizing the Rational Choice model successfully explains that particular situation and additionally serves as proof of people’s general rationality, without acknowledging limits to such generalizations; such exaggerated and arrogant claims draw critics’ ire (Van den Berg & Meadwell, 2004).

Although the RAM has been useful across many fields (social sciences, economics, political science, sociology and psychology) and topics, the Model can also be misleading. For instance, while it may appear that an agent is operating rationally, there could actually be underlying, salient evidence which lies dormant concerning the agent’s objectives, conceptualization of the problematic situation, and/or cost-benefit assessment. Two other models provide supplemental perspectives that have enhanced our understanding of the actor’s perceptions and calculations, shedding light on unnoticed evidence when explaining and predicting events (Allison & Zelikow, 1999).

Viewing organization’s behavior “as actions chosen by a unitary, rational decision maker... centrally controlled, completely informed, and value maximizing” possibly oversimplifies the situation and masks important factors (Allison & Zelikow, 1999). Examples

of researcher deficiencies when utilizing RAM include failure to identify how organizations perceive problems, as well as insufficient investigation into how organizations define alternatives and estimate consequences (Allison & Zelikow, 1999). Additionally, researchers employing RAM can fail to examine how component organizations process information, as well as how organizations enact routines and programs (Allison & Zelikow, 1999). Given these potential shortcomings, researchers have turned their attention to the Organizational Behavior Model (OBM).

Organizational Behavior Model (OBM)

As opposed to focusing on the unitary actor's choices in RAM, a researcher utilizing the Organizational Behavior Model (OBM) places emphasis on the organization's outputs. Using OBM, the researcher examines and collects evidence concerning the organization's components, functions, standard operating procedures, pre-existing routines utilized when defining feasible options, and implementation (Allison & Zelikow, 1999). The organization's behavior follows a predictable pattern of trends reflecting their fixed procedures and programs, within the context of their organizational culture of beliefs they have inherited and disseminated to their peers and successors (Allison & Zelikow, 1999).

Organizational Behavior Model (OBM) advocates and critics. The organization's predictable behavioral trends have associated consequences. The entity must guard against gravitating towards their established bureaucratic comfort zone (Allison & Zelikow, 1999). Inherent in this comfort zone are associated policies and procedures, an emphasis towards achieving short-term goals and objectives, and perceived limited resources (financial constraints, time limitations, personnel capacity, etc.) (Allison & Zelikow, 1999). These bureaucratic comfort zone properties can result in the entity prematurely limiting the scope when listing

available options, assessing their likely characteristics and associated consequences, and selecting the highest-ranking course of action (Allison & Zelikow, 1999). This tendency aligns with Simon's "satisficing,"

Where satisficing is the rule – stopping with the first alternative that is good enough – the order in which alternatives are approached is critical. Organizations generate alternatives by relatively stable, sequential search processes. As a result, the menu of choice is severely limited and success is more likely to be defined simply as compliance with relevant rules. (Allison & Zelikow, 1999)

Satisficing fuels the fire to prematurely use existing programs and routines. Already-established programs and routines reflect technological and social tradeoffs which have already been made within the organizational context and culture. "As new situations arise, the construction of an entirely new program is rarely contemplated (March & Simon, 1958). In most cases, adaptation takes place through a recombination of lower-level programs that are already in existence" (Allison & Zelikow, 1999).

Whereas a RAM explanation would ask why "the President of XYZ University" voluntarily implemented SOX Best Practices whistleblowing policy, an OBM explanation would ask the same of "University XYZ" in an attempt to explain their behavior "in terms of organizational purposes and practices common to the members of the organization, not those peculiar to one or another individual" (Allison & Zelikow, 1999).

Following the principle of efficiency, Simon's "administrative man" is theoretically in-line with the classical "economic man" (Simon, 1997). The rational character of the administrative man seeks to select the alternative which accomplishes the greatest outcome with the least expenditure (Simon, 1997). This course of action occurs despite being bounded by his

limited characteristics. These limitations can include factual understanding, skills, habits, reflexes, values and ethics, conceptions of purpose, knowledge, difficulties of anticipation, tendency to procrastinate when dealing with difficult decisions, stress, etc. (Simon, 1997). Thus, the administrative man “satisfices” using logical and judgmental decision-making by searching for a satisfactory means-end course of action available within one’s limited faculties. This means-end rational decision-making schema “always requires the comparison of alternative means in terms of the respective ends to which they will lead... this means that “efficiency” – the attainment of maximum values with limited means – must be a guiding criterion in administrative decision” (Simon, 1997).

Decisions have both factual (belief) and value (assessment) components which may (or may not) reflect how others perceive the same situation and/or circumstances. Over time, a series of decisions become a strategy with resulting consequences. The rational decision-maker’s success is evaluated and determined in light of all consequences (both anticipated and unanticipated). Simon viewed “administrative organizations as systems of cooperative behavior. The members of the organization are expected to orient their behavior with respect to certain goals that are taken as ‘organization objectives’” (Simon, 1997). Over time, employees can develop “loyalty to the organization objective... [as well as] a loyalty to the organization itself and an interest in its survival and growth” (Simon, 1997). This loyalty tugs at the whistleblower and their peers. Some whistleblowers disclose out of a sense of loyalty to protecting the organization. However, tension arises when the organization or peers view the whistleblower’s disclosure as being disloyal and/or harmful. By what standard of rationality is conduct evaluated? “Rationality is concerned with the selection of preferred behavior alternatives in terms of some system of values whereby the consequences of behavior can be evaluated”

(Simon, 1997). “A decision is “organizationally” rational if it is oriented to the organization’s goals; it is “personally” rational if it is oriented to the individual’s goals” (Simon, 1997). Thus, the whistleblower can believe they are being organizationally rational and loyal by disclosing knowledge of fraud and/or retaliation. Simultaneously, the organization and/or peers can view the whistleblower’s disclosure as a polar opposite motivation – namely, to harm the organization and/or individuals. Therein lies the tension for both parties – the whistleblower and the organization.

Extending Simon’s efforts to explain organizational problem-solving under bounded rationality, Cyert and March view organizational decisions as bargaining amongst internal and external coalition partners, each of whom has differing demands, priorities, and attention spans. Through a series of de facto agreements or decisions, the organization’s culture, acceptable behavioral boundaries, identity, rules for future action, definition of virtue and truth, and method of assigning glory or blame are established.

The manner in which organizations derive their preferences ultimately affects their decisions. Likewise, the lens through which scholars view organizations influences their data collection and analysis efforts. Old-school OBM adherents “see organizations as aggregations of interests where problems of cooperation and collective action are solved” (Allison & Zelikow, 1999). These old-school OBM adherents view entity preferences through an efficiency lens, principal-agent relationships, and a “logic of consequence” (Allison & Zelikow, 1999). “New” institutionalism OBM adherents (e.g., March and Olsen) adopt some old-school concepts while viewing entity preferences through a cultural lens and a “logic of appropriateness” (Allison & Zelikow, 1999). Although these paradigms of efficiency and culture uniquely view organizational behavior when defining objectives and measuring performance, both approaches

complement each other on many core concepts. Their commonalities include “a mission, the creation of special capacities linked to operational objectives oriented toward performance of specific tasks, and reliance on routines” (Allison & Zelikow, 1999).

The third theoretical lens through which we can analyze how large entities, such as an organization or government, can be seen to approach decision making is the Governmental Politics Model (GPM).

Governmental Politics Model (GPM)

As opposed to focusing on the unitary actor’s choices in RAM or the organization’s outputs in OBM, we now peer through Allison and Zelikow’s Governmental Politics Model (GPM) theoretical lens to see what possible explanatory characteristics doing so offers. In the GPM, the entity arrives at an ultimate decision through a circuitous journey of negotiations. Common negotiation elements include elites’ personal and professional agendas, personalities and insecurities, persuasiveness, and ability (or inability) to garner consensus (Allison & Zelikow, 1999). The GPM researcher focuses on shared power, players’ relative power and their bargaining skills as multiple players compete for their preferences (Allison & Zelikow, 1999). Eventually, these interactions result in group decisions and associated actions. The political game’s participants can include internal, external, mandatory, invited and uninvited players. Even legislators, the media, and the general public are candidates for participation. The stakes can be high for everyone involved. Internal players’ careers can be at-stake. External players’ futures could hang in the wind, as organizational decisions affect robust contracts and alliances. Each participant brings to the discussion a unique perspective, sense of responsibility, and potentially conflicting viewpoint on what should occur (or not occur). Each trait is tied to the

participants' preferences and beliefs, many of which are formed by their background and current role.

Governmental Politics Model (GPM) information asymmetry, principals and agents.

Oftentimes a Principal (the decision maker) will bring onboard a knowledgeable, skilled Agent (one with specialized expertise and/or asymmetric information) to mitigate pitfalls. Such pitfalls can include misconceiving the issue, neglecting relevant objectives, misestimating consequences, etc. (Allison & Zelikow, 1999). However, the Agent may or may not share the Principal's preferences and rationale. Rather than providing unbiased information to the Principal, the Agent could (wittingly or not) alter the content, leading to the Principal's choice and actions with other group members.

Governmental Politics Model (GPM) assets and challenges. The political arena can be messy, comprised of coalitions, compromises, and confusion. At times, this competitive arena yields a clear "victor", whose desires prevail over others' alternatives. At other times, the resultant decision reflects the net outcome of multiple proponent and opponent players' inputs, none of whom receive everything they initially desired (Allison & Zelikow, 1999).

GPM "analysis begins with the proposition that knowledge of the leader's initial preferences is, by itself, rarely a sufficient guide for explanation or prediction. That proposition is grounded in appreciation of the fact that authoritative power is most often shared" (Allison & Zelikow, 1999). The leader's motivation and the decision making process are rarely linear and transparent. Rather than bargaining with others, an organizational leader may choose to caress a situation, balancing "the demands, the risks, and the threats to his own personal influence as he persuades, cajoles, and spurs other members of the [organization] to act accordingly" (Allison & Zelikow, 1999). Examining what ultimately defines successful influence for formal and informal

leaders while realizing that power equals impact on the outcome, it has been stated that it is “Not action as an outcome but his [the leader’s] impact on the outcome [that] is the measure of the man” (Neustadt, 1990).

Political decision-making does not necessitate negative results. Oftentimes, the decision making group can yield better decisions than possible with a single actor in terms of a broader array of options and more accurate cost/benefit estimates. However, groups must mitigate “analysis paralysis”, as limits must be placed on data gathering, analysis, and decision-making (Allison & Zelikow, 1999). In GPM, group interactions (or “action channels”) and outcomes are best analyzed by examining actor’s interactions, instead of looking at formal organizational chart relationships. “Action channels ‘vest and weight particular interests and perspectives’ by distributing formal powers, information, access, and bargaining advantages to players with predictable predispositions in regularized policymaking processes” (Allison & Zelikow, 1999).

Thus, GPM extends beyond OBM’s emphasis on explaining organizational behavior as actions molded by organizational culture, preferences, and routines. Groups are comprised of people with different experiences, beliefs, attitudes, and styles. How (and whether) a group responds to a problem “often depends on the way the problem is framed and reaches the group’s agenda” (Allison & Zelikow, 1999). While acknowledging players’ self-image as ambassadors of their interests and role, GPM delves into individual power broker’s calculations and bargaining skills (Allison & Zelikow, 1999). GPM digs into complex group dynamics. There are three key elements. First is how the problem is framed – especially with respect to avoiding losses or seeking gain. Second is how and when the problem reaches the group’s agenda. Third is the definition of the situation (Allison & Zelikow, 1999). Adding layers to the in-depth

investigation, GPM looks at the group composition of risk-takers versus risk-averse participants, and whether groupthink suppresses dissent and/or alternatives (Allison & Zelikow, 1999).

Key characteristics, concepts, pros and cons of the three aforementioned lenses through which we can view organizational decision-making are summarized in the Table 3.

Table 3

Theoretical Model Summary (RAM, OBM and GPM)

Concepts	Rational Actor (RAM)	Organizational Behavior (OBM)	Governmental Politics (GPM)
Actor(s)	Unified; completely informed	Programs, routines and pre-existing procedures	Diverse players
Action	Rational choice	Organizational output	Political resultant
Choice components	Objectives, Options, Consequences, & Choice	Logic of appropriateness; Standard Operating Procedures	Group decision from action-channels
Dominant inference pattern	Choice is value-maximizing	Incremental action. Information, estimates and choice based on routines and programs	Negotiations and Bargaining
Utility function	Coherent	Satisficing, risk-averse	Preference competition

(table continues)

Concepts	Rational Actor (RAM)	Organizational Behavior (OBM)	Governmental Politics (GPM)
Evidence	Threats, opportunities	Routines, culture, short-term goals & objectives	Players' perceptions, loyalty, preferences, and stance
Analyze	Cost-benefits calculation	SOPs, components	Action-channels; actors' interactions; power broker's calculations; misunderstandings and foul-ups
Power	Central control	Closest-related program	Shared
Pros	Relatable; widely used	Thick understanding	Thicker understanding
Cons	Can simplify culture and overlook evidence, perceptions, information processing & calculations	Can overlook group member's experiences, beliefs, attitudes & styles; how problem framed	Analysis paralysis; timely access difficult

(Allison & Zelikow, 1999)

We have seen the nature and extent of fraud. Additionally, we realize whistleblowers are uniquely positioned to mitigate fraud (through the perception of detection) and disclose red flags as well as perceived and/or observed fraudulent activities. We also saw how organizations' decisions can be viewed as a unitary actor's rational choice, organizational output, and/or the

political resultant of bargaining. The next step is discovering how organizations historically respond to fraud and whistleblowers.

Reality Check: Organization's Response to Fraud and Whistleblowers

Providing a Trustworthy Disclosure Environment

Some organizations voluntarily implement fraud prevention and/or mitigation measures while other organizations do not. These anti-fraud measures can include providing confidential complaint reporting mechanisms (CCM) and whistleblower protections. To the organization, of what worth are CCM and whistleblower protection efforts and scarce resource expenditures? In short, they can be of great worth. Creating “an environment in which employees feel comfortable reporting illegal activity without fear of retaliation from their employers” can significantly decrease “the apprehension employees may feel in coming forward” (Fisher, 2007). This safe disclosure environment is especially important considering whistleblower's “tips are consistently and by far the most common detection method... more than twice the rate of any other detection method” (Report to the Nations on Occupational Fraud and Abuse, 2014).

A key element in providing an effective stewardship environment in which fraud is mitigated and/or avoided involves the organization's internal control structure. The internal control structure consists of the control environment (management philosophy, hiring procedures, etc.), the accounting system (valid, authorized transactions, etc.), and control activities (segregation of duties, control over assets/records, etc.) (Albrecht, 2003). Likened to installing a lock on your car door, internal controls are only effective (and your car secure) if all key holders consistently “lock” the car (versus leaving it unlocked and/or failing to listen to insiders' disclosure that they perceived (or observed) a potential vulnerability (or actual breach). “Establishment of control systems within the firm and protecting whistleblowers helps ensure the

flow of information within the company” (Ribstein, 2002). The environment which embraces and fosters the use of internal whistleblowers can become self-regulatory, serving as a conduit to learn what employees know about undisclosed fraudulent behavior within the organization (Fisher, 2007). Oftentimes, oversight internal controls and external entities (such as external auditors) are unable to detect fraud. In fact, independent audits “should not be relied upon as organizations’ primary anti-fraud mechanism (Report to the Nations on Occupational Fraud and Abuse, 2014). Although such audits were the most commonly implemented control [in the ACFE’s 2014 study] and they detected only 3% of the frauds reported to [the ACFE], independent audits ranked extremely low in limiting fraud losses (Report to the Nations on Occupational Fraud and Abuse, 2014).

Providing a safe reporting environment through whistleblower protections supports the critical “undersight” concept, in which employee-insiders with intricate knowledge of daily organizational operations can provide robust insight into financial fraud indicators and/or events (Westman, 2005). Timely discovery can significantly mitigate losses. Congress enacted SOX to systemically encourage insider (whistleblower) disclosures by mandating CCMs and anti-retaliation mechanisms in publicly-traded corporations. “In order to promote the uncovering of illegal activities by corporate entities, the statute is built on the premise that employees are in the best position to reveal corporate fraud” (Fisher, 2007). Now that we have seen the noteworthy effects whistleblowers’ disclosures of perceived and/or observed fraud and/or retaliation can bring to fraud prevention and/or mitigation, it is interesting to address organizations’ commonplace responses to whistleblower disclosures.

Whistleblower Disclosures and Management Retaliation

An organization's response to whistleblowers' disclosures can take many forms, with widely diverse outcomes for whistleblowers and future disclosures. On a somewhat positive note, a study of nationwide data indicates management *may* applaud internal whistle-blowing "when it identifies bad apples within the company and allows for their removal before they cost the organization financial loss, scathing publicity, and/or litigation" (Rothschild & Miethe, 1999). A potential internal whistleblower hearing of this somewhat optimistic organizational support for their voluntary internal disclosure might note the operative words which condition whether their voluntary actions are subsequently deemed acceptable in the organizations' viewpoint. Namely, if management views post-disclosure outcomes for the organization positively, the internal whistleblower *may* be supported as long as nothing substantially adverse occurs. If not, life can rapidly become very difficult for the voluntary internal whistleblower. Such ambiguity on the organization's potential handling can thwart whistleblower's willingness to disclose, especially given the sordid history of whistleblower retaliation.

Two other organizational responses to whistleblower's disclosures are possible. A second organizational response concerns whistleblowers that use disclosure mechanisms outside of the organization, such as the press or social media. These whistleblowers are commonly referred to as "external" whistleblowers, since they are using disclosure channels outside of the organization. The external whistleblower's experience can be far different from the fortunate internal whistleblowers whose actions some organizations at times applaud. Oftentimes, management condemns external whistle-blowing "because the exposure of wrongdoing often brings adverse publicity" (Rothschild & Miethe, 1999). Such adverse publicity could feasibly

result in decreased state appropriations, a loss of benevolent donor contributions, and/or decreased student enrollment.

Finally, a third option finds that internal and external “whistle-blowers -- even when their disclosures are found to be true and of great benefit to the employer – still face significant risk of various types of organizational retaliation, such as ostracism by coworkers, long-term economic harm, and psychological injury” (Rothschild & Miethe 1999). The authors found “organizational retaliation against whistle-blowers is severe and common”; in fact, about two-thirds of the study’s internal whistle-blower respondents experienced significant adversity including job loss, co-worker pressure, and increased scrutiny to blacklisting (Rothschild & Miethe, 1999). Detailed results are shown in Table 4.

Table 4

Negative Responses to Whistleblower Disclosures

Response to Internal Whistleblower disclosure	Rate of occurrence (%)
Lost their job or were forced to retire	69
Were criticized or avoided by co-workers	69
Had work more closely monitored by supervisors	68
Were blacklisted from getting another job in their field	64
Received negative job performance evaluations	64

Note: External reporters had the above-stated retaliation items between 10–15% *higher* than internal reporters

(Rothschild & Miethe 1999).

On their own, these high rates (64% to 69%) of adverse organizational and peer retaliation actions to *internal* disclosures could very well discourage well-intended whistleblowers who uniquely possess asymmetric information concerning fraud. External whistleblowers experienced even greater rates of organizational and peer retaliation than internal whistleblowers. The substantial, adverse rate of retaliation to *external* disclosures (ranging up to 79% to 84%) is even more alarming.

“Noise” disclosures. One type of disclosure which could readily be deemed as having little to no value while involving negative consequences is “noise” disclosures – complaints interpreted by management and/or peers as nuisance and/or tattling. According to Trevino and Victor (2002), “whistleblowers were less liked by work group members if there were no perceived negative consequences of the reported behavior” (Kidder, 2005). In some organizations, while whistleblowers deemed their so-called “noise” disclosures to have sufficient merit to take action, others found the disclosure could be harmful to healthy work environment relationships. Thus, one challenge organizations face is how to balance encouraging helpful disclosures while avoiding the pitfalls inherent with noise disclosures.

Retaliation viewed from an employee’s perspective. Looking beyond Rothschild and Miethe’s 1999 study, a more recent telephonic and web-based longitudinal study (n = 4,800) of workplace ethics from the employee’s perspective indicates that while misconduct is at an all-time low and whistleblowing is at an all-time high, retaliation and pressure against whistleblowers is alarmingly negative (Lowney & Robbins, 2011). According to the study, “45% of employees observed a violation of the law or company ethics standards in the past twelve months... with a record number of employees [65%] choosing to report [the] observed misconduct” (Lowney & Robbins, 2011). Significantly, 22% of employees reporting others’

misconduct experienced some kind of retaliation for their disclosure (Lowney & Robbins, 2011). Putting these numbers into a national perspective with regards to the workforce (more than 138 million over the age of 18 in Calendar Year 2011) across the entire United States raises several key points. First, 62 million American employees observed workplace misconduct (margin of error: +/- 1.4%). Second, 41 million Americans who witnessed wrongdoing reported the misconduct. Lastly, almost 9 million Americans who witnessed and reported misconduct said they experience some kind of retaliation (Lowney & Robbins, 2011). Such retaliation nationwide is staggering. On a more personal level, how would such misconduct witnessing, reporting, and retaliation materialize locally?

Adapted from Robinson (2012), at the local level these rates would equate to the following at Auburn University (AU) during the Fall 2011 Semester with 8,040 employees in the AU workforce over the age of 18. First, 3,618 AU employees observed workplace misconduct in that year alone (margin of error: +/- 1.4%). Second, 2,351 AU employees who witnessed wrongdoing reported the misconduct. Third, 517 AU employees who reported misconduct said they experience some kind of retaliation. If the 2,403 hourly student employees were included as potential whistleblowers, there would be an additional 155 student worker whistleblowers who experienced retaliation. In essence, 672 fellow AU employees experienced retaliation merely because they reported misconduct in Year 2011. These whistleblowers experiencing retaliation are not ambiguous numbers. They are real people with whom we work. They could be a close friend or family member. In fact, they could be you later today or tomorrow. As retaliation against whistleblowers is at an all-time high, to what type of retaliation could you be subjected?

Unfortunately, retaliation against whistleblowers is at an all-time high, in which whistleblowers experienced being excluded by management, ostracised and harassed by peers, and placing their careers in jeopardy. Further details are available in Table 5.

Table 5

Retaliation Against Whistleblowers

Form of Retaliation Against Whistleblowers	% Occurrence
Excluded from decisions and work activity by supervisor or management	64
Given a cold shoulder by other employees	62
Verbal abuse by supervisor or someone else in management	62
Almost lost job	56
Not given promotions or raises	55
Verbal abuse by other employees	51
Hours or pay were cut	46
Relocated or reassigned	44
Demoted	32
Experienced online harassment	31
Experienced physical harm to your person or property	31
Harassed at home	29

N = 4,800 (Lowney & Robbins, 2011)

Organization’s assessment of whistleblower motivation to disclose. Another approach to explaining organization’s decision whether to support retaliation and fraud reporting was addressed in the Economic Model Theory. Using the Economic Model, Heyes and Kapur (2008)

found there are several mutually exclusive schools of thought concerning whistleblowers' motivations: conscious cleansing, welfarist, and punitive. According to the researchers, decision makers' assessment of whistleblowers' motivation drives their Institutional policy decisions. Hence, each competing psychological theory carries resultant policy implications and consequences.

In their study of whistleblowing in regulatory enforcement, Heyes and Kapur (2008) found whistleblowers are motivated to disclose observed and/or perceived infractions by one of three categories. First, whistleblowers can be motivated to disclose to follow their moral code (i.e., "Conscious-clearing" motivation). A second whistleblower motivation is to correct or prevent harm while doing more societal good than harm (i.e., "Welfarist" motivation). A third whistleblower motivation is to opportunistically discomfort the organization and/or anti-social or illegal employees (i.e., "Punitive" motivation). According to the researchers, regulatory decision makers' assessment of whistleblowers' motivation drives their policy decisions regarding whistleblower responsiveness and/or wrongdoer penalties. Hence, each competing psychological theory carries resultant policy implications. The authors found "that the optimal policy involves "full enforcement" – that is, pursuing every case brought to light by whistleblowers and the use of maximal penalties – *only* when whistle-blowing is a social act and when the whistle-blower is not distorted by noisy information" (Heyes, 2008). This "social act" classification coincides with the "Welfarist" whistleblower scenario. "Noisy information" concerns disclosures when the whistleblower "base(s) their disclosure decision on faulty or partial information" (Heyes, 2008). The first whistleblower motivation school of thought, "Conscious-clearing," has agencies' optimal policies supporting less than complete responsiveness to whistleblowers' complaints. The last whistleblower motivation school of

thought, “Punitive,” has agencies’ optimal policies not supporting the use of maximal penalties, due to the possibility of inducing “the wrong sort of whistle-blower to come forward” (Heyes, 2008).

Applied to Higher Education Institutions, the Economic Model provides insight into Institutions’ possible responses to deciding whether to implement Confidential Complaint Mechanisms and/or support effective whistleblower protection policies. If the HEI assesses the whistleblower’s motivation originating from a desire to correct or prevent harm while doing more societal good than harm [i.e., “Welfarist” motivation], the Institution could implement CCM and/or whistleblower policies that address Structural Model (CCM hotlines, etc.) and Anti-Retaliation Model (Whistleblower protection) issues to maximize disclosures and minimize retaliation. On the other hand, if the HEI assesses the whistleblower’s motivation deriving from either “Conscious-clearing” or “Punitive” origins, the Institution could decide either to decline CCM and/or Whistleblower protection policy implementation, or not fully-support effective CCM and/or Whistleblower protection policies.

Organizations can decide whether to implement confidential complaint mechanisms and/or whistleblower protection policies to prevent and mitigate fraud in higher education institutions. There are many options available from which HEIs can choose regarding types of CCMs and whistleblower protection policies. How do organizations make such decisions? A review of Organization Theory can help illuminate the path down which organizations tread.

Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud. We have briefly reviewed the first vital realm through which obtaining whistleblower’s asymmetric information concerning fraud lies: the organization’s decision-making process as viewed through Organization Theory – RAM, OBM and GPM. The next

component to obtaining the whistleblower's asymmetric information concerning fraud entails the whistleblower's disclosure calculation. This decision is addressed in Principal-Agent Theory.

Whistleblower's disclosure calculation – Principal-Agent Theory. In addition to the organization's decision-making process, the potential whistleblower decides whether to disclose perceived fraud. Similar to the organization's decision making process, the whistleblower's disclosure decision is neither straightforward nor clear-cut. One manner in which we can view the whistleblower's disclosure decision-making process lies in the Principal-Agent Theory. Frederick Taylor laid the groundwork for the Principal-Agent Theory and follow-on economics contributions in which organizations (Principals) incentivize rational maximizing individuals (Agents) to obtain acceptable (according to the Principal's perspective) Agent actions (Miller, 1992). In the current context, the acceptable Agent actions would be in response to organizational information asymmetry issues, which Miller (1992) viewed as one of the three reasons for market failure. According to Miller, the ideal incentive system is one in which employees find it in their best interest to share private information and make costly efforts on the organization's behalf. It is also one in which superiors find that the residual created after inducing subordinates to take efficient actions could not be increased by providing a set of less efficient incentives. A competing approach, heralded by Chester Barnard, states that leadership is important to overcoming employee suspicions and in building trusts (Miller, 1992).

Within the Principal-Agent model, Terry Moe's Contractual Paradigm helps explain organizations' contractual nature, rationality of structure, and economic methods of analysis vis-à-vis overcoming information asymmetries (Moe, 1984). Shapiro (2005) speaks to the contrasting conflict of interest between Principals and Agents. Risk-neutral Principals must

adequately address risk-averse Agents' concerns to gain access to the latter's shrouded, asymmetric information (Shapiro, 2005).

Forms of information asymmetry can include insider information of retaliation and fraud. Whistleblowers are the Agents who possess insider-information on alleged fraudulent activities and/or retaliation, while the organization's management team is the Principal. "Glazer and Glazer (1989, p. 4) define a Whistle-blower as one who (a) acts to prevent harm to others, not him or herself, (b) while possessing evidence that would convince a reasonable person" (Heyes, 2008). Using the Principal-Agent model, the Principal attempts to provide an acceptable framework within which the Agent will satisfactorily expose alleged fraud and/or retaliation.

Whistleblowers are not a clean slate devoid of standards of conduct and professional expectations. Discussing whistleblower motivation in a multi-theory examination of employee misconduct, whistleblowers are best described as principled agents who take deviant courses of action (disclosing perceived/observed wrongdoings) based on their relational obligations with their employer, even though doing so may damage the organization and result in adverse interpersonal relationships (Kidder, 2005). Such disclosures are not without risk to the whistleblower. The author notes that,

Despite increasing concerns about corporate corruption and unethical behaviors, employers in the U.S. can and still do fire whistleblowers legally for insubordination (although recent legislation, such as the Sarbanes-Oxley Act, are encouraging signs that this will be less prevalent in the future). (394-395)

It is within such circumstances that potential whistleblowers calculate whether to disclose.

Allison and Zelikow noted the importance of employing competitive conceptual frameworks (such as the aforementioned Models – RAM, OBM and GPM) when analyzing

organizations' conduct vis-à-vis events. The alternative perspectives can illuminate blind spots (showing what was omitted). Additionally, gathering available evidence from multiple models points out distortions and conceptual limitations. Several scholars proffer a thoughtful compromise: perhaps it could be beneficial to employ the rational choice model in a heuristic, strictly methodologically manner, versus ontologically (Van den Berg & Meadwell, 2004). Doing so could help illuminate *initial* explanations to a problem instead of focusing on proving how the Rational Choice model exclusively explains the given situation and/or works in *all* circumstances (Van den Berg & Meadwell, 2004).

Alleviating information asymmetry to facilitate timely fraud discovery and/or mitigation involves organizational and whistleblower decisions. These decisions do not occur in a vacuum; rather, each party decides under conditions present in their existent environment. We have briefly reviewed the organization's decision-making process using RAM, OBM and GPM. We also discussed the whistleblower's disclosure calculation, which is addressed in Principal-Agent Theory. The third theoretical realm influencing asymmetric information disclosure lies in the HEI environment.

The HEI Environment

Organizational Culture

Herbert A. Simon addressed choices Rational Actors make in conducting the organization's core reason for existing. Organizational members throughout all hierarchical strata and functional areas make choices and decisions that ultimately affect the organization's ability to successfully attain their collective institutional goals and objectives. These choices emerge within the organizational culture, which "shape[s] the behavior of individuals within the organization in ways that conform with informal as well as formal norms. The result becomes a

distinctive entity with its own identity and momentum” (Allison & Zelikow, 1999). Decisions by higher ranking officials, when properly communicated to operative employees, can positively influence the latter’s “attitudes, habits, and [inculcate] a state of mind which lead him to reach that decision which is advantageous to the organization” (Simon, 1997). The flip side is the organization elites’ ability to negatively influence operatives’ likelihood of deciding in a manner advantageous to the organization’s interest by establishing a workplace climate or environment which is not conducive to long-term organizational aims. For instance, if organizational leadership does not consistently establish a workplace environment which supports and defends loyal employees’ efforts to report and/or eradicate potentially harmful activities to the organization’s clientele and/or existence, the legally authorized leaders will have lost the opportunity to adequately establish and influence an environment in which timely, pertinent, and salient information can flow to unbiased authorities so that appropriate corrective/mitigation actions can take place. Thus, employees with critical (asymmetric) insider information dealing with potentially-fraudulent activities can be intentionally or inadvertently structurally dissuaded from internally disclosing perceived and/or observed harmful activities.

A Complex, Challenging HEI Environment

The HEI demographic and environment has been described as diverse, expansive and decentralized. For instance, as a 4-year degree-granting Institution, Auburn University has the following characteristics which present a challenging fraud prevention milieu: expansive population (25,078 students and 6,500 employees), widespread operating area (28,630 acres across the state), and large at-risk funds (\$899 million in annual revenue; \$100 million in research (some classified, chemicals, pathogens, etc.). Concerning decentralized operations, AU

has 19 colleges and schools, the largest library in the state, and an art museum. Additionally, one AU Division, the Alabama Cooperative Extension System, has offices in all 67 counties. Another AU Division has Alabama Agricultural Experiment Stations throughout the state. These expansive activities are compounded by international travel by students and employees. There are also retail businesses, a complex ground and airplane transportation system, airport with student instruction, construction, Hotel and Conference Center, utilities, clinics (speech, marriage, psychology), several pharmacies, livestock and farming operations, daycare, pools and recreational facilities. In essence, AU has a complex HEI environment with many opportunities for individuals to make decentralized choices which place Institutional resources at risk. These characteristics result in unique risk management issues related to fraud (Robinson, 2012).

Pressures, Incentives, and Challenges in HEIs

Since the well-known publicly traded company's fraud cases are more highly publicized and seemingly have greater funds involved, it would be easy to conclude that fraud in HEIs is not as significant as corporate fraud. However, "the public domain seems to provide greater pressures/incentives to commit fraud than the private sector. Lower salaries and the frustration associated with bureaucracies might contribute to this issue. Poor accountability compounds the problem and sets the stage for fraud" (Kranacher, 2005). The author asserts that challenges associated with segregation of duties when budget cuts result in consolidation of responsibilities, a lack of oversight, abuse of foundation funds, and a blatant disregard for adhering to ethical values due to the 'tone at the top' set by high-placed officials make these fiscally-trying times ripe for HEI fraud. Indeed, this cancerous threat can strain the university's current operations budget and impair the institution's future viability.

These pressures and incentives are accentuated by a myriad of significant issues severely challenging HEIs' already-scarce resources. First, the resources HEIs utilize will become even more competitive as, for the first time in our nation's history, there will be an exponentially smaller Worker-to-Social Security Beneficiary ratio. Coupled with increased life expectancies, increased average age, decreased birth rates, decreased fertility rates, and decreased death rates, HEIs will increasingly need to be transparent and accountable stewards of strained public resources (Marx, 2006).

As Baby Boomers (born 1946 to 1964) reach retirement age in significant numbers, a second significant issue accentuating the competition for scarce resources will be the mixed agendas between Boomers and members of Generation X, Millennials, and Generation E (Marx, 2006). These challenges require engaged leadership.

Engaged Leadership

Policy implementation is complex and requires enduring leadership involvement. A landmark, in-depth case study highlights the importance of engaged and inclusive leadership making a clear connection between visionary policy initiation and evolutionary policy implementation (Pressman & Wildavsky, 1984).

HEI Policy Agenda and Stewardship

The policy agendas of HEIs have many similarities. Looking at one institution can shed light on its obligation to the greater community. Auburn University's policy agenda flows from its mission statement, a portion of which declares:

Auburn University's mission is defined by its land-grant traditions of service and access.

The University will serve the citizens of the State through its instructional, research, and

outreach programs and prepare Alabamians to respond successfully to the challenges of a global economy. (Mission 2004)

Fraud wastes scarce public resources sacrificially provided by taxpayers and legislatively allocated to accomplish the above-stated mission elements. The total funds involved and loss of public trust could far surpass the monetary and emotional damage inflicted by corporate scandals. As HEIs are living Institutions socially- and structurally-comprised of its employees, these financial and trust issues can affect every aspect of the organization's body. However, this fraudulent downward spiral does not have to be our destiny. By gathering available evidence and viewing the salient elements of fraud disclosure through a theoretical lens, perhaps we can benchmark and incorporate successful processes and alter the institutional culture, resulting in transparent and accountable climates. Such a lens exists in the Modified Rational Actor Model (MRAM). The next step in our journey is to construct a model with which we can view organizations and whistleblowers using available evidence.

Research Model – Modified Rational Actor Model (MRAM)

The Modified Rational Actor Model (MRAM) encompasses elements of all three organizational theory models to detail relationships and anticipated responses by elite actors in the Higher Education Institution environment. Obtaining the complete picture of an event would optimally involve gaining access to salient elements of all RAM, OBM and GPM evidence. Such access would first involve pertinent Rational Actor Model information involving the decision-maker's decision-making process and rationale. Second, Organizational Behavior Model evidence would need to include the organization's routines, standard operating procedures, and key characteristics to form a coherent picture of the organization's output. Third, key Governmental Politics Model components would include the organization's action-

channels, players, and communication to form a coherent picture of the organization's resultant choice. Such complete information and evidence access is extremely rare. However, the Modified Rational Actor Model (MRAM) enables the researcher to envisage and potentially comprehend informed HEI decision-makers' generalizable, initial HEI insights. In football, the offense typically selects plays tailored towards their assets paired with opportunities the opponent's defense allows. If the defense "stacks the box" to prevent or hinder inside-the-tackles run plays, the offense generally runs outside plays or selects options which emphasize their passing game. Historically, HEI CCM Non-Implementers have been reluctant to respond to questions regarding their decision-making process, rationale and barriers to CCM implementation. In the current research context, while access to RAM information was generally granted by many Implementers and some Non-Implementers, access to a majority of OBM and GPM components was not possible. Hence, this research pragmatically ties together RAM (Rational Actor) components with select OBM (Organization Behavior) and GPM (Governmental Politics) components through a MRAM (Modified Rational Actor) lens. So how would a researcher using MRAM view an event?

The Modified Rational Actor (MRAM) is a unified actor operating with incomplete information to make a value-maximizing, rational (in their viewpoint) decision through a cost-benefit calculation. As a risk-averse entity operating with limited resources, the actor makes satisficing decisions using information provided by biased, competing agents whose preferences tailor information and options provided and/or withheld. In optimal conditions a researcher gathers MRAM evidence concerning threats, opportunities, culture, and player communications, inferring the actor's choice can involve incremental action influenced by player's negotiations and bargaining. In essence, the MRAM can describe whether the benefit of an action was worth

the cost. MRAM can inform the discussion on why or why not. MRAM can ascertain whether existing programs exist to meet the situation (or be adaptable). Additionally, the Model can envisage and potentially comprehend what barriers existed and their influence. MRAM is not the complete picture concerning what occurred, who influenced the outcome, and why negotiations and bargaining resulted in the associated course of action. MRAM methodologically uses available information, adding to the discussion and furthering our understanding of initial explanations to the problem, potentially combined with subsequently obtainable views on organizational behavior and bargaining players. The Modified Rational Actor Model (MRAM) is summarized in Table 6.

Table 6

Modified Rational Actor Model (MRAM) Summary

Concepts	Modified Rational Actor Model (MRAM)
Actor(s)	Unified; informed (within constraints) through inputs from programs, routines, pre-existing procedures and diverse bargaining players
Action	Rational choice with some political influences
Choice components	Objectives, Options, Consequences, and Choice. Can include Logic of appropriateness and SOPs
Dominant inference pattern	Choice is value-maximizing, with some incremental action through negotiations and bargaining. Information, estimates and choice influenced by existing programs.
Utility function	Satisficing, risk-averse, preference influenced
Evidence	Threats, opportunities, culture, communication
Analyze	Cost-benefits calculation, barriers to implementation
Power	Central control with some diverse input. Can favor closest-related program.
Pros	Relatable; based on model widely-used in Social Sciences. Provides enhanced understanding. Adds cultural perspective and views on other players' inputs/influence. Not as susceptible to analysis paralysis. Pragmatic access to available information/player(s).
Cons	Can overlook evidence, group member's experiences, beliefs, attitudes & styles; how problem framed, players' perceptions, information processing & calculations. Does not address action-channels; details on actors' interactions; power broker's calculations; misunderstandings and foul-ups. Ignores players' loyalty, preferences, and stance.

Adapted from (Allison & Zelikow, 1999)

Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud. Obtaining whistleblower's asymmetric information concerning fraud lies within three realms: the HEI's decision-making process (Organization Theory), the whistleblower's disclosure calculation (Principal-Agent Theory), and the HEI environment. The research foundation primarily lies within the Rational Actor Model, augmented by elements from the Organizational Behavior Model, Governmental Politics Model, and Principal-Agent Theory. The relationship between the HEI's decision-making process, the whistleblower's disclosure calculation, and the HEI environment is illustrated below. With this framework in mind, we now turn to the research hypotheses and methodology.

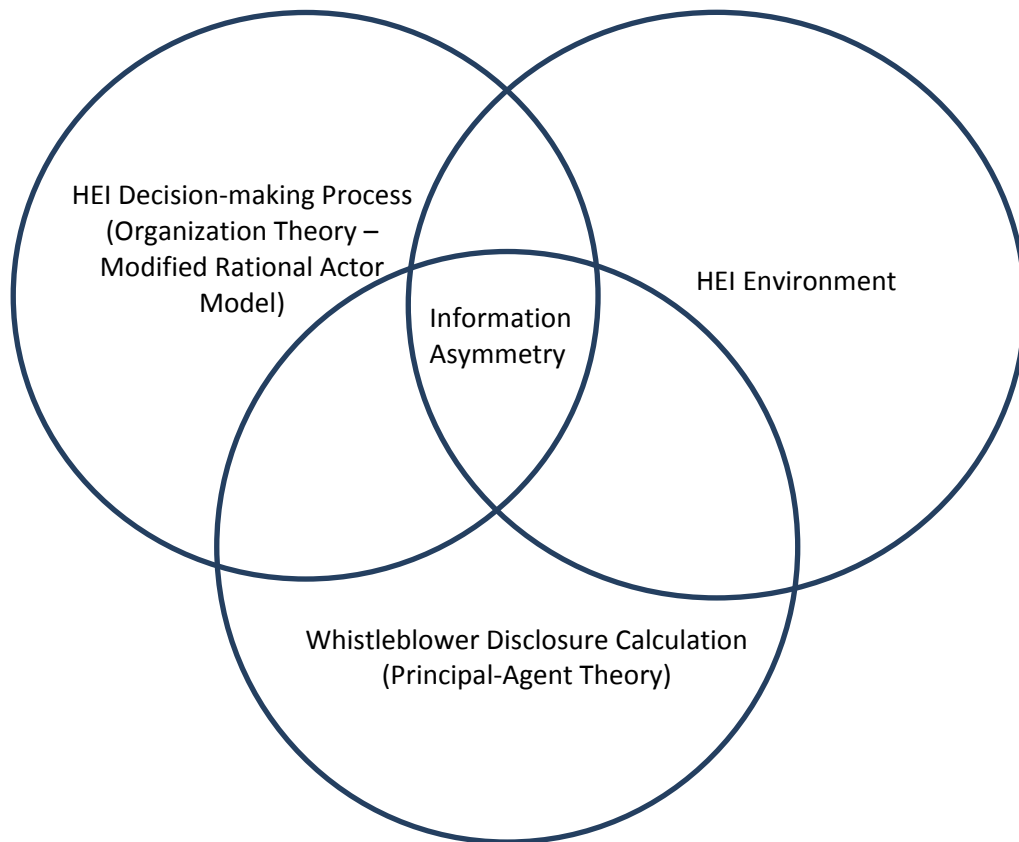


Figure 1. McMillan Anti-Fraud Conceptual Framework

CHAPTER 3. RESEARCH HYPOTHESES AND METHODOLOGY

As seen in Chapter 1, fraud drains scarce resources – estimated at 5% annually on average – from all institutional sectors – private and public companies, governmental, and not-for-profit (Report to the Nations on Occupational Fraud and Abuse, 2014). The frequency and extent of fraud can be mitigated – as a review of the literature establishes in Chapter 2. However, fraud continues to occur, organizations do not implement published anti-fraud measures, and individuals with knowledge of suspected or observed fraudulent activities (labeled potential “whistleblowers”) do not timely disclose their insider information to prevent and/or mitigate the adverse effects of fraud. We now turn to the research hypotheses and study methodology. In so doing, it is helpful to review the research goal.

The goal of this exploratory research is to determine Higher Education Institutions’ (HEIs’) level of implementation, expectations and effects from voluntarily implementing National Association of College and University Business Officers’ (NACUBO)-recommended Sarbanes-Oxley (SOX) Act of 2002 whistleblowing Best Practices (BP) provisions. The research concentrates on two SOX policy areas: Confidential Complaint Mechanisms (CCM) and Anti-Retaliation. The CCM is optimally geared towards providing an internal “direct and legitimate” disclosure channel (Moberly, 2006). This CCM can be designed to mitigate and/or overcome two historically significant roadblocks to effective whistleblower disclosures: the entity’s norm of silence and blocking/filtering efforts by institutional agents and/or peers

(Moberly, 2006). The whistleblowing policy is geared towards protecting the whistleblower from retaliation after disclosure (Moberly, 2006).

Chapter 3 first provides an outline of each Research Question and associated hypotheses. Afterwards, each hypothesis is tied to the Survey instrument. Next, the methods of analysis are reviewed. Finally, each hypothesis and associated responses' coding is summarized.

Research Questions and Hypotheses

Research Question 1

Research Question 1 asks, “Has the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels?”

Fraud depletes entities' resources by an estimated annual average of 5%, as discussed in Chapter 2 (Report to the Nations on Occupational Fraud and Abuse, 2014). To make matters even worse, 58% of victim organizations do not recover any of their fraud losses, which is up from 49% in 2012, as discussed in Chapter 2 (Report to the Nations on Occupational Fraud and Abuse, 2014). The frequency and extent of fraud can be mitigated – as a review of the literature establishes in Chapter 2. However, fraud continues to occur, organizations do not implement published anti-fraud measures, and individuals with knowledge of suspected or observed fraudulent activities (labeled potential “whistleblowers”) do not timely disclose their insider information to prevent and/or mitigate the adverse effects of fraud. This hypothesis proffers Higher Education Institutions (HEIs) have implemented SOX Best Practices whistleblowing policies at a higher level than found in the 2007 NACUBO survey.

The associated Hypothesis 1 is, “*The level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.*”

If the implementation level has changed from 2007 levels, the next Research Question and associated hypotheses address why such change may have occurred.

Research Question 2

Research Question 2 asks, “If the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels, why has this change occurred?”

I use the Modified Rational Actor Model (MRAM) to explain HEI Whistleblower Policy implementation. The MRAM suggests elite HEI decision-makers weigh potential costs and benefits of voluntarily implementing anti-fraud and whistleblower protection measures. One could wonder, “Given the preponderance of indications (Chapter 2) that fraud can be prevented or its effects mitigated, *why* does this cycle of anti-fraud non-implementation continue?” In other words, why do some organizations voluntarily implement anti-fraud measures while other organizations do not? Are there benefits Implementers perceived that made CCM implementation worth the cost? Are there Barriers Non-Implementers perceived or experienced that inhibited CCM implementation? Likewise, why do some individuals disclose perceived or observed wrongdoings while other individuals do not disclose? It is first helpful to review previous research.

After multiple attempts, another researcher was unable to gain NACUBO authorization to host his 2009 SOX survey. His desired sampling frame was NACUBO members; however, the author was unable to obtain NACUBO sponsorship due to the organization’s concern with members’ objection to “survey-spam.” His realized sampling frame was National Association of College and University Attorneys (NACUA) members. After obtaining approval to utilize the

NACUA website for one month with severe restrictions, the author announced the SurveyMonkey-based tool's availability, with a follow-up reminder after two weeks had expired. Of the approximately 700 NACUA institutions of higher education represented nationwide by their members, there were 27 responses (representing 11 separate institutions) to James Seaman's survey. This is too weak to have adequate predictive power. However, the small n is somewhat mitigated by follow-up in-depth interviews, which provided insight into why participants had voluntarily implemented SOX provision best practices and what they expected to obtain. After analyzing the survey data, the author conducted ten qualitative, telephonic interviews with survey respondents, having failed to obtain adequate funding for in-person interviews.

Seaman studied the respondents' expectations and effects of implementing the best practices. Implementers' modifications were likely due to the fact that the Institutions believed the modifications would enhance integrity, increase confidence in the institutions' processes by current trustees and stakeholders, and provide an increasing sense of transparency and responsibility. Additional implementation expectations included a feeling of confidence in the institutions' compliance practices, some general governance, oversight and risk management benefits, increased internal controls and financial oversight, and realization that implementation is important to public perception/accountability. Respondent results ranked expected effects as follows: recruited Trustees that are financially competent (43%), obtaining gifts from donors (36%), and obtaining Federal and other funding from various agencies (29%). Additionally, respondent results ranked increase reputation (29%), no value obtained (29%), and attract students (0%). No respondents' institutions monetarily quantified the value received from implementing SOX provisions (Seaman, 2009). Essentially, Seaman was able to gather limited

data concerning Implementers' financial, governance, and ethics expectations. With Dr. Seaman's permission, I used elements of his instrument and dissertation concepts as a springboard for my Survey instrument.

I gathered available evidence concerning the HEI's opportunities and threats arising from implementation. HEIs could realize several *financial benefits* from CCM implementation. First, HEIs could gain insider's knowledge of alleged fraud (Report to the Nations on Occupational Fraud and Abuse, 2014; Shapiro, 2005). Access to whistleblower's asymmetric knowledge could be instrumental, since whistleblower tips are the leading source of fraud detection and have a significant deterrent effect (Report to the Nations on Occupational Fraud and Abuse, 2014). Second, HEIs could improve confidence in the Institution's stewardship of public funds (Goins, Giacomino, & Akers, 2009). Third, implementation could enhance the HEI's grant proposals and funding solicitations (Seaman, 2009), provide a competitive edge over non-implementers (Seaman, 2009), and lower operating costs (Goins, Giacomino, & Akers, 2009). These expected financial benefits lead to Hypothesis 2.1: "*As HEIs have assessed financial cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.*" Financial threats include loss of resources due to fraud, loss of confidence in the institution's stewardship, and loss of competitiveness for scarce resources. Potential opportunities and threats are not only financially-related. Such opportunities and threats can also concern governance issues.

HEIs could also realize several *governance opportunities* from CCM implementation. First, HEIs could proactively protect the Institution's reputation (Seaman, 2009), improve internal information flow (Ribstein, 2002), and improve the Institution's decision-making. These expected governance benefits lead to Hypothesis 2.2: "*As HEIs have assessed governance cost-*

benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.” HEI’s governance threats include reduction in the Institution’s reputation, degradation of internal information flow, and decreased effectiveness of Institution’s decision-making. Besides potential financial and governance opportunities and threats, HEIs could also have ethics issues related to implementation.

Ethics opportunities from CCM implementation can include attracting students (Seaman, 2009) and recruiting and retaining ethical employees (Goins, Giacomino, & Akers, 2009). Additionally, CCM implementation could potentially improve the culture and signal that the Institution supports ethical conduct and accountability (Goins, Giacomino, & Akers, 2009; Seaman, 2009; Shapiro, 2005). These expected ethics benefits lead to Hypothesis 2.3: “*As HEIs have assessed ethics cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.*” Concerning ethics threats, failure to implement could deter prospective students, initiate a loss of current and future human resources (ethical employees), and degrade the culture and signal that the Institution does not support ethical conduct and accountability.

The literature supports HEIs’ concerns with several “*barriers*” to implementation. First, full-scale SOX implementation can be costly. Some publicly traded companies saw their compliance costs double due to mandatory full-scale SOX implementation (Carney, 2006). While locally tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is not synonymous with full-scale SOX implementation, the well-publicized horror stories from publicly traded companies is likely not falling on deaf ears in the HEI sector. Requisite CCM implementation resources can include training personnel to correctly accomplish new SOX-induced responsibilities and procedures. Small Institutions with limited segregation of duties

and stretched resources could determine the cost of implementation does not justify the perceived benefits.

A second barrier to implementation could reside in implementation complexity. Policy implementation is complex and requires enduring leadership involvement. A landmark, in-depth case study highlights the importance of engaged and inclusive leadership making a clear connection between visionary policy initiation and evolutionary policy implementation (Pressman & Wildavsky, 1984). At times there can be too many unanticipated decision points to handle within the allotted time frame (Pressman & Wildavsky, 1984). This implementation complexity can be compounded by interactions from the Institutions' broad constituency. In the HEI environment, stakeholders can include faculty, staff, potential whistleblowers, alumni, donors, Office of the President/Chancellor, Central Administration, Board of Trustees, State-level officials, community members, governmental regulatory agencies, HEI accreditation agencies, and foundations. At times, such pushback from stakeholders can sabotage successful implementation and/or success.

Another barrier can involve the CCM being incompatible with the Institutional climate. Characteristics of an environment ripe for fraud include a weak tone from the top, a vulnerable culture in which whistleblowing is not supported, and compensation structures that reward unethical and/or excessively risky behavior (Marks, 2012). Each of these factors has one common theme: whistleblowing. An organization which establishes a structural reporting mechanism (such as a confidential complaint mechanism) and protects whistleblowers (through anti-retaliation measures) can be in a better position than non-implementers to gain insight into fraudster's red flag behaviors and/or organizational gaps through employees' timely observations and disclosures. Details are discussed in Chapter 2. Challenges associated with segregation of

duties when budget cuts result in consolidation of responsibilities, a lack of oversight, abuse of foundation funds, and a blatant disregard for adhering to ethical values due to the ‘tone at the top’ set by high-placed officials make these fiscally-trying times ripe for HEI fraud (Kranacher, 2005). However, HEI decision makers may have a different viewpoint of CCM implementation.

Finally, institutions may be concerned with “noise” disclosures, as discussed in Chapter 2. One type of disclosure which could readily be deemed as having little to no value while involving negative consequences is “noise” disclosures – complaints interpreted by management and/or peers as nuisance and/or tattling. According to Trevino and Victor (2002), “whistleblowers were less liked by work group members if there were no perceived negative consequences of the reported behavior” (Kidder, 2005). In some organizations, while whistleblowers deemed their so-called “noise” disclosures to have sufficient merit to take action, others found the disclosure could be harmful to healthy work environment relationships. Thus, one challenge organizations face is how to balance encouraging helpful disclosures while avoiding the pitfalls inherent with noise disclosures. If the Institution assesses there would likely be an unacceptable amount of “noise” disclosures if a CCM were implemented, the Institution could decide to not implement at all. These expected barriers lead to Hypothesis 2.4: *“As HEIs have assessed cost-benefit disadvantages (i.e., “Barriers”), the level of SOX Best Practices whistleblowing policy implementation has decreased or remained level from 2007 NACUBO survey levels.”*

Moving beyond these financial, governance, ethics, and barrier considerations, the next Research Question assesses the relationship between assessed Whistleblower motivation and HEI implementation.

Research Question 3

Research Question 3 asks, “Does HEIs’ assessment of whistleblowers’ motivation affect their Institutional level of SOX Best Practices (Anti-Retaliation & CCM) implementation?”

HEIs can decide whether to voluntarily implement confidential complaint mechanisms and/or whistleblower protection policies to prevent and mitigate fraud in higher education institutions. One possible approach to explaining organization’s decision to support retaliation and fraud reporting was addressed in the Economic Model Theory, which is presented in Chapter 2. Using the Economic Model, Heyes and Kapur (2008) found there are several mutually exclusive schools of thought concerning whistleblowers’ motivations: conscious cleansing, welfarist, and punitive. According to the researchers, decision makers’ assessment of whistleblowers’ motivation drives their institutional policy decisions. Hence, each competing psychological theory carries resultant policy implications and consequences.

In their study of whistleblowing in regulatory enforcement, Heyes and Kapur (2008) found whistleblowers are motivated to disclose observed and/or perceived infractions by one of three categories. First, whistleblowers can be motivated to disclose to follow their moral code (i.e., “Conscious-clearing” motivation). A second whistleblower motivation is to correct or prevent harm while doing more societal good than harm (i.e., “Welfarist” motivation). A third whistleblower motivation is to opportunistically discomfort the organization and/or anti-social or illegal employees (i.e., “Punitive” motivation). According to the researchers, regulatory decision makers’ assessment of whistleblowers’ motivation drives their policy decisions regarding whistleblower responsiveness and/or wrongdoer penalties. Hence, each competing psychological theory carries resultant policy implications.

The authors found “that the optimal policy involves “full enforcement” – that is, pursuing every case brought to light by whistle-blowers and the use of maximal penalties – *only* when whistle-blowing is a social act and when the whistle-blower is not distorted by noisy information” (Heyes, 2008). This “social act” classification coincides with the “Welfarist” whistleblower scenario. “Noisy information” concerns disclosures when the whistleblower “base(s) their disclosure decision on faulty or partial information” (Heyes, 2008). The first whistleblower motivation school of thought, “Conscious-clearing,” has agencies’ optimal policies supporting less than complete responsiveness to whistleblowers’ complaints. The last whistleblower motivation school of thought, “Punitive,” has agencies’ optimal policies not supporting the use of maximal penalties, due to the possibility of inducing “the wrong sort of whistle-blower to come forward” (Heyes, 2008).

Applied to Higher Education Institutions, the Economic Model provides insight into institutions’ possible responses to deciding whether to implement Confidential Complaint Mechanisms and/or support effective whistleblower protection policies. If the HEI assesses the whistleblower’s motivation originating from a desire to correct or prevent harm while doing more societal good than harm (i.e., “Welfarist” motivation), the institution could implement CCM and/or whistleblower policies that address Structural Model (CCM hotlines, etc.) and Anti-Retaliation Model (Whistleblower protection) issues to maximize disclosures and minimize retaliation. On the other hand, if the HEI assesses the whistleblower’s motivation deriving from either “Conscious-clearing” or “Punitive” origins, the Institution could decide either to decline CCM and/or whistleblower protection policy implementation, or not fully-support effective CCM and/or whistleblower protection policies.

Given these considerations, the associated Hypothesis 3.1 states, “*HEIs that assess whistleblowers as “Welfarists” have higher levels of SOX Best Practices (Anti-Retaliation & CCM) implementation than HEIs who assess whistleblowers as “Conscious clearing” or “Punitive.”*”

Moving beyond HEI’s assessment of whistleblower motivation, we now study whether locally tailored HEI SOX Best Practices policy implementation is associated with positive self-assessed tangible or intangible results.

Research Question 4

Research Question 4 asks, “Is locally tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation associated with positive self-assessed tangible/intangible results?”

One of the major complaints publicly traded companies have of SOX is that full-scale implementation is too costly. I use the Modified Rational Actor Model (MRAM) to explain HEI Whistleblower Policy implementation. The MRAM suggests elite HEI decision-makers weigh potential costs and benefits of voluntarily implementing anti-fraud and whistleblower protection measures. Implementation hindrances or costs can be barriers. One could wonder, “Given the preponderance of indications (Chapter 2) that fraud can be prevented or its effects mitigated, *why* does the cycle of anti-fraud non-implementation continue?” In other words, are there barriers Non-Implementers perceived or experienced that inhibited CCM implementation? Some publicly traded companies saw their compliance costs double due to mandatory full-scale SOX implementation (Carney, 2006). While locally tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is not synonymous with full-scale SOX implementation, the well-publicized horror stories from publicly traded companies are likely not

falling on deaf ears in the HEI sector. One feasible option is for organizations to selectively implement CCM elements that, given the HEI's unique circumstances, add sufficient value to be worthwhile. However, perhaps barriers sufficiently dilute benefits such that the net added value does not justify voluntary implementation.

Given these considerations, the associated Hypothesis 4 is, "*Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results.*"

Another area of interest is seeing whether impartial investigators of fraud complaints and/or alleged retaliation are associated with the organization's satisfaction with voluntarily continuing CCM efforts.

Research Question 5

Research Question 5 asks, "Is there a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI's satisfaction with voluntarily continuing CCM implementation?"

As discussed in Chapter 2, trust is paramount for an effective CCM to be viable. Whistleblowers need actionable assurance that their complaint will be confidentially handled and they will be protected against retaliation for filing the complaint. Creating "an environment in which employees feel comfortable reporting illegal activity without fear of retaliation from their employers" can significantly decrease "the apprehension employees may feel in coming forward" (Fisher, 2007). This safe disclosure environment is especially important considering that whistleblower's "tips are consistently and by far the most common detection method... more than twice the rate of any other detection method" (Report to the Nations on Occupational Fraud and Abuse, 2014).

As discussed in Chapter 2, an organization's response to whistleblowers' disclosures can take many forms, with widely diverse outcomes for whistleblowers and future disclosures. On a somewhat positive note, a study of nationwide data indicates management *may* applaud internal whistle-blowing "when it identifies bad apples within the company and allows for their removal before they cost the organization financial loss, scathing publicity, and/or litigation" (Rothschild & Miethe, 1999). A potential internal whistleblower hearing of this somewhat optimistic organizational support for their voluntary internal disclosure might note the operative words which condition whether their voluntary actions are subsequently deemed acceptable in the organizations' viewpoint. Namely, if management views post-disclosure outcomes for the organization positively, the internal whistleblower *may* be supported as long as nothing substantially adverse occurs. If not, life can rapidly become very difficult for the voluntary internal whistleblower. Such ambiguity on the organization's potential handling can thwart whistleblower's willingness to disclose, especially given the sordid history of whistleblower retaliation.

Two other organizational responses to whistleblower's disclosures are possible. A second organizational response concerns whistleblowers that use disclosure mechanisms outside of the organization, such as the press or social media. These whistleblowers are commonly referred to as "external" whistleblowers, since they are using disclosure channels outside of the organization. The external whistleblower's experience can be far different from the fortunate internal whistleblowers whose actions some organizations at times applaud. Oftentimes, management condemns external whistle-blowing "because the exposure of wrongdoing often brings adverse publicity" (Rothschild & Miethe, 1999). Such adverse publicity could feasibly

result in decreased state appropriations, a loss of benevolent donor contributions, and/or decreased student enrollment.

Finally, a third option finds that internal and external “whistle-blowers – even when their disclosures are found to be true and of great benefit to the employer – still face significant risk of various types of organizational retaliation, such as ostracism by coworkers, long-term economic harm, and psychological injury” (Rothschild and Miethe 1999). The authors found “organizational retaliation against whistle-blowers is severe and common”; in fact, about two-thirds of the study’s internal whistle-blower respondents experienced significant adversity including job loss, co-worker pressure, and increased scrutiny to blacklisting (Rothschild & Miethe, 1999). Looking beyond Rothschild and Miethe’s 1999 study, a more recent telephonic and web-based longitudinal study (n = 4,800) of workplace ethics from the employee’s perspective indicates that while misconduct is at an all-time low and whistleblowing is at an all-time high, retaliation and pressure against whistleblowers is alarmingly negative (Lowney & Robbins, 2011). Further details are available in Chapter 2.

Part of this safe disclosure environment can involve establishing a trusted, impartial investigator who will be responsible for investigating and resolving fraud complaints and/or retaliation allegations. Given these considerations, the associated Hypothesis 5 is, “*HEIs with impartial investigators of alleged retaliation and fraud complaints find the SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their Institution at a higher level than HEIs without impartial investigators.*”

Lastly, after studying whether impartial investigators of fraud complaints and/or alleged retaliation are associated with the organization’s satisfaction with voluntarily continuing CCM

efforts, we now see whether high-level decision maker involvement in CCM implementation is correlated to HEI self-assessed CCM program effectiveness.

Research Question 6

Research Question 6 asks, “Is high-level decision maker involvement in CCM implementation correlated to HEI self-assessed CCM program effectiveness?”

Leadership is important to overcoming employee suspicions and in building trusts (Miller, 1992). The HEI demographic and environment has been described as diverse, expansive and decentralized, as discussed in Chapter 2. Furthering the challenging situation, policy implementation is complex and requires enduring leadership involvement. A landmark, in-depth case study highlights the importance of engaged and inclusive leadership making a clear connection between visionary policy initiation and evolutionary policy implementation (Pressman & Wildavsky, 1984). At times there can be too many unanticipated decision points to handle within the allotted time frame (Pressman & Wildavsky, 1984). This implementation complexity can be compounded by excessive interactions from the institutions’ broad constituency. In the HEI environment, internal and external stakeholders can include faculty, staff, potential whistleblowers, alumni, donors, Office of the President/Chancellor, Central Administration, Board of Trustees, State-level officials, community members, governmental regulatory agencies, HEI accreditation agencies, and foundations. At times, such interactions and pushback from stakeholders can sabotage successful implementation and/or program success.

If an organization’s leadership is characterized by short tenure and responsiveness to hot button issues, it is highly likely that existing organizational orientations and routines will not receive adequate attention to effect major changes over time (Allison & Zelikow, 1999). Given

all of these challenges, would not organizations overwhelmingly welcome insight from loyal employees?

As discussed in Chapter 2, employees acquire organizational allegiance over time. In fact, employees can develop “loyalty to the organization objective... [as well as] a loyalty to the organization itself and an interest in its survival and growth” (Simon, 1997). This loyalty tugs at the whistleblower and their peers. Some whistleblowers disclose out of a sense of loyalty to protecting the organization. However, tension arises when the organization or peers view the whistleblower’s disclosure as being disloyal and/or harmful. If organizational leadership does not consistently establish a workplace environment which supports and defends loyal employees’ efforts to report and/or eradicate potentially harmful activities to the organization’s clientele and/or existence, the legally authorized leaders will have lost the opportunity to adequately establish and influence an environment in which timely, pertinent, and salient information can flow to unbiased authorities so that appropriate corrective or mitigation actions can take place. Thus, employees with critical (asymmetric) insider information dealing with potentially-fraudulent activities can be intentionally or inadvertently structurally dissuaded from internally disclosing perceived or observed harmful activities. In this case, HEIs can see diminished (or non-existent) returns on their anti-fraud efforts and scarce resource expenditures. Thus, HEIs with high-level decision-maker involvement in establishing a trustworthy reporting environment could have greater self-assessed program effectiveness than HEIs without executive leadership or governance support.

Given these considerations, the associated Hypothesis 6 states, “*HEIs with high-level decision-maker involvement in Anti-Retaliation & CCM policy implementation had greater self-assessed program effectiveness than HEIs without executive leadership/governance support.*”

Now that we have reviewed each Research Question and Hypothesis, we next turn to the study impetus, my collaborative instrument approach and salient demographics.

Data Source

Survey was chosen to conduct an exploratory study to determine Higher Education Institution's (HEI's) level of implementation, expectations and effects from voluntarily implementing NACUBO-recommended Sarbanes-Oxley Act of 2002 whistleblowing best practices provisions; barriers to implementation were also studied. The Survey was a Web-based NACUBO instrument of equivalent 2- and 4-year degree-granting U.S. Universities. The Unit of Analysis is Public and Private HEIs. This study will help illuminate their level of implementation, expectations and effects from voluntarily implementing NACUBO-recommended Sarbanes-Oxley Act of 2002 whistleblowing best practices provisions; the study will also further the body of knowledge on Implementer's and Non-Implementer's barriers.

Study Impetus and Collaboration with NACUBO

The impetus for studying HEI SOX Best Practices CCM implementation and barriers arose in the spring of 2010, as I observed a gap in current and generalizable peer-reviewed HEI literature as most research on whistleblowers and SOX over the last twelve years has mainly dealt with corporate entities. Initially, the tool built upon concepts from the literature review, combined with portions of NACUBO's 2004/2007 Surveys and James Seaman's 2009 Dissertation Survey. Over the ensuing 17 months I refined the instrument, collaborating with Sue Menditto (NACUBO Director of Accounting Policy) and Natalie Pullaro Davis (NACUBO Manager of Research and Policy Analysis, Advocacy and Issue Analysis).

Collaboration with NACUBO and ACUA was extremely desirable, as they have content expertise and direct access to key HEI decision makers nationwide. Such sponsorship can be

invaluable, as recognized entities like NACUBO and ACUA oftentimes have greater recognition and legitimacy with the desired population than a lone, aspiring researcher; this relationship can oftentimes lead to voluntary, informed participation and robust data (Dillman, Smyth, & Christian, 2009).

I deemed collaboration to have great potential, as NACUBO’s 2,098 U.S. constituents total 2,032 Higher Education Institutions (1,077 Private Institutions and 955 Public Institutions), 17 Higher Education Governing Boards (representing Public Institutions), and 49 Higher Education Systems (representing 2 Private Institution Systems and 47 Public Institution Systems) when the data collection instrument was released. A constituent breakdown is available in Table 7.

Table 7

NACUBO Member Institution Demographics

Most NACUBO member organizations are Private or Public Higher Education Institutions

Private/Public HEIs	Affiliation	Percent
Private	1,079	51%
Public	<u>1,019</u>	<u>49%</u>
N	<u><u>2,098</u></u>	100%

These Private and Public Higher Education Institutions had varying curriculum lengths

Curriculum Length	Count	Percent
2 Year	456	22%
3 Year	1	0%
4 Year/4 Year or Above	<u>1,575</u>	<u>78%</u>
N	<u>2,032</u>	100%

Several NACUBO member organizations are Governing Boards or Systems

Governance Type	Count	Percent
Governing Board	17	26%
System	<u>49</u>	<u>74%</u>
N	<u>66</u>	100%

As shown in Table 8, these institutions geographically span across the United States and outlying territories, representing the gamut of U.S. higher education institutions. The overall response rate was 8%. Comparing the population versus the instrument responses, there were some notable variances. The Northwest HEIs were over-represented (14%). In contrast, the Southeast (7%), Northeast (6%), and Southwest (1%) were under-represented. Despite these variances, without access to this expansive group of decision makers I would have been hard-pressed to reach the intended audience and collect salient, generalizable data.

Table 8

Population by Region, Representation, and Response Rate (All %)

Region	Population within Region	Respondents within Region	Representation Variance	Response Rate
Northwest	23	37	14	12
Northeast	40	34	(6)	6
Southeast	27	20	(7)	6
Southwest	9	8	(1)	7
Outlying Territories	1	1	0	9
Total (%)	100	100	0	8
				(Average)

Collaboration with ACUA

To assist respondents in accurately answering detailed questions, NACUBO and I determined it would be helpful if Institutions with Internal Audit departments would be available to assist NACUBO-invited members in answering CCM and fraud questions. I coordinated with the Association of College and University Auditors (ACUA) Executive Director for ACUA to send out an announcement I drafted on behalf of the ACUA President to ACUA members stating the SOX Survey has been sent to their Institution’s Controller’s Office so that they can provide assistance (as needed) with the survey. The announcement is available at Appendix 3. NACUBO made the Invitation-only survey available to respondents for 10 weeks. To contextually grasp the instrument flow and breadth, I will now provide a brief overview.

Management, Governance and Fraud Survey Overview

The SOX Survey questions sequentially follows NACUBO survey questions on Governance and Ethics. The NACUBO survey has 7 questions on Governance issues, 9 questions on External Auditors and the Audit Committee, 6 questions on Financial Certifications, 3 questions on Internal Controls, 4 questions on Internal Audit, and 10 questions on Ethics/Conflicts of Interest. Content-wise, the NACUBO Governance and Ethics questions constitute approximately 40 percent of the combined Survey, while my CCM questions constitute approximately 60 percent of the combined Survey. NACUBO field tested the survey instrument with several renowned HEI Controllers; feedback indicates the time commitment is approximately 30 minutes, with the question stems/answers both appropriate and comprehensive. Survey participants were advised that Internal Auditors at their Institution (if they have Internal Auditors) are aware of the survey through their membership organization, ACUA, and will be available to assist if necessary.

Survey Questions: An Overview

The SOX Survey starts with a closed-ended question that discretely discerns whether responding Institutions have voluntarily implemented Confidential Complaint Mechanism(s) (CCMs). Implementers can then identify who led the decision making process, what CCM channels were utilized, who investigates/resolves complaints, how the Whistleblower's confidentiality is protected, how beneficial the CCM was expected to be for financial-, governance-, and ethics-issues, whether the CCM has been successful, whether fraud has existed, whether the CCM was the source of discovering the fraud, what was the perceived whistleblower's primary motivation to disclose, whether barriers exist that affect the use and/or success of the CCM for fraud reporting, and whether a CCM makes sense for their institution

(and the corresponding rationale). For comparison, non-implementers were asked identical questions where appropriate, with not-applicable questions electronically avoided through skip pattern design.

Types of CCM include institutionally-supported, third party vendor, and law enforcement. Within the institutionally-supported and third party vendor options, respondents could identify the following disclosure channels: hotline, fax, website, e-mail, mailing address, physical drop box, and Other (with an associated fill-in field for textual responses). Non-implementers were provided the opportunity to identify the designee to whom whistleblowers report a complaint via a fill-in field for textual responses.

Implementers and non-implementers were asked to identify who investigates/resolves the allegation/complaint. Options included internal auditors, Ombudsman for the institution, Office of the President, Human resources, a departmental administrator, state-level official, third party vendor, and Other (with an associated fill-in field for textual responses). After identifying how the whistleblower's confidentiality is protected, CCM implementers and non-implementers faced their first in a series of Likert scale questions (5 point basis ranging from "Highly beneficial" to "Not at all beneficial"). These questions asked for their assessment of how beneficial the CCM was expected to be for financial-, governance-, and ethics issues.

The final dichotomous question in the CCM section asks implementers whether the CCM program has been successful, followed by an open-ended opportunity to describe how they measure success/failure and what indicators would be present.

Concerning fraud, a series of questions gathers data on cases of fraud at their Institution in the last three years (number of cases, aggregate level of funds affected, case disposition, aggregate dollar amount of funds returned to the institution, and whether the CCM was the

source of discovering the fraud for any of the cases). The next question discretely asks for implementers and non-implementers assessment of the whistleblower's primary motivation to disclose perceived/illegal acts; possible answers are one of three options or a fill-in textual field.

Implementers and non-implementers were then asked a dichotomous question on whether there are perceived barriers that affect the use and/or success of the CCM for fraud reporting at their institution. Those answering in the affirmative are offered 17 closed-ended literature review-based options and one open-ended response, all of which are on a Likert scale basis (4 point basis ranging from "Significant affect" to "Not applicable").

The closing question asks implementers and non-implementers if having a CCM makes sense for their institution (and provides an open-ended textual field in which to describe the key reasons).

There is a gap in current and generalizable peer-reviewed HEI literature as most research on whistleblowers and SOX over the last twelve years has mainly dealt with corporate entities. Generalizable Higher Education Institution data indicating whether voluntary implementation of SOX whistleblowing Best Practices benefits HEIs does not exist. Generalizable HEI data concerning what whistleblowing policies were implemented and why they were chosen is non-existent. Likewise, generalizable data indicating what factors (i.e., barriers) were present with non-implementing HEIs is also lacking.

Now that we have reviewed each Research Question and Hypothesis, the study impetus, my collaborative instrument approach and salient demographics, we now turn to see the tie between each hypothesis and the survey instrument.

Hypotheses, Survey Instrument and Coding

Research Question 1

The first Research Question examines the current level of SOX Best Practices whistleblowing policy implementation compared to 7 years ago. The related Hypothesis 1 states, *“The level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.”*

We examine if the Institution has a Confidential Complaint Mechanism for employees. The implementation of CCM is addressed in Q21, “Your Institution has a confidential complaint mechanism for employees.” Responses were coded to “1” for “Yes”, and “0” for “Plan to implement”, “Definitely will not implement”, and “Undecided (may or may not implement).” This stem and associated response options branch Instrument participants into CCM “Implementers” and “Non-Implementers.”

Research Question 2

Research Question 2 asks, “If the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels, why has this change occurred?” There are four hypotheses related to Research Question 2. The first hypothesis addresses HEI financial cost-benefit calculations.

Hypothesis 2.1 is, *“As HEIs have assessed financial cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.”*

As discussed earlier, there can be many financial benefits to SOX Best Practices whistleblowing policy implementation. This hypothesis and associated survey question ascertains whether HEIs expected financial benefits from implementation. Several instrument

questions glean details concerning the financial motivating factors behind institutional decision maker's actions to implement (or not implement) CCM. Both implementers (Q28) and non-implementers (Q56) were asked to describe how beneficial a CCM was expected to be in seven financial considerations. Possible financial benefits include decrease fraud, gain insider's knowledge on alleged fraud, and improve confidence in the Institution's stewardship of public funds. Additional possible financial benefits survey participants could identify include enhance grant proposals and funding solicitations, provide a competitive edge over non-implementers, and lower operating costs.

CCM implementers and non-implementers were asked, "How beneficial was the CCM expected to be for financial issues?" on a 1 to 5 Likert Scale, where "5" equals "Highly beneficial", "4" equals "Very beneficial", "3" equals "Somewhat beneficial", "2" equals "Slightly Beneficial", and "1" equals "Not at all beneficial." I calculated the mean for each of the seven possible Financial Likert scale items. I then created an average mean "Financial Benefit Scale" to use in determining if the combined financial factors were statistically significantly different among implementers' and non-implementers' Cost-Benefit analyses. The next hypothesis addresses governance cost-benefit issues.

Hypothesis 2.2 is, "As HEIs have assessed governance cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels."

As discussed earlier, there can be many governance benefits to SOX Best Practices whistleblowing policy implementation. This hypothesis and associated Survey question ascertains whether HEIs expected governance benefits from implementation. Several instrument questions glean details concerning the governance motivating factors behind Institutional

decision maker's actions to implement (or not implement) CCM. Both Implementers (Q30) and Non-Implementers (Q57) were asked to describe how beneficial a CCM was expected to be in four governance considerations. Possible governance benefits include: proactively protect the Institution's reputation, improve internal information flow, and improve the Institution's decision-making.

CCM implementers and non-implementers were asked, "How beneficial was the CCM expected to be for governance issues?" on the same five-point Likert Scale described above regarding Hypothesis 2.1. I calculated the mean for each of the four possible Governance Likert scale items. I then created an average mean "Governance Benefit Scale" to use in determining if the combined governance factors were statistically significantly different among implementers' and non-implementers' Cost-Benefit analyses. HEI cost-benefit calculations are not limited to financial and governance issues. The next hypothesis addresses ethics cost-benefit issues.

Hypothesis 2.3 is, *"As HEIs have assessed ethics cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels."*

As discussed earlier, there can be many ethics benefits to SOX Best Practices whistleblowing policy implementation. This hypothesis and associated survey question ascertains whether HEIs expected ethics benefits from implementation. Several instrument questions glean details concerning the ethics motivating factors behind Institutional decision maker's actions to implement (or not implement) CCM. Both Implementers (Q31) and Non-Implementers (Q58) were asked to describe how beneficial a CCM was expected to be in five ethics considerations. Possible ethics benefits include: attract students, and recruit and retain ethical employees. Additional ethics benefits could include: build local capacity for self-

governance, as well as improve the culture and signal that the Institution supports ethical conduct and accountability.

CCM implementers and non-implementers were asked, “How beneficial was the CCM expected to be for ethics issues?” on the same five-point Likert Scale described above regarding Hypothesis 2.1. I calculated the mean for each of the five possible Ethics Likert scale items. I then created an average mean “Ethics Benefit Scale” to use in determining if the combined ethics factors were statistically significantly different among implementers’ and non-implementers’ Cost-Benefit analyses. HEI cost-benefit calculations are not limited to financial, governance, and ethics issues. The next hypothesis addresses cost-benefit barrier issues.

Hypothesis 2.4 is, *“As HEIs have assessed cost-benefit disadvantages (i.e., “Barriers”), the level of SOX Best Practices whistleblowing policy implementation has decreased or remained level from 2007 NACUBO survey levels.”*

As discussed earlier, there can be many barriers which possibly affect the SOX Best Practices whistleblowing policy level of implementation. This hypothesis and associated Survey question ascertains whether HEIs experienced barriers to implementation. One instrument question (Q51) gleans details concerning the barriers influencing Institutional decision maker’s actions to implement (or not implement) CCM. Implementers and Non-Implementers could identify the extent barriers adversely affected the Institution’s level of CCM success. Both Implementers and Non-Implementers were asked to describe the extent to which CCM success was affected by seventeen barrier considerations. Possible barriers include: perceived costs outweigh benefits, stakeholder disagreements, and realization that the CCM program is more complex than originally perceived. Additional barriers could include policy disagreement, pushback (from Faculty, Office of the President/Chancellor, Central Administration, the Board

of Trustees, and external entities). Further potential barriers are time constraints, too many decision makers and/or unanticipated decision points, and the CCM being incompatible with institutional culture. Furthermore, barriers could include the decision maker anticipated too many “noise” disclosures would overwhelm institutional capacity, concern over program administration/ responsibility issues, a low sense of urgency, and CCM advocate support waned.

CCM implementers and non-implementers were asked, “To what extent did the following barriers adversely affect the institution’s level of CCM success?” on a 1 to 4 Likert Scale, where “4” equals “Significant affect”, “3” equals “Moderate affect”, “2” equals “Slight affect”, and “1” equals “No affect.” I calculated the mean for each of the seventeen possible Barrier Likert scale items. I then created an average mean “Barriers Scale” to use in determining if the combined barriers factors were statistically significantly different among implementers’ and non-implementers’ Cost-Benefit analyses.

Research Question 3

Research Question 3 asks, “Does HEIs’ assessment of whistleblowers’ motivation affect their Institutional level of SOX Best Practices (Anti-Retaliation & CCM) implementation?”

Hypothesis 3.1 is, “*HEIs that assess whistleblowers as “Welfarists” have higher levels of SOX Best Practices (Anti-Retaliation & CCM) implementation than HEIs who assess whistleblowers as “Conscious clearing” or “Punitive.”*

As discussed earlier, there can possibly be varying levels of implementation, depending upon Institutions’ assessment of whistleblowers’ motivation to disclose. This hypothesis and associated survey questions ascertain whether HEIs’ assessment of whistleblowers’ motivation to disclose is associated with their Institutional level of SOX Best Practices (Anti-Retaliation & CCM) implementation.

The influence of the Institution's view of the whistleblower's primary motivation to disclose perceived/observed illegal acts on their level of Anti-Retaliation and Confidential Complaint Mechanism (CCM) policy implementation is addressed in Q49 as related to Q21. The Independent Variable (Q49) stem states, "In your opinion, a Whistleblower's primary motivation to disclose perceived/observed illegal acts is best described as:" Three possible responses include "Following their moral code", "Disgruntled or opportunistic person desiring to cause problems within the organization", and "Correcting or preventing harm while doing more good than harm." Decision makers can choose only one of the above-stated answers.

The Dependent Variable (Q21) indicates the level of CCM implementation, stating "Your Institution has a confidential complaint mechanism for employees." Possible choices were "Yes", "Plan to implement", "Definitely will not implement", and "Undecided (may or may not implement)." Decision makers can choose only one of the above-stated answers to Q21.

Whistleblower motivation responses were coded to "1" for "Following their moral code", "2" for "Disgruntled or opportunistic person desiring to cause problems within the organization", and "3" for "Correcting or preventing harm while doing more good than harm."

Regarding the level of implementation, responses were coded to "1" for "Yes", and "0" for "Plan to implement", "Definitely will not implement", and "Undecided (may or may not implement)." This question and associated response options branch instrument participants into CCM "implementers" and "non-implementers."

Research Question 4

Research Question 4 asks, "Is locally tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation associated with positive self-assessed tangible/intangible results?"

Hypothesis 4.1 is, “*Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results.*”

As discussed previously, HEIs can feasibly implement locally-tailored SOX Best Practices (Anti-Retaliation & CCM) policies and realize positive self-assessed tangible/intangible results. This hypothesis and associated Survey questions ascertain whether HEIs implemented SOX Best Practices (Anti-Retaliation & CCM) policies and the institution’s assessment of the bottom line tangible/intangible results.

Several questions ascertain CCM implementers’ chosen type of Confidential Complaint Mechanism (CCM). Q23 first assesses whether the implemented CCM was “Institutionally supported”, “Third party vendor”, “Employees are directed to contact a designated law enforcement official”, or “Other.” Selection(s) were coded “1” while non-selections were coded “0”.

Further implementer details are obtained regarding institutionally-supported CCM (Q24), Third party vendor (Q25), and “Other” (Q26). In Q24, institutionally-supported options include the following disclosure channels: Hotline, Fax, Website, E-mail, Mailing address, Physical drop box, Employees are directed to contact an independent institutional official, and Other (with an associated fill-in field for textual responses). In addition to institutionally-supported CCMs, respondents could identify third-party vendor-supported CCM. In Q25, Third-party vendor options include all of the institutionally-supported CCMs except “Employees are directed to contact an independent institutional official.” In Q26, respondents to “Other” in Q24 can provide textual details identifying the entity to which whistleblowers report the complaint. In

Q54, non-implementers were provided the opportunity to identify the designee to whom whistleblowers report a complaint via a fill-in field for textual responses.

In Q24, institutionally-supported CCM selection(s) were coded “1” while non-selections were coded “0”. In Q25, Third-party vendor-supported CCM selection(s) were coded “1” while non-selections were coded “0”. If a HEI had implemented at least one method of institutionally-supported CCM or Third-party Vendor-supported CCM, they were assigned a “1” in a new variable identifying HEIs who had provided institutionally-supported CCM or Third-party Vendor-supported CCM, respectively. These new summary variables were useful in facilitating statistical analysis of association with results. Besides Confidential Complaint Mechanisms, HEIs could implement policies designed to protect whistleblowers. Such policies are typically intended to create a safe environment in which whistleblowers can disclose their asymmetric information regarding fraud without fear of retaliation.

In Q26, respondents to “Other” institutionally-supported CCM or Third-party vendor supported CCM selection(s) can provide textual details identifying the entity to which whistleblowers report the complaint. These responses were aggregated using Grounded Theory Pile Sorting. Likewise, in Q54, non-implementers were provided the opportunity to identify the designee to whom whistleblowers report a complaint via a fill-in field for textual responses.

These non-implementer responses were aggregated using Grounded Theory Pile Sorting.

A second type of locally tailored policy concerns whistleblower protection. Q48 discerns what anti-retaliation method was implemented to protect confidential complaint providers. Possible protection options include Federal/State/institutional policies, and the retaliator being subject to reprimand/dismissal/prosecution. Additional protection options are a Code of Ethics

includes whistleblower protection provisions, and Other – with a follow-on textual field for respondent details.

Anti-retaliation method selection(s) were coded “1” while non-selections were coded “0”. If a HEI had implemented at least one method of whistleblower protection, they were assigned a “1” in a new variable identifying HEIs who had provided anti-retaliation protection. This new summary variable was useful in facilitating statistical analysis of anti-retaliation protection association with results.

The dependent variable, tangible/intangible results, is addressed in several instrument questions. Survey participants could identify tangible and intangible results concerning CCM program success, cases of fraud at their institution (with follow-on questions), and identifying whether having a CCM make sense for their institution. I will introduce each result area in order.

First, implementers identified overall CCM program success. In Q29, implementers were asked, “In your opinion, has the CCM Program been successful?” Dichotomous answers “Yes” and “No” lead to a textual field to identify how participants measure success/failure and/or the indicators for which they look (Q52). Dichotomous answers “Yes” and “No” were coded “1” and “0” respectively. Answers to the follow-on textual field identifying how participants measure success/failure and/or the indicators for which they look (Q52) were coded using Grounded Theory Pile Sorting.

Second, implementers and non-implementers identified fraud at their institution. Implementers and non-implementers alike identified cases of fraud at their institution in the past three (3) years (Q39). Dichotomous answers “Yes” and “No” were coded “1” and “0” respectively. If positively answered, several follow-on questions ascertained the number of cases

(Q40), aggregate funds involved (Q41), case disposition (Q42), aggregate funds returned to the Institution (Q43), whether the CCM was the source of discovering the fraud for any of the cases (Q45), and the source of discovering the fraud (if not the CCM; Q46). For these questions, “selections” were coded “1” while non-selections were coded “0”. An additional question concerned whether the CCM was the source of discovering the fraud for any of the cases (Q45). Dichotomous answers “Yes” and “No” were coded “2” and “1” respectively.

The final instrument source for obtaining respondents’ assessment of CCM results is Q53, which asks “Does having a CCM make sense for your institution? Why, what are the key reasons?” The dichotomous “Yes” and “No” responses are followed by a textual field for “why” and “key reason” details. Dichotomous answers “Yes” and “No” were coded “1” and “0” respectively. Answers in a follow-on textual field for “why” and “key reason” details were sorted and coded using Grounded Theory Pile Sorting.

Research Question 5

Research Question 5 asks, “Is there a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI’s satisfaction with voluntarily continuing CCM implementation?”

Hypothesis 5.1 is, “*HEIs with impartial investigators of alleged retaliation and fraud complaints find the SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their Institution at a higher level than HEIs without impartial investigators.*”

For CCM implementers and non-implementers, this concept addresses what type of independent investigator of allegations/complaints was implemented and the institution’s assessment of the bottom line tangible/intangible results. Discerning the entity that investigates/resolves the allegation/complaint is found in Q27 (CCM implementers) and Q55

(CCM non-implementers). CCM implementers and non-implementers could select all applicable investigators from the following choices: “Internal Auditors”, “Ombudsman for the Institution”, “Office of the President”, “Human Resources”, “A departmental administrator”, “State-level official”, “Third-party vendor”, and “Other.” The seven possible investigators were coded “1” if selected and “0” if not selected.

To initially analyze the aggregate independent variables, the seven possible investigators (Internal Auditors, Ombudsman for the Institution, Office of the President, Human Resources, a Departmental Administrator, State-level Official, and Third-Party Vendor) were combined into one variable “xq27ALLImpartial” to ascertain whether overall investigators were related to HEI’s assessment that SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their Institution. This Independent Variable represents HEIs who have implemented at least one of the aforementioned investigators.

For statistical comparison, a second Independent Variable representing HEIs who have implemented at least one of the aforementioned investigators *except* Departmental Administrators (“xq27ImpartialInvestigator”) was coded as “1” if the HEI had implemented at least one investigator besides a Departmental Administrator.

The dependent variable, tangible/intangible results, is addressed in several instrument questions. Survey participants could identify tangible and intangible results concerning cases of fraud at their Institution (with follow-on questions), and identifying whether having a CCM make sense for their Institution. I will sequentially introduce the instrument questions and coding for each result area.

CCM implementers and non-implementers identified fraud at their institution. Implementers and non-implementers alike identified cases of fraud at their Institution in the past

three (3) years (Q39). Dichotomous answers “Yes” and “No” were coded “1” and “0” respectively. If positively answered, several follow-on questions ascertained the number of cases (Q40), aggregate funds involved (Q41), case disposition (Q42), aggregate funds returned to the Institution (Q43), and the source of discovering the fraud (if not the CCM; Q46). For these questions, “selections” were coded “1” while non-selections were coded “0”. An additional question concerned whether the CCM was the source of discovering the fraud for any of the cases (Q45). Dichotomous answers “Yes” and “No” were coded “2” and “1” respectively.

The final instrument source for obtaining respondents’ assessment of CCM results is Q53, which asks “Does having a CCM make sense for your Institution? Why, what are the key reasons?” The dichotomous “Yes” and “No” responses are followed by a textual field for “why” and “key reason” details. Dichotomous answers “Yes” and “No” were coded “1” and “0” respectively. Answers in a follow-on textual field for “why” and “key reason” details were sorted and coded using Grounded Theory Pile Sorting.

Research Question 6

Research Question 6 asks, “Is high-level decision maker involvement in CCM implementation correlated to HEI self-assessed CCM program effectiveness?”

Hypothesis 6 is, “*HEIs with high-level decision-maker involvement in Anti-Retaliation & CCM policy implementation had greater self-assessed program effectiveness than HEIs without executive leadership/governance support.*”

This concept addresses whether engaged leadership/governance was involved and the Institution’s assessment of the bottom line self-assessed program effectiveness. Engaged leadership/governance is assessed in Q22, which asks CCM Implementers “Who led the decision making process? (Please list Official’s title, not person’s name).” If answered, the response was

coded “1” while no answers were coded “0”. The textual responses were also sorted and coded using Grounded Theory Pile Sorting.

The dependent variable, tangible/intangible results, is addressed in several instrument questions. Survey participants could identify tangible and intangible results concerning CCM program success, cases of fraud at their institution (with follow-on questions), and identifying whether having a CCM make sense for their institution. I will introduce each result area in sequentially.

First, implementers identified overall CCM program success. In Q29, Implementers were asked, “In your opinion, has the CCM Program been successful?” Dichotomous answers “Yes” and “No” were coded “1” and “0” respectively. Answers to the follow-on textual field identifying how participants measure success/failure and/or the indicators for which they look (Q52) were coded using Grounded Theory Pile Sorting.

Second, implementers and non-implementers identified fraud at their institution. Implementers and non-implementers alike identified cases of fraud at their institution in the past three (3) years (Q39). Dichotomous answers “Yes” and “No” were coded “1” and “0” respectively. If positively answered, several follow-on questions ascertained the number of cases (Q40), aggregate funds involved (Q41), case disposition (Q42), aggregate funds returned to the institution (Q43), and the source of discovering the fraud (if not the CCM; Q46). For these questions, “selections” were coded “1” while non-selections were coded “0”. An additional question concerned whether the CCM was the source of discovering the fraud for any of the cases (Q45). Dichotomous answers “Yes” and “No” were coded “2” and “1” respectively.

The final instrument source for obtaining respondents’ assessment of CCM results is Q53, which asks “Does having a CCM make sense for your institution? Why, what are the key

reasons?” Dichotomous answers “Yes” and “No” were coded “1” and “0” respectively.

Answers in a follow-on textual field for “why” and “key reason” details were sorted and coded using Grounded Theory Pile Sorting.

We have reviewed each Research Question and Hypothesis, the study impetus, my collaborative instrument approach and salient demographics. We then saw the tie between each hypothesis, the survey instrument and coding. We now turn to see the Method of Analysis.

Method of Analysis

Statistical analysis of study data was accomplished using SPSS Version 22. The data analysis plan included three methods: descriptive, comparative, and relational/associative. First, the descriptive method of analysis using frequencies allowed for reporting the current level of implementation as well as comparing this level with the 2007 level. Descriptive frequencies were beneficial for analyzing the methods by which institutions provided confidential complaint mechanisms and whistleblower protection. Additionally, frequency distribution was useful for analyzing the dichotomous variable dividing survey responders into either “Implementers” or “Non-Implementers.” This “Implementers” or “Non-Implementers” segregation was present throughout the research questions.

Second, the comparative method of analysis for the interval variable “Expectation Scale” is ANOVA. These benefit scales represented aggregate financial, governance, ethics, and barrier Likert Scale expectations related to Research Question 2. One-way ANOVA allowed for statistical analysis concerning differences between implementers and non-implementers on the respective scales. Regarding effect size (r^2) for the independent variable’s association with the dependent variable, ANOVA allowed for statistical analysis and reporting of the independent variable’s association with the dependent variable.

Third, the relationship method of analysis for the nominal variables in Research Questions 3 through 6 is chi-square. These procedures allowed for Pearson's chi-square statistics generation to examine the relationships for implementers and non-implementers while quantifying the reliability of the association between the independent variable and the dependent variable.

Textual answers (such as "why" and "key reason" details) were categorized using Grounded Theory Pile Sorting. The resulting categories in Research Questions 3 through 6 were analyzed using cross-tabulations and frequency distributions. A summary of each Research Question, associated Hypothesis, Method of Analysis, Independent Variables and Dependent Variables follows.

Research Question 1

Research Question 1: Has the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels?

Hypothesis 1, *The level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.*

Method of analysis for the dichotomous variable is frequency distribution ["Implementers" and "Non-Implementers."].

Research Question 2

Research Question 2 asks, "If the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels, why has this change occurred?"

Hypothesis 2.1 is, "As HEIs have assessed *financial* cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels."

The method of analysis for the interval variable “Expectation Scale” is ANOVA and cross-tabulation [Financial Expectations (Independent Variable) and HEI CCM implementation (Dependent Variable)].

Hypothesis 2.2 is, “As HEIs have assessed **governance** cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.”

The method of analysis for the interval variable “Expectation Scale” is ANOVA and cross-tabulation [Governance Expectations (Independent Variable) and HEI CCM implementation (Dependent Variable)].

Hypothesis 2.3 is, “As HEIs have assessed **ethics** cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.”

The method of analysis for the interval variable “Expectation Scale” is ANOVA and cross-tabulation [Ethics Expectations (Independent Variable) and HEI CCM implementation (Dependent Variable)].

Hypothesis 2.4 is, “As HEIs have assessed cost-benefit disadvantages (i.e., “**Barriers**”), the level of SOX Best Practices whistleblowing policy implementation has decreased or remained level from 2007 NACUBO survey levels.”

The method of analysis for the interval variable “Expectation Scale” is ANOVA and cross-tabulation [Barriers Expectations (Independent Variable) and HEI CCM implementation (Dependent Variable)]

Research Question 3

Research Question 3 asks, “Does HEIs’ assessment of whistleblowers’ motivation affect their Institutional level of SOX Best Practices (Anti-Retaliation & CCM) implementation?”

Hypothesis 3.1 is, “HEIs that assess whistleblowers as “Welfarists” have higher levels of SOX Best Practices (Anti-Retaliation & CCM) implementation than HEIs who assess whistleblowers as “Conscious clearing” or “Punitive.”

The method of analysis for the nominal variables is cross-tabulation using Chi-Square [HEI whistleblower assessment (Independent Variable) and HEI CCM implementation (Dependent Variable)].

Research Question 4

Research Question 4 asks, “Is locally tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation associated with positive self-assessed tangible/intangible results?”

Hypothesis 4.1 is, “Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results.”

The method of analysis for the nominal variables is cross-tabulation using Chi-Square [locally-tailored policy implementation (Independent Variable) and positive tangible/intangible results (Dependent Variable)].

Research Question 5

Research Question 5 asks, “Is there a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI’s satisfaction with voluntarily continuing CCM implementation?”

Hypothesis 5.1 is, “*HEIs with impartial investigators of alleged retaliation and fraud complaints find the SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their Institution at a higher level than HEIs without impartial investigators.*”

The method of analysis for the nominal variables is cross-tabulation using chi square [HEIs with impartial investigators (Independent Variable) and HEIs satisfaction with voluntary CCM implementation (Dependent Variable)].

The method of analysis for the nominal variable is cross-tabulation using chi-square [HEIs with impartial investigators (Independent Variable) and positive tangible/intangible results (Dependent Variable)].

Research Question 6

Research Question 6 asks, “Is high-level decision maker involvement in CCM implementation correlated to HEI self-assessed CCM program effectiveness?”

Hypothesis 6.1 is, “*HEIs with high-level decision-maker involvement in Anti-Retaliation & CCM policy implementation had greater self-assessed program effectiveness than HEIs without executive leadership/governance support.*”

The method of analysis for the nominal variables is cross-tabulation using chi-square [Engaged high-level leadership (Independent Variable) and positive tangible/intangible results (Dependent Variable)].

As seen in Chapter 1, fraud depletes entities’ resources by an estimated annual average of 5% (Report to the Nations on Occupational Fraud and Abuse, 2014). The frequency and extent of fraud can be mitigated – as a review of the literature establishes in Chapter 2. However, fraud continues to occur, organizations do not implement published anti-fraud measures, and individuals with knowledge of suspected or observed fraudulent activities (labeled potential

“whistleblowers”) do not timely disclose their insider information to prevent and/or mitigate the adverse effects of fraud. Chapter 3 described the research hypotheses and study methodology. Chapter 4 discusses the research findings.

CHAPTER 4. RESEARCH FINDINGS

Fraud drains scarce resources – estimated at 5% annually on average – from all institutional sectors – private and public companies, governmental, and not-for-profit (Report to the Nations on Occupational Fraud and Abuse, 2014). Higher Education Institutions (HEIs) are the fifth highest type of organization where fraud is reportedly occurring (up from seventh place in 2010), according to the Association of Certified Fraud Examiners (Report to the Nations, 2014). This negative trend exacerbates organizations which could readily experience annual aggregate losses up to \$13.4 billion. To make matters worse, 58% of victim organizations do not recover any of their fraud losses, increasing from 49% in 2012 (Report to the Nations on Occupational Fraud and Abuse, 2014). The frequency and extent of fraud can be mitigated – as a review of the literature establishes in Chapter 2. However, fraud continues to occur, organizations do not implement published anti-fraud measures, and individuals with knowledge of suspected or observed fraudulent activities (labeled potential “whistleblowers”) do not disclose in a timely manner their insider information to prevent and/or mitigate the adverse effects of fraud. Using responses from elite administrators representing 162 U.S. Higher Education Institutions (HEIs), this chapter begins to describe why organizations implemented or did not implement voluntary anti-fraud measures.

There is a gap in current and generalizable peer-reviewed HEI literature as most research on whistleblowers and SOX over the last twelve years has mainly dealt with corporate entities. Generalizable Higher Education Institution data indicating whether voluntary implementation of

SOX whistleblowing Best Practices benefits HEIs does not exist. Generalizable HEI data concerning what whistleblowing policies were implemented and why they were chosen is non-existent. Likewise, generalizable data indicating what factors (i.e., barriers) were present within non-implementing HEIs is also lacking. This study significantly contributes to the body of knowledge concerning HEIs' level of implementation, expectations and effects from voluntarily implementing National Association of College and University Business Officers' (NACUBO)-recommended Sarbanes-Oxley (SOX) Act of 2002 whistleblowing Best Practices (BP) provisions.

Research Questions, Hypotheses and Results

The following are the study's questions, hypotheses, and results. Note: For the reader's reference, survey questions (Appendix 5) are referenced in the discussion according to their survey instrument nomenclature (i.e., Q21, etc.).

Research Question 1

Research Question 1 asks, "Has the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels?" This concept is addressed in Q21, asking if "Your Institution has a confidential complaint mechanism for employees (e.g. Hotline, Fax, Website, Mailing Address, Physical Drop Box)." 131 CCM implementers (81%, N = 162) and 31 CCM non-implementers (19%, N = 162) responded. Table 9 summarizes the responses.

Table 9

Level of CCM Implementation

Implement CCM?	
Yes	131 (81%)
No	31 (19%)
N	162 (100%)

In 2007, 65% of HEIs implemented some form of CCM. In 2013, 81% of institutions reported CCM implementation. HEIs implementing institutionally-supported CCMs primarily used e-mail, directing employees to contact an independent institutional official, and hotline as means to provide a confidential complaint mechanism. Details are in Table 24. HEIs implementing third-party vendor-supported CCMs used hotline, website, and e-mail as primary means to provide a confidential complaint mechanism. Details are in Table 25. HEIs differed in the method(s) by which Whistleblower's confidentiality is protected, as illustrated in Table 26. HEIs primarily used four methods of protecting whistleblowers from retaliation. First, their institutional policy prohibits retaliation. Second, their Code of Ethics includes whistleblower protection provisions. Third, the retaliator can be dismissed. Fourth, the retaliator can be reprimanded in writing. We have seen the HEI level of CCM implementation rise from 65% in 2007 to 81% in 2013. The next logical question is "Why has this change occurred?"

Research Question 2

Research Question 2 discerns possible reason(s) for increased implementation by asking, "If the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels, why has this change occurred?" This concept addresses "why" CCM

implementation has (or has not) occurred. I use the Modified Rational Actor Model (MRAM) to explain HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation decision making. The MRAM suggests elite HEI decision makers weigh costs and benefits of voluntarily implementing anti-fraud and whistleblower protection measures. Several instrument questions glean details concerning the motivating factors behind institutional decision maker's actions to implement (or not implement) CCM. These instrument questions address topics related to potential financial, governance, and ethics benefits as well as perceived barriers (costs) to implementation. The financial, governance, and ethics benefit expectation answers were on a 1 to 5 Likert Scale. This Scale had "5" equal "Highly beneficial", "4" equal "Very beneficial", "3" equal "Somewhat beneficial", "2" equal "Slightly Beneficial", and "1" equal "Not at all beneficial." I will discuss expectation results in order.

Hypothesis 2.1 Financial expectations. Hypothesis 2.1 states, "*As HEIs expected financial cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.*" CCM implementers and non-implementers were asked, "How beneficial was the CCM expected to be for financial, governance, and ethics issues?" The financial benefits were expected to be at least "somewhat beneficial." Eighty-one percent (81%) of HEIs expected the Confidential Complaint Mechanism program to at least somewhat beneficially improve confidence in the institution's stewardship of public funds. Almost three-quarters of HEIs expected to at least somewhat benefit by decreasing fraud (73%) and gaining insider's knowledge (72%) on alleged fraud through the CCM program. Further, institutions expected to at least somewhat benefit by enhancing grant proposals and funding solicitations (50%) through the CCM program. Thus, most expectations for financial benefits were directly tied to fraud prevention and increasing confidence in HEI stewardship of

funds. More remote, indirect effects of CCM (like providing a competitive edge over non-implementers (35%) or lowering operating costs (32%)) were not seen as at least somewhat beneficial to the institution. The results for each financial item are reported in Table 10.

Table 10

Expectations of Financial Benefits from CCM Implementation (%)

		Highly	Very	Somewhat	Slightly	Not at all	
	N	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	Total
Confidence in Stewardship	113	12	34	35	14	5	100
Decrease Fraud	118	8	25	40	19	8	100
Gain Insider's Knowledge	116	9	31	32	19	9	100
Enhance Grant Proposals	108	5	13	32	23	27	100
Competitive edge	102	4	6	25	23	42	100
Lower Operating Costs	104	2	11	19	21	47	100

CCM implementers and non-implementers differed on how much they expected the Confidential Complaint Mechanism program to at least somewhat provide financial benefits to the institution. Surprisingly, the few responding non-implementers had higher financial benefit expectations than implementers had from CCM implementation. All responding non-implementers expected CCM implementation to somewhat or higher benefit the institution in six areas. First, all responding non-implementers expected CCM implementation to somewhat or higher benefit the institution by improving confidence in the institution's stewardship of public funds and decrease fraud. Second, all responding non-implementers expected CCM implementation to somewhat or higher benefit the institution by gaining insider's knowledge on alleged fraud and enhancing grant proposals and funding solicitations. Third, three-fourths of

responding non-implementers expected CCM implementation to somewhat or higher benefit the institution by providing a competitive edge over non-implementers, while one-third of non-implementers saw sufficient value in lowering operating costs.

Conversely, CCM implementers expected lower financial benefits in all items. First, four-fifths of responding implementers expected CCM implementation to somewhat or higher benefit the institution by improving confidence in the institution's stewardship of public funds. Second, nearly three-fourths of responding implementers expected CCM implementation to somewhat or higher benefit the institution by decreasing fraud (72%) and gaining insider's knowledge on alleged fraud (70%). Third, nearly half of responding implementers expected CCM implementation to somewhat or higher benefit the institution by enhancing grant proposals and funding solicitations (48%). Fourth, approximately one-third of responding implementers expected CCM implementation to somewhat or higher benefit the institution by providing a competitive edge over non-implementers (34%), while 32% of implementers saw sufficient value in lowering operating costs. Implementers' and non-implementers' summary expected financial benefits from CCM implementation at a "somewhat beneficial or higher" level are provided in Table 11. Note: non-implementing Higher Education Institution response size was limited, as shown in Table 11.

Table 11

Implementers' and Non-Implementers' Expected Financial Benefits from CCM Implementation

(%)

	"Somewhat Beneficial or Higher" Expected Financial Benefits			
	Implementers		Non-Implementers	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Confidence in Stewardship	109	80	4	100
Decrease Fraud	114	72	4	100
Gain Insider's knowledge	112	70	4	100
Enhance Grant proposals	105	48	3	100
Competitive edge	98	34	4	75
Lower Operating costs	101	32	3	33

Hypothesis 2.2 Governance expectations. Hypothesis 2.2 states, "As HEIs expected governance cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels." Besides financial considerations, the survey addressed governance expectations. CCM implementers and non-implementers were asked, "How beneficial was the CCM expected to be for governance issues?" on the aforementioned 1 to 5 Likert Scale. The governance benefits were expected to be at least "somewhat beneficial." 82% of HEIs expected the Confidential Complaint Mechanism program to be at least somewhat beneficial by proactively protecting the institution's reputation. Almost three-quarters of HEIs expected to at least somewhat benefit by improving internal information

flow (70%) through the CCM program. Further, institutions expected to at least somewhat benefit by improving the institution’s decision-making (54%) through the CCM program. Thus, most expectations for governance benefits were directly tied to protecting the HEI’s reputation and improving internal processes. The results for each governance item are reported in Table 12.

Table 12

Expectations of Governance Benefits from CCM Implementation (%)

	N	Highly Beneficial	Very Beneficial	Somewhat Beneficial	Slightly Beneficial	Not at all Beneficial	Total
Protect HEI reputation	124	15	32	35	11	7	100
Improve Info Flow	124	3	23	44	18	12	100
Improve Decision-making	119	2	17	35	22	24	100

CCM implementers and non-implementers differed on how much they expected the Confidential Complaint Mechanism program to at least somewhat provide governance benefits to the institution. Surprisingly, the few responding non-implementers had higher governance benefit expectations than implementers had from CCM implementation on two of the three governance items. All responding non-implementers expected CCM implementation to somewhat or higher benefit the institution by proactively protecting the institution’s reputation. Second, nearly two-thirds of responding non-implementers expected CCM implementation to somewhat or higher benefit the institution by improving the institution’s decision-making (60%). Third, nearly two-thirds of responding non-implementers expected CCM implementation to somewhat or higher benefit the institution by improving internal information flow (60%).

Conversely, CCM implementers expected lower financial benefits in two of the three governance items. First, nearly all responding implementers expected CCM implementation to somewhat or higher benefit the institution by proactively protecting the institution’s reputation (96%). Second, over half of responding implementers expected CCM implementation to somewhat or higher benefit the institution by improving the institution’s decision-making (54%). Third, nearly two-thirds of responding implementers expected CCM implementation to somewhat or higher benefit the institution by improving internal information flow (70%). Implementers’ and non-implementers’ summary expected governance benefits from CCM implementation at a “somewhat beneficial or higher” level are provided in Table 13.

Table 13

Implementers’ and Non-Implementers’ Expected Governance Benefits from CCM Implementation (%)

	“Somewhat Beneficial or Higher” Expected Governance Benefits			
	Implementers		Non-Implementers	
	N	%	N	%
Protect HEI reputation	119	96	5	100
Improve Info Flow	119	70	5	60
Improve Decision-making	115	54	4	60

Hypothesis 2.3 Ethics expectations. Hypothesis 2.3 states, “As HEIs expected ethics cost-benefit advantages, the level of SOX Best Practices whistleblowing policy implementation has increased from 2007 NACUBO survey levels.” Besides financial and governance

considerations, the survey addressed ethics expectations. CCM Implementers and Non-Implementers were asked, “How beneficial was the CCM expected to be for ethics issues?” on the aforementioned 1 to 5 Likert Scale. The ethics benefits were expected to be at least “somewhat beneficial.” Seventy-seven percent (77%) of HEIs expected the Confidential Complaint Mechanism program to be at least somewhat beneficial by improving the culture and signaling that the institution supports ethical conduct and accountability. Over half of HEIs expected to at least somewhat benefit by recruiting and retaining ethical employees (58%) through the CCM program. Further, nearly half of institutions expected to at least somewhat benefit by building local capacity for self-governance (49%) through the CCM program. Thus, most expectations for ethics benefits were directly tied to improving the institutional culture of ethical conduct and accountability as well as increasing employees’ capacity and morale. More remote, indirect effects of CCM (like attracting students) were not seen as at least somewhat beneficial to the institution. The results for each ethics item are reported in Table 14.

Table 14

Expectations of Ethics Benefits from CCM Implementation (%)

		Highly	Very	Somewhat	Slightly	Not at all	
	N	Beneficial	Beneficial	Beneficial	Beneficial	Beneficial	Total
Improve Culture	121	13	35	29	14	9	100
Ethical Employees	121	3	21	34	26	16	100
Local Capacity	114	5	18	26	26	25	100
Attract Students	110	3	9	21	21	46	100

CCM implementers and non-implementers differed on how much they expected the Confidential Complaint Mechanism program to at least somewhat provide ethics benefits to the institution. Surprisingly, the few responding non-implementers had higher ethics benefit expectations than implementers had from CCM implementation on three of the four ethics items. All responding non-implementers expected CCM implementation to somewhat or higher benefit the institution by improving culture and signaling that the institution supports ethical conduct and accountability. Second, over three-fourths of responding non-implementers expected CCM implementation to somewhat or higher benefit the institution by recruiting and retaining ethical employees (80%). Third, nearly two-thirds of responding non-implementers expected CCM implementation to somewhat or higher benefit the institution by building local capacity for self-governance (60%). The only ethics benefit area in which non-implementers expected less benefits than implementers concerned attracting students. The remote, indirect effects of CCM (like attracting students) were seen by implementers (33%) and non-implementers (25%) as at least somewhat beneficial to the institution.

Conversely, implementers had higher ethics benefit expectations than non-implementers had from CCM implementation on one of the four ethics items. Three-fourths of responding implementers expected CCM implementation to somewhat or higher benefit the institution by improving culture and signaling that the institution supports ethical conduct and accountability. Second, over half of responding implementers expected CCM implementation to somewhat or higher benefit the institution by recruiting and retaining ethical employees (58%). Third, nearly half of responding implementers expected CCM implementation to somewhat or higher benefit the institution by building local capacity for self-governance (49%). The only ethics benefit area in which non-implementers (25%) expected less benefits than implementers (33%) concerned

attracting students. Implementers’ and non-implementers’ summary expected ethics benefits from CCM implementation at a “somewhat beneficial or higher” level are provided in Table 15.

Table 15

Implementers’ and Non-Implementers’ Expected Ethics Benefits from CCM Implementation (%)

“Somewhat Beneficial or Higher” Expected Ethics Benefits

	Implementers		Non-Implementers	
	N	%	N	%
Improve Culture	116	75	5	100
Ethical Employees	116	58	5	80
Local Capacity	109	49	5	60
Attract Students	106	33	4	25

Hypothesis 2.4 Barriers. Hypothesis 2.4 states, “As HEIs have assessed cost-benefit disadvantages (i.e., “Barriers”), the level of SOX Best Practices whistleblowing policy implementation has decreased or remained level from 2007 NACUBO survey levels.” Besides financial, governance and ethics considerations, the survey addressed barriers. CCM implementers and non-implementers were asked, “To what extent did the following barriers adversely affect the institution’s level of CCM success?” on a 1 to 4 Likert Scale. This scale had “4” equal “Significant affect”, “3” equal “Moderate affect”, “2” equal “Slight affect”, and “1” equal “No affect.” The barrier affects were expected to be at least “Moderate affect” for non-implementers. Barrier affects were expected to be less than “Moderate affect” or greater for implementers. Fifty-two of the one hundred fifty-two responding HEIs reported barriers exist

that affect the use and/or success of CCM for fraud reporting at their Institutions (34%, N = 152), while one hundred responding HEIs reported barriers do not exist that affect the use and/or success of CCM for fraud reporting at their Institution (66%, N = 152). I will now discuss summary results of responding HEIs with barriers which adversely affected the institution's level of CCM success.

Over 40% of implementers reporting barriers with a moderate or greater effect on the institution's level of CCM success experienced challenges with a low sense of urgency related to the program (41%). Further, institutions experienced barriers with a moderate or greater effect related to program administration/responsibility issues (38%), having CCM advocate support wane due to the leader leaving their position or their attention being diverted to higher priorities (29%), and time constraints (25%). More remote, indirect effects of barriers (like having too many decision makers and/or unanticipated decision points (24%), the CCM being incompatible with institutional climate (23%) or anticipating too many "noise" disclosures that would overwhelm institutional capacity (22%)) were not seen as having at least a moderate or greater effect on the institution's level of CCM success. Thus, CCM implementer's primary barriers were related to deciding whether the program was worth the cost (low sense of urgency and time constraints) and leadership (resolving program administration/responsibility issues and ensuring enduring program advocacy).

As expected, non-implementers experienced greater barriers with a moderate or greater effect on the institution's level of CCM success than implementers experienced. Non-implementers reported thirteen barriers with at least 25% moderate or greater effect on CCM success. Over three-fourths of non-implementers assessed the CCM program was more complex than originally perceived (78%). Further, over two-thirds of non-implementing HEIs perceived

the CCM costs outweighed the benefits (70%) and experienced institutional pushback from faculty (67%), with a moderate or greater effect on the institution's level of CCM success. Additionally, non-implementers experienced institutional pushback from the Office of the President/Chancellor (63%), time constraints (60%), and assessed the CCM was incompatible with institutional climate (56%). Half of the non-implementers reported barriers related to policy disagreements and program administration/responsibility issues with a moderate or greater effect on the institution's level of CCM success. Over one-third of non-implementers experienced barriers with a moderate or greater effect related to a low sense of urgency (46%), having too many decision makers and/or unanticipated decision points (44%), and anticipating too many "noise" disclosures would overwhelm institutional capacity (40%). Lastly, barriers related to stakeholder disagreements (33%) and institutional pushback from Central Administration (25%) was reported as having a moderate or greater effect on the institution's level of CCM success. More remote, indirect effects of barriers (like having CCM advocate support wane due to the leader leaving their position or their attention being diverted to higher priorities (22%), external pushback/resistance (11%), or institutional pushback from the Board of Trustees (2%)) were not seen as having at least a moderate or greater effect on the institution's level of CCM success. Thus, CCM non-implementer's primary barriers were related to deciding whether the program was worth the cost (CCM complexity, perceived costs outweighed benefits, and time constraints) and leadership (resolving institutional pushback from faculty and the Office of the President/Chancellor, and the CCM being incompatible with institutional climate).

For fifteen of the seventeen possible items, non-implementers experienced greater barriers with a moderate or greater effect on the institution's level of CCM success than implementers experienced. Non-implementers reported nine barriers with at a least twenty

percentage point difference from implementers for barriers with 25% moderate or greater effect on CCM success. These nine barriers included the perceived cost outweighed benefits, stakeholder disagreements, and the CCM program was more complex than originally perceived. Further, non-implementers' barriers included policy disagreement, institutional pushback from faculty, and institutional pushback from the Office of the President/Chancellor at a level at least twenty percentage point difference from implementers for barriers with 25% moderate or greater effect on CCM success. Lastly, large differences between non-implementers' and implementers' barriers dealt with time constraints, having too many decision makers and/or unanticipated decision points, and the CCM being incompatible with institutional climate. Table 16 summarizes key indicators regarding possible Barriers for CCM Implementers and Non-Implementers with a moderate or greater effect on the institution's level of CCM success.

Table 16

CCM Implementers' and Non-Implementers assessed Barriers Likert Scale (%)

“Moderate Effect or Greater”

Assessed Barriers	Implementers		Non-Implementers	
	N	%	N	%
Perceived costs outweighed benefits	29	7	10	70
Stakeholder disagreements	25	4	9	33
CCM program more complex than originally perceived	31	16	9	78
Policy disagreement	29	10	8	50
Institutional pushback from Faculty	32	9	9	67
Institutional pushback from Office of the President/Chancellor	32	15	8	63
Time constraints	32	25	10	60
Too many decision makers and/or unanticipated decision points	33	24	9	44
CCM incompatible with institutional climate	35	23	9	56
Other (Specify)	5	60	1	0
Anticipated too many “noise” disclosures would overwhelm institutional capacity	32	22	10	40
Institutional pushback from Central Administration	32	22	8	25
Institutional pushback from Board of Trustees	30	10	9	22
Program administration/ responsibility issues	37	38	10	50
Low sense of urgency	37	41	11	46
External pushback/ resistance	29	7	9	11
CCM advocate support waned	31	29	9	22

These descriptive analyses of frequency distributions have been informative for analyzing the dichotomous variables dividing survey respondents into CCM implementers and non-implementers. We now turn to the comparative method using ANOVA to analyze the interval benefit expectation scales representing aggregate Likert Scale expectations. Table 17 summarizes key statistical indicators regarding the four expectation scales (financial, governance, ethics, and barriers) for CCM implementers and non-implementers with respect to CCM implementation. The financial, ethics, and barriers scales were significantly related to CCM implementation, while the governance scale was not significantly related to CCM implementation. Concerning Effect Size, the financial ($\eta^2 = 0.04$), governance ($\eta^2 = 0.03$), and ethics ($\eta^2 = 0.04$) scales had a small association between the respective scale and CCM implementation. The barriers scale ($\eta^2 = 0.11$) had a medium association between the scale and CCM implementation (Tabachnick & Fidell, 2007). I will discuss each scale in order.

Table 17

CCM Implementers' and Non-Implementers' Expectation Scales Summary

Expectation Scale	Implementers		Non- Implementers		F	Sig	η^2
	N	Mean (SD)	N	Mean (SD)			
Financial	118	2.71 (.91)	5	3.67 (1.65)	4.93	0.028	0.04
Governance	120	2.91 (.96)	5	3.73 (1.26)	3.48	0.064	0.03
Ethics	118	2.64 (.95)	5	3.55 (1.18)	4.37	0.039	0.04
Barriers	40	1.84 (.78)	11	2.46 (.62)	5.82	0.02	0.11

(Significant, .05)

A one-way ANOVA was used to examine differences between implementers and non-implementers on the Financial Scale. This comparison was statistically significant ($F = 4.931$, $p = .028$). The Null Hypothesis, which stated there is no relationship between Higher Education Institution's assessed financial cost-benefit expectations and their level of anti-fraud and whistleblower protection implementation, was rejected. More specifically, the group that reported implementing CCM also reported a lower mean on the financial scale. The effect size of this difference was moderate for one variable (Enhance grant proposals and funding solicitations) and small for four variables.

Regarding effect size (r^2) for the independent variable's association with the dependent variable, five of the seven Financial Independent Variables showed an association (ranked high to low) in Table 18 and Figure 2. The following statistically-significant Independent Variables may predict HEI's expected CCM implementation benefits at the following levels: Enhance grant proposals and funding solicitations (10.6%); Improve confidence in institution's stewardship of public funds (6.8%); Decrease fraud (4.5%); Provide competitive edge over non-implementers (4.5%); and Gain knowledge on alleged fraud (3.9%). Thus, the Independent Variable "Enhance grant proposals and funding solicitations" has a moderate effect on CCM Implementation, while "Improve confidence in institution's stewardship of public funds", "Decrease fraud", "Provide competitive edge over non-implementers", and "Gain knowledge on alleged fraud" had a small effect on CCM Implementation. Measuring reliability, Cronbach's Alpha for the Financial Scale (.902) indicated high internal consistency.

Non-implementing Higher Education Institution response size was limited. Independent Variables "Lower operating costs" and "Other" showed no association with expected CCM implementation benefits. These results were expected, as the review of literature across all

organizational spectrums indicated CCM Implementers generally expected to realize benefits in many of these areas. These results are consistent with the previously discussed frequency distributions.

Table 18 summarizes CCM Implementer and Non-Implementer Financial expectation means, standard deviations, and ANOVA tests.

Table 18

ANOVA Summary: Financial Expectations and CCM Implementation

Financial Expectation	Implementers		Non-Implementers		F	Sig	r^2
	N	Mean (SD)	N	Mean (SD)			
Enhance grant proposals and funding solicitations	105	2.39 (1.11)	3	4.67 (.58)	12.55	0.00	0.11
Improve confidence in institution's stewardship of public funds	109	3.28 (1.02)	4	4.75 (.5)	8.15	0.01	0.07
Decrease Fraud	114	3.02 (1.04)	4	4.25 (.96)	5.46	0.02	0.05
Provide competitive edge over non-implementers	98	2.02 (1.08)	4	3.25 (1.71)	4.74	0.03	0.05
Gain insider's knowledge on alleged fraud	112	3.06 (1.09)	4	4.25 (.96)	4.59	0.03	0.04
Lower operating costs	101	1.98 (1.1)	3	2.33 (2.31)	0.28	0.60	0.00
Other (Specify)	4	2.75 (1.26)	-	0 (.00)	-	-	-

(Significant, .05)

Although three CCM Implementers responded to the “Other” optional answer, only one of these HEIs provided a follow-on textual explanation (“Complaints are primary (sic) regarding management and suspected discrimination”). This implementer assessed the CCM implementation financial benefit as “Very beneficial” on the Likert scale.

Surprisingly, the few responding non-implementers had higher mean scores on Likert scale financial expectations than implementers for the following items. First, enhance grant proposals and funding solicitations (4.67 versus 2.39). Second, improve confidence in institution’s stewardship of public funds (4.75 versus 3.28). Third, decrease fraud (4.25 versus 3.02). Fourth, provide competitive edge over non-implementers (3.25 versus 2.02). Fifth, gain knowledge on alleged fraud (4.25 versus 3.06). Sixth, lower operating costs (2.33 versus 1.98).

One possible explanation for non-implementers’ higher mean scores than implementers’ mean scores resides in non-implementer’s barriers. For instance, one HEI indicated they will definitely not implement CCM, but assessed, the CCM had would be highly beneficial in several financial areas. This HEI stated CCM would “Improve confidence in institution’s stewardship of public funds” and “Enhance grant proposals and funding solicitations.” However, they were subjected to a variety of barriers. First, the HEI experienced barriers with “Significant affect” with Stakeholder disagreements, Anticipated too many “Noise” complaints, Too many decision makers, and Institutional resistance/pushback from Central Administration. Second, the HEI experienced barriers with “Moderate affect” with the CCM Cost outweighing the Benefit, Institutional climate being incompatible, Program administrator responsibility issues, Time constraints, and CCM Advocate support waned. Third, the HEI experienced barriers with “Slight affect” with Institutional resistance/pushback from the Office of President/Chancellor.

A second HEI will definitely not implement CCM but indicated the CCM would be highly beneficial in several financial areas (“Decrease Fraud”, Gain insider’s knowledge on alleged fraud”, Improve confidence in Institution’s stewardship of public funds”, “Enhance grant proposals and funding solicitations”, Provide competitive edge over Non-Implementers”, and “Lower operating costs”) experienced barriers as follows. The HEI experienced barriers with “Significant affect” with CCM complexity, CCM Cost outweighing the Benefit, Institutional resistance/pushback from the Office of President/Chancellor, External pushback/resistance, Low sense of urgency, Policy disagreement, the Institutional climate being incompatible, Program administrator responsibility issues, Anticipated too many “Noise” complaints, and Time constraints. Additionally, the HEI experienced barriers with “Moderate affect” with Institutional resistance/pushback from Faculty. Finally the HEI experienced barriers with “Slight affect” with Institutional resistance/pushback from the Board of Trustees, and Too many decision makers.

A third HEI will definitely not implement CCM but indicated the CCM would be highly beneficial in several financial areas (“Decrease Fraud”, Gain insider’s knowledge on alleged fraud”, and “Improve confidence in Institution’s stewardship of public funds”) did not experience barriers. Continuing research can address why non-implementers assessed financial benefits higher, on average, than implementers. One possible method to ascertain this unexplained riddle could entail interviewing a sample of willing non-implementing research participants, most likely via phone. One hurdle to overcome is gaining access to and trust of non-implementers, who have historically been reluctant to divulge the rationale for their CCM choices.

Thus, most expectations for financial benefits were directly tied to fraud prevention, enhancing funding opportunities and increasing confidence in HEI stewardship of funds. More

remote, indirect effects of CCM (like lowering operating costs) were not seen as significantly associated with the institution's CCM implementation decision. Besides financial considerations, the survey assesses governance expectations in Hypothesis 2.2. I now discuss the governance scale results.

A one-way ANOVA was used to examine differences between implementers and non-implementers on the Governance Scale. This comparison was not statistically significant ($F = 3.48, p = .064$). However, the comparison between implementers and non-implementers was statistically significant ($F = 7.13, p = .009$) for the variable "proactively protect the institution's reputation." The effect size of this difference was small for this variable. The Null Hypothesis, which stated there is no relationship between Higher Education Institution's assessed governance cost-benefit expectations and their level of anti-fraud and whistleblower protection implementation, was rejected. The group that reported implementing CCM also reported a lower mean on the governance scale.

Regarding effect size (f^2) for the independent variable's association with the dependent variable, one of the four governance independent variables shows a small association in Table 19 and Figure 2; this independent variable is "Proactively protect the institution's reputation." This statistically-significant independent variable may predict HEI's expected CCM implementation benefits up to 6%. Measuring reliability, Cronbach's Alpha for the Governance Scale (.896) indicates high internal consistency.

Independent Variables "Improve internal information flow", "Improve institution's decision-making and "Other" showed no association with expected CCM implementation benefits. These results were not entirely expected, as the review of literature across all organizational spectrums indicated CCM implementers could generally be expected to realize

benefits in many of these areas. Table 19 summarizes CCM implementer and non-implementer governance expectation means, standard deviations, and ANOVA tests.

Table 19

CCM Implementers and Non-Implementers Governance Expectations

Governance Expectation	Implementers		Non-Implementers		F	Sig	η^2
	N	Mean (SD)	N	Mean (SD)			
Proactively protect the institution's reputation	119	3.3 (1.07)	5	4.6 (.89)	7.13	0.01	0.06
Improve institution's decision-making	115	2.51 (1.09)	4	3.0 (1.63)	0.75	0.39	0.01
Improve internal information flow	119	2.87 (.97)	5	3.2 (1.79)	0.53	0.47	0.00

(Significant, .05)

Although two CCM implementers responded to the “Other” optional answer, only one of these HEIs provided a follow-on textual explanation (“Have not received any governance related complaints”). This implementer assessed the CCM implementation Governance benefit as “Not at all beneficial” on the Likert scale.

Surprisingly, the few responding non-implementers had higher Mean scores on Likert scale Governance expectations than implementers for the following items. First, proactively protect the institution's reputation (4.6 versus 3.3). Second, improve institution's decision-making (3.0 versus 2.51). Third, improve internal information flow (3.2 versus 2.87). One possible explanation resides in non-implementer's barriers. Although non-implementers were

very keen on protecting their institution's reputation and valued CCM's reputational protection benefits, several non-implementers experienced barriers to implementation. For instance, one HEI indicated they will definitely not implement CCM but assessed the CCM had would be highly beneficial in one governance area ("Proactively protect the institution's reputation"). However, the HEI experienced barriers as follows. First, the HEI experienced barriers with "Significant affect" with Stakeholder disagreements, Anticipated too many "Noise" complaints, Too many decision makers, and institutional resistance/pushback from Central Administration. Second, the HEI experienced barriers with "Moderate affect" with the CCM Cost outweighing the Benefit, Institutional climate being incompatible, Program administrator responsibility issues, Time constraints, and CCM Advocate support waned. Lastly, the HEI experienced barriers with "Slight affect" with institutional resistance/pushback from the Office of President/Chancellor.

A second HEI will definitely not implement CCM but indicated the CCM would be highly beneficial in three governance areas ("Proactively protect the institution's reputation", Improve internal information flow", and "Improve Institution's decision-making"). However, they experienced barriers as follows. First, the HEI experienced barriers with "Significant affect" with CCM complexity, CCM Cost outweighing the Benefit, Institutional resistance/pushback from the Office of President/Chancellor, External pushback/resistance, Low sense of urgency, Policy disagreement, the Institutional climate being incompatible, Program administrator responsibility issues, Anticipated too many "Noise" complaints, and Time constraints. Second, the HEI experienced barriers with "Moderate affect" with institutional resistance/pushback from Faculty. Third, the HEI experienced barriers with "Slight affect" with institutional resistance/pushback from the Board of Trustees, and Too many decision makers.

A third HEI will definitely not implement CCM but indicated the CCM would be highly beneficial in one governance area (“Proactively protect the Institution’s reputation”) did not experience barriers. A fourth HEI will definitely not implement CCM but indicated the CCM would be somewhat beneficial in two governance areas (“Proactively protect the institution’s reputation” and “Improve institution’s decision-making”) but did not experience barriers.

Continuing research can address why non-implementers assessed governance benefits higher, on average, than implementers. Similar to the financial disparity, one possible method to ascertain this unexplained riddle could entail interviewing a sample of willing non-implementing research participants, most likely via phone. One hurdle to overcome is gaining access to, and trust of, non-implementers, who have historically been reluctant to divulge the rationale for their CCM choices.

Thus, ANOVA analysis indicates most expectations for governance benefits were directly tied to protecting the HEI’s reputation. Internal improvement efforts (such as improving the institution’s decision-making and improving internal information flow) were not significantly associated with the institution’s CCM implementation decision. Besides financial and governance considerations, the survey assesses ethics expectations in Hypothesis 2.3.

A one-way ANOVA was used to examine differences between implementers and non-implementers on the Ethics Scale. This comparison was statistically significant ($F = 4.37$, $p = .039$). The Null Hypothesis, which stated there is no relationship between Higher Education Institution’s assessed ethics cost-benefit expectations and their level of anti-fraud and whistleblower protection implementation, was rejected. More specifically, the group that reported implementing CCM also reported a lower mean on the ethics scale. The effect size of

this difference was small for two variables (Recruit and retain ethical employees, and Improve culture and signal that institution supports ethical conduct and accountability).

Regarding effect size (r^2) for the independent variable's association with the dependent variable, two of the five ethics Independent Variables show a small association (ranked high to low) in Table 20 and Figure 2. The following statistically-significant Independent Variables may predict HEI's expected CCM implementation benefits at the following levels: Recruit and retain ethical employees (6.2%); and Improve culture and signal that institution supports ethical conduct and accountability (4.1%). Measuring reliability, Cronbach's Alpha for the ethics scale (.875) indicates high internal consistency.

Due to the available responding non-implementer's limited sample size versus having a balanced equal-n design, the effect sizes are not cumulative with respect to CCM Implementation (Tabachnick & Fidell, 2007). Independent Variables "Build local capacity for self-governance", "Other" and "Attract students" showed no association with expected CCM implementation benefits. These results were expected, as the review of literature across all organizational spectrums indicated CCM implementers generally expected to realize benefits in these areas.

Table 20 summarizes CCM implementer and non-implementer ethics expectation means, standard deviations, and ANOVA tests.

Table 20

CCM Implementers and Non-Implementers Ethics Expectations

Ethics Expectation	Implementers		Non-Implementers		F	Sig	r^2
	N	Mean (SD)	N	Mean (SD)			
Recruit & retain ethical employees	116	2.7 (1.04)	5	4.0 (1.22)	7.92	0.01	0.06
Improve culture and signal that institution supports ethical conduct and accountability	116	3.24 (1.13)	5	4.4 (.89)	5.09	0.03	0.04
Build local capacity for self- governance	109	2.49 (1.13)	5	3.2 (2.04)	1.77	0.19	0.02
Attract students	106	2.0 (1.11)	4	2.25 (1.89)	0.19	0.67	0.002

(Significant, .05)

Although two CCM implementers responded to the “Other” optional answer, only one of these HEIs provided a follow-on textual explanation (“Have not received any complaints regarding ethics”). One non-implementer responded to the “Other” optional answer, providing the follow-on textual explanation (“Dismissal of corrupt management”). Not surprisingly, this implementer assessed the CCM implementation ethics benefit as “Highly beneficial” on the Likert scale.

Similar to the financial and governance responses, the few responding non-implementers had mean scores higher on Likert scale Ethics expectations than implementers for the following items. First, recruit and retain ethical employees (4.0 versus 2.7). Second, improve culture and

signal that institution supports ethical conduct and accountability (4.4 versus 3.24). Third, build local capacity for self-governance (3.2 versus 2.49). Fourth, Other (5.0 versus 3.5). Fifth, attract students (2.25 versus 2.0).

One possible explanation resides in non-implementer's barriers. For instance, one HEI indicated they will definitely not implement CCM but assessed the CCM had would be highly beneficial in several ethics areas ("Recruit and retain ethical employees", "Build local capacity for self-governance", and "Improve culture and signal that institution supports ethical conduct and accountability") experienced barriers as follows. First, the HEI experienced barriers with "Significant affect" with Stakeholder disagreements, Anticipated too many "Noise" complaints, Too many decision makers, and Institutional resistance/pushback from Central Administration. Second, the HEI experienced barriers with "Moderate affect" with the CCM Cost outweighing the Benefit, Institutional climate being incompatible, Program administrator responsibility issues, Time constraints, and CCM Advocate support waned. Third, the HEI experienced barriers with "Slight affect" with Institutional resistance/pushback from the Office of President/Chancellor.

A second HEI will definitely not implement CCM but indicated the CCM would be highly beneficial in all ethics areas ("Attract students", "Recruit and retain ethical employees", "Build local capacity for self-governance", and "Improve culture and signal that institution supports ethical conduct and accountability") plus "Dismissal of corrupt management" experienced barriers as follows. First, the HEI experienced barriers with "Significant affect" with CCM complexity, CCM Cost outweighing the Benefit, Institutional resistance/pushback from the Office of President/Chancellor, External pushback/resistance, Low sense of urgency, Policy disagreement, the Institutional climate being incompatible, Program administrator responsibility issues, Anticipated too many "Noise" complaints, Time constraints. Second, the

HEI experienced barriers with “Moderate affect” with Institutional resistance/pushback from Faculty. Third, the HEI experienced barriers with “Slight affect” with Institutional resistance/pushback from the Board of Trustees, and Too many decision makers.

A third HEI will definitely not implement CCM but indicated the CCM would be highly beneficial in one ethics area (“Improve culture and signal that institution supports ethical conduct and accountability”) and very beneficial in another ethics area (“Recruit and retain ethical employees”) did not experience barriers. A fourth HEI will definitely not implement CCM but indicated the CCM would be somewhat beneficial in three ethics areas (“Attract students”, “Recruit and retain ethical employees”, and “Improve culture and signal that institution supports ethical conduct and accountability”) did not experience barriers.

Continuing research can address why non-implementers assessed ethics benefits higher, on average, than implementers. One possible method to ascertain this unexplained riddle could entail interviewing a sample of willing non-implementing research participants, most likely via phone. One hurdle to overcome is gaining access to, and trust of, non-implementers, who have historically been reluctant to divulge the rationale for their CCM choices.

Thus, most expectations for ethics benefits were directly tied to improving the institutional culture of ethical conduct and accountability as well as increasing employees’ morale. More remote, indirect effects of CCM (like building local capacity for self-governance and attracting students) were not seen as significantly associated with the institution’s CCM implementation decision. Besides financial, governance and ethics considerations, the survey assessed barriers to CCM program success in Hypothesis 2.4.

A one-way ANOVA was used to examine differences between implementers and non-implementers on the Barriers Scale. This comparison was statistically significant ($F = 5.82$, $p =$

.02). The Null Hypothesis, which stated there is no relationship between Higher Education Institution's assessed barriers and their level of anti-fraud and whistleblower protection implementation, was rejected. More specifically, the group that reported implementing CCM also reported a lower mean on the barriers scale. The effect size of this difference was large for seven variables.

Regarding effect size (r^2) for the independent variable's association with the dependent variable, six of the sixteen barrier independent variables show a large association (ranked high to low) in Table 21 and Figure 3 at the .003125 level of significance. This stricter level of significance (versus at the .05 level for the financial, governance and ethics benefit expectations scales) was chosen to accommodate interactions between the large number of barrier dependent variables (where $.05/16 = .003125$). Measuring reliability, Cronbach's Alpha for the Barrier Scale (.903) indicates high internal consistency.

The following statistically-significant Independent Variables may predict HEI's expected CCM implementation success at the following levels: Perceived costs outweigh benefits (32.9%); Stakeholder disagreements (30.8%); CCM program more complex than originally perceived (27.5%); Policy disagreement (24.6%); Institutional pushback from Faculty (22.6%); and Institutional pushback from Office of the President/Chancellor (20.5%).

The following Independent Variables showed no significant association with expected CCM implementation success: "Time constraints", "Too many decision makers and/or unanticipated decision points"; CCM incompatible with institutional culture, "Anticipated too many "noise" disclosures would overwhelm institutional capacity", "Institutional pushback from Central Administration", "Institutional pushback from Board of Trustees", "Program administration/responsibility issues", "Low sense of urgency", "External pushback/resistance"

and “CCM advocate support waned.” These results were expected, as the review of literature across all organizational spectrums indicated CCM implementers generally expected to realize barriers in many of these areas but assess the benefits outweigh the costs. CCM implementers were expected to “work through” difficulties such as barriers. Likewise, CCM non-implementers were expected to assess the costs outweigh the benefits. In essence, CCM non-implementers were expected to encounter indomitable barriers.

Table 21 summarizes significant CCM implementer and non-implementer barrier means, standard deviations, and ANOVA tests.

Table 21

CCM Implementers and Non-Implementers Assessed Barriers, Significant

Assessed Barriers	Implementers		Non-Implementers		F	Sig	n2
	N	Mean (SD)	N	Mean (SD)			
Perceived costs outweighed benefits	29	1.41 (.73)	10	2.7 (1.06)	18.11	<0.001	0.33
Stakeholder disagreements	25	1.4 (.58)	9	2.44 (1.01)	14.24	0.001	0.31
CCM program more complex than originally perceived	31	1.48 (.77)	9	2.67 (1.00)	14.41	0.001	0.28
Policy disagreement	29	1.48 (.78)	8	2.63 (1.06)	11.40	0.002	0.25
Institutional pushback from Faculty	32	1.59 (.76)	9	2.67 (1.12)	11.38	0.002	0.23
Institutional pushback from Office of the President/Chancellor	32	1.59 (.91)	8	2.75 (1.04)	9.79	0.003	0.21

(Significant at .0031; 0.05/16 variables)

Table 22 summarizes CCM implementer and non-implementer barrier means, standard deviations, and ANOVA tests not found to be significant.

Table 22

CCM Implementers and Non-Implementers Assessed Barriers, Not Significant

Assessed Barriers	Implementers		Non-Implementers		F	Sig	r^2
	N	Mean (SD)	N	Mean (SD)			
Time Constraints	32	1.78 (.91)	10	2.6 (1.07)	5.70	0.022	0.13
Too many decision makers and/or unanticipated decision points	33	1.7 (.98)	9	2.56 (1.24)	4.83	0.034	0.11
CCM incompatible with institutional climate	35	1.77 (.94)	9	2.56 (1.13)	4.58	0.038	0.10
Anticipated too many "noise" disclosures would overwhelm institutional capacity	32	1.75 (.88)	10	2.4 (1.26)	3.35	0.08	0.08
Institutional pushback from Central Administration	32	1.72 (.96)	8	2.13 (1.25)	1.02	0.32	0.03
Institutional pushback from Board of Trustees	30	1.33 (.84)	9	1.67 (.87)	1.07	0.31	0.03
Program administration/ responsibility issues	37	2.14 (1.03)	10	2.4 (1.17)	0.49	0.49	0.01
Low sense of urgency	37	2.35 (1.06)	11	2.55 (1.29)	0.26	0.62	0.01
External pushback/ resistance	29	1.34 (.61)	9	1.44 (1.01)	0.13	0.72	0.00
CCM advocate support waned	31	1.87 (1.06)	9	1.89 (.78)	0.00	0.96	-

Although eight CCM implementers responded to the “Other” optional textual answer, only five of these HEIs provided a Likert scale response. HEIs assessed Barriers of “Slight affect” with explanations (“Not actively communicated to the campus” and “Hesitancy of whistleblowers to trust confidentiality”). HEIs assessed Barriers of “Moderate affect” with explanations (“Need for regular communication to maintain awareness”; “Low level of awareness among most employees”; and “Perceived distrust of reporting system”). Three HEIs not assessing a Likert scale Barrier affect provided explanations (“Staff still afraid to report because they view it as tattle-telling”; “People could not find the reporting link on the website – corrected now”; and “Human Resources is the most negative contributor”).

The one responding non-implementer assessed the CCM implementation Barrier as “No affect” on the Likert scale, but provided no textual follow-on explanation. This non-implementer was in the “Undecided (may or may not implement)” category for Q21.

As expected, the few responding non-implementers had Mean scores higher on Likert scale Barriers than implementers for sixteen (16) of the seventeen (17) items. First, perceived costs outweigh benefits (2.7 versus 1.41). Second, stakeholder disagreements (2.44 versus 1.4). Third, CCM program more complex than originally perceived (2.67 versus 1.48). Fourth, policy disagreement (2.63 versus 1.48). Fifth, Institutional pushback from Faculty (2.67 versus 1.59). Sixth, Institutional pushback from Office of the President/Chancellor (2.75 versus 1.59). Seventh, time constraints (2.6 versus 1.78). Eighth, too many decision makers and/or unanticipated decision points (2.56 versus 1.7). Ninth, CCM incompatible with institutional climate (2.56 versus 1.77). Tenth, anticipated too many “noise” disclosures would overwhelm institutional capacity (2.4 versus 1.75). Eleventh, Institutional pushback from Central Administration (2.13 versus 1.72). Twelfth, Institutional pushback from Board of Trustees (1.67

versus 1.33). Thirteenth, program administration/ responsibility issues (2.4 versus 2.14). Fourteenth, low sense of urgency (2.55 versus 2.35). Fifteenth, external pushback/resistance (1.44 versus 1.34). Sixteenth, CCM advocate support waned (1.89 versus 1.87).

Only implementers responded to Independent Variable “Other”, which is addressed above. Continuing research can glean details as to why non-implementers assessed Barriers higher, on average, than implementers. This research could focus on distinguishing possible variances in barriers experienced by the three types of current non-implementers (plan to implement; undecided – may or may not implement, and definitely will not implement). One possible method to ascertain this unexplained riddle could entail interviewing a sample of willing participants, most likely via phone. One hurdle to overcome is gaining access to, and trust of, non-implementers, who have historically been reluctant to divulge the rationale for their CCM choices. It could also prove helpful to interview implementers who experienced the same barriers, yet were able to work through these challenges and subsequently assess CCM implementation to be beneficial to their institution.

In summary, many HEIs expected benefits in CCM implementation dealing with financial, governance, and ethics issues, despite the existence of significant barriers. Descriptive and comparative analysis indicates most expectations for financial benefits were directly tied to fraud prevention, enhancing funding opportunities, and increasing confidence in HEI stewardship of funds. More remote, indirect effects of CCM (like lowering operating costs) were not seen as significantly associated with the institution’s CCM implementation decision. Analysis indicates most expectations for governance benefits were directly tied to protecting the HEI’s reputation. Internal improvement efforts (such as improving the institution’s decision-making and improving internal information flow) were not significantly associated with the

institution's CCM implementation decision. Most expectations for ethics benefits were directly tied to improving the institutional culture of ethical conduct and accountability as well as increasing employee morale. More remote, indirect effects of CCM (like building local capacity for self-governance and attracting students) were not seen as significantly associated with the institution's CCM implementation decision. CCM implementers' and non-implementers' primary barriers were related to deciding whether the program was worth the cost (perceived costs outweighed benefits and dealing with time constraints) and leadership (resolving stakeholder disagreements, CCM complexity, and institutional pushback from faculty and the Office of the President/Chancellor). We now study whether there is an association of the HEI's assessment of whistleblower motivation to disclose and the HEI's CCM implementation decision.

Research Question 3

The next research question deals with assessed whistleblower motivation on implementation level in Research Question 3, "Does HEIs' assessment of whistleblowers' motivations affect their institutional level of SOX Best Practices (Anti-Retaliation & CCM) implementation?" This question follows the Economic Model, which provides insight into institutions' possible responses to deciding whether to implement Confidential Complaint Mechanisms and/or support effective whistleblower protection policies. If the HEI assesses the whistleblower's motivation originating from a desire to correct or prevent harm while doing more societal good than harm (i.e., "Welfarist" motivation), the institution could implement CCM and/or whistleblower policies that address Structural Model (CCM hotlines, etc.) and Anti-Retaliation Model (Whistleblower protection) issues to maximize disclosures and minimize retaliation. On the other hand, if the HEI assesses the whistleblower's motivation deriving from

either “Conscious-clearing” or “Punitive” origins, the institution could decide either to decline CCM and/or whistleblower protection policy implementation, or not fully-support effective CCM and/or whistleblower protection policies.

All HEIs were asked, “In your opinion, a whistleblower’s primary motivation to disclose perceived/observed illegal acts is best described as” (choose one from available responses). Ninety-six HEIs (67%, N = 144) selected “Following their moral code.” Thirty-three HEIs (23%, N = 144) selected “Correcting or preventing harm while doing more good than harm.” Fifteen HEIs (10%, N = 144) selected “Disgruntled or opportunistic person desiring to cause problems within the organization.” Decision makers could choose only one of the above-stated answers.

There was no distinguishable difference between implementers’ and non-implementers’ assessment of whistleblowers’ motivation to disclose. First, 67% of implementers viewed whistleblowers’ motivation to disclose perceived or observed illegal acts as following their moral code. 68% of non-implementers viewed whistleblowers’ motivation to disclose likewise. Second, 22% of implementers viewed whistleblowers’ motivation to disclose perceived or observed illegal acts as correcting or preventing harm while doing more good than harm. 25% of non-implementers viewed whistleblowers’ motivation to disclose likewise. Third, 11% of implementers viewed whistleblowers’ motivation to disclose perceived or observed illegal acts as disgruntled or opportunistic person desiring to cause problems within the organization, compared to 7% of non-implementers who chose likewise.

On an affirmative note, 89% of responding CCM implementers viewed whistleblowers’ disclosure motivation as either “Following their moral code” (67%) or “Correcting or preventing harm while doing more good than harm” (22%), while only 11% of CCM implementers viewed

whistleblowers’ disclosure motivation as “Disgruntled or opportunistic person desiring to cause problems within the organization.” Likewise, 93% of responding CCM non-implementers viewed whistleblowers’ disclosure motivation as either “Following their moral code” (68%) or “Correcting or preventing harm while doing more good than harm” (25%), while only 7% of CCM non-implementers viewed whistleblowers’ disclosure motivation as “Disgruntled or opportunistic person desiring to cause problems within the organization.”

Table 23 summarizes key indicators regarding whistleblower motivation assessment for CCM implementers and non-implementers for variables not found to be significant.

Table 23

HEI’s Perceived Whistleblower Motivation to Disclose

	Combined	Implementers	Non-Implementers
Whistleblower Motivation	(%)	(%)	(%)
Following their moral code	67	67	68
Correcting or preventing harm while doing more good than harm	23	22	25
Disgruntled or opportunistic person desiring to cause problems within the organization	10	11	7
	100	100	100
N	144	116	28

These descriptive analyses of frequency distributions have been informative for analyzing the dichotomous variables dividing survey respondents into CCM implementers and non-implementers in order to analyze their assessment of whistleblowers' motivation to disclose and their CCM implementation decision. We now turn to the relationship method using Pearson's Chi-Square to analyze the nominal variables and quantify the reliability of association. All expected frequencies were at least five. With the small non-implementer sample, this was an issue. Chi-Square analysis of the whistleblower motivation assessment yielded a Pearson Chi-Square value of 0.431 with 2 degrees of freedom at the .05 significance level. The Null Hypothesis stated there is no association of the HEI's assessment of whistleblower motivation to disclose and the HEI's CCM implementation decision. The 3 X 2 whistleblower motivation assessment was not large enough to reject the Null Hypothesis. Using descriptive and associative analyses, HEIs' assessment of whistleblowers' motivation was not found to be associated with their institutional level of SOX Best Practices (Anti-Retaliation and CCM) policy implementation. These results were not expected, as the review of related literature indicated CCM advocates (implementers) could be expected to better support whistleblowers whose assessed motivation to disclose was regarded as "Correcting or preventing harm while doing more good than harm", rather than "Following their moral code", or "Disgruntled or opportunistic person desiring to cause problems within the organization." There was no distinguishable difference between implementers' and non-implementers' assessment of whistleblowers' motivation to disclose. Descriptive and relationship analyses indicate the HEI's assessment of whistleblower motivation to disclose was not found to be statistically associated with the institution's CCM implementation decision.

Research Question 4

Research Question 4 discerns if locally-tailored implementation is related to results by asking, “Is locally tailored HEI SOX Best Practices (Anti-Retaliation & Confidential Complaint Mechanism) policy implementation associated with positive self-assessed tangible/intangible results?” The associated Hypothesis 4.1 is, “Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results.” I use the Modified Rational Actor Model (MRAM) to explain HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation decision making. The MRAM suggests elite HEI decision makers weigh costs and benefits of voluntarily implementing anti-fraud and whistleblower protection measures. MRAM suggests if HEIs assess sufficient value added through positive self-assessed tangible/intangible results from anti-retaliation and/or CCM implementation, elite institutional leaders may view the cost is worth the benefit. Several instrument questions glean details concerning what type CCM and/or whistleblower protection measures HEIs voluntarily implemented and what results institutions realized.

One locally-tailored HEI SOX Best Practices policy implementation is an institutionally-supported CCM. The associated question asked, “What type of intuitionally-supported CCM is used? HEIs implementing institutionally-supported CCMs primarily used e-mail (33%), directing employees to contact an independent institutional official (24%), and hotline (19%) as means to provide a confidential complaint mechanism. Lesser-implemented reporting mechanisms include mailing address, website, fax, and physical drop box. HEIs implemented the following types of institutionally-supported channels, shown in Table 24. For this question, HEIs could select all channels that apply, so some institutions indicated multiple means of providing an institutionally-supported CCM.

Table 24

Implementers' Institutionally-supported CCMs

Institutionally-supported CCM	%
E-mail	33
Employees are directed to contact an independent institutional official	24
Hotline	19
Mailing Address	14
Website	13
Fax	8
Physical Drop Box	8
Other	5

N = 131

Besides institutionally-supported reporting mechanisms, another locally-tailored HEI SOX Best Practices policy implementation is a Third-party Vendor-supported CCM. A follow-on question asked, “What type of Third-Party Vendor supported CCM is used?” HEIs implementing third-party vendor-supported CCMs used hotline (37%, N = 131), website (26%), and e-mail (18%) as primary means to provide a confidential complaint mechanism. Lesser-implemented reporting mechanisms include mailing address, fax, and physical drop box. HEIs implemented the following types of third-party vendor supported channels, shown in Table 25.

Table 25

Implementers' Third-party Vendor-supported CCMs

Third-party Vendor-supported CCM	%
Hotline	37
Website	26
E-mail	18
Mailing Address	6
Fax	5
Other	2
Physical Drop Box	0

N = 131

For this question, HEIs could select all channels that apply, so some institutions indicated multiple means of providing a third-party vendor supported CCM. In an optional “Other” textual response field, four HEIs indicated whistleblowers could report claims to: the Chair of the Audit Committee; the HR Director or selected Board of Trustee member; Report issues to the process; and State Board.

HEIs who did not implement CCM were asked, “To whom do whistleblowers report a complaint?” A total of two HEIs responded with “Human Resources” and “One of their senior managers” (one response per institution).

Besides a Confidential Complaint Mechanism, another locally-tailored HEI SOX Best Practices policy implementation is a whistleblower protection mechanism. All institutions were asked, “How is the confidentiality of the whistleblower protected?” HEIs primarily used four

methods of protecting whistleblowers from retaliation. First, their institutional policy prohibits retaliation. Second, their Code of Ethics includes whistleblower protection provisions. Third, the retaliator can be dismissed. Fourth, the retaliator can be reprimanded in writing. CCM implementers tended to use a variety of complimentary whistleblower protection measures. CCM non-implementers primarily protected whistleblowers through their institutional policy which prohibits retaliation. Secondly, CCM non-implementers had provisions by which the retaliator can be dismissed. HEIs utilized the following types of whistleblower protection mechanisms, shown in Table 26.

Table 26

Method by which Whistleblower's Confidentiality is Protected

Whistleblower Protection	Combined	Implementers	Non-Implementers
	(%)	(%)	(%)
Institutional policy prohibits retaliation	63	76	10
Code of Ethics includes Whistleblower provisions	36	44	–
Retaliator can be dismissed	23	28	3
Retaliator can be reprimanded in writing	17	21	–
Retaliator can be orally reprimanded	15	18	–
Retaliator can be prosecuted	9	11	–
Other	3	4	–
N	162	131	31

For this question, HEIs could select all methods that apply, so some institutions indicated multiple types of whistleblower protection mechanisms.

Several questions provide insights into the dependent variable, implementation results. First, I asked elite administrators to provide their institution's CCM program success assessment. CCM implementers were asked, "Has the CCM Program been successful?" Ninety-two HEIs (77%, N = 120) responded "Yes", while 28 HEIs (23%, N = 120) responded "No."

For CCM implementers, a follow-up open-ended question asked, "How do you measure success/failure? What indicators do you look for?" Eighty-two HEIs responded as follows: 65% stated "Participation: Number and significance of complaints", 21% stated "Satisfactory investigation and resolution", 12% replied "Trust in the system", and 2% responded "Internal Controls sufficient." HEIs assessing the CCM program as successful reported primary measures of participation: number and significance of complaints (50%), and satisfactory investigation and resolution (19%). HEIs assessing the CCM program as successful reported secondary measures as trust in the system (6%) and internal controls (2%). HEIs assessing the CCM program as unsuccessful reported the primary measure of participation: number and significance of complaints (15%). HEIs assessing the CCM program as unsuccessful reported secondary measures being trust in the system (6%) and satisfactory investigation and resolution (2%). These responses were divided into HEIs indicating the CCM had been successful as follows in Table 27.

Table 27

How Implementers Measure CCM Success (%)

	CCM Program Successful?
	Yes
Participation: Number and Significance of Complaints	50
Satisfactory Investigation and Resolution	19
Trust in the System	6
Internal Controls Sufficient	2
N = 82	77

The next possible area of results from CCM implementation involves cases of fraud within the past three years. All HEIs were asked, “In the past three years, have there been cases of fraud at the institution?” Sixty HEIs (38%, N = 157) responded “Yes”, while 97 HEIs (62%, N = 157) responded “No.” All HEIs reporting fraud which occurred within the past three years were then asked, “How many cases?” with an open-ended response field provided. HEIs reporting fraud within the past three years primarily had one case (53%) or two cases (25%). The remaining 22% of HEIs reported three or more cases.

All HEIs reporting fraud were then asked, “What aggregate levels of funds were affected by the frauds?” The fifty-one HEIs reporting fraud cases and aggregate losses primarily experienced damages totaling less than \$60,000 (64%) and frauds affecting aggregate funds totaling \$60,001 to \$120,000 (16%). Fourteen percent of the frauds affected funds greater than \$240,000. Four percent of HEI frauds affected aggregate funds totaling \$120,001 to \$180,000. The remaining two percent of HEI frauds affected aggregate funds totaling \$180,001 to

\$240,000. Fifty-one of the sixty HEIs reporting fraud indicated the number of cases shown in Table 28.

Table 28

HEIs' Aggregate Funds Affected by Fraud in Past Three Years

Aggregate Fraud Funds	(%)
Less than \$60,000	64
\$60,001 to \$120,000	16
Greater than \$240,000	14
\$120,001 to \$180,000	4
\$180,001 to \$240,000	2
	100

N = 51

All HEIs reporting fraud were asked, “What was the case disposition?” HEIs with fraud cases within the past three years primarily disposed of cases through firing the perpetrator (75%), having funds returned to the institution (52%), and prosecuting the perpetrator (38%). Lesser encountered outcomes include the accusation being dismissed (22%), publicly disclosing the case disposition (15%), and the perpetrator receiving a written reprimand (22%) or an oral reprimand (8%). HEIs reporting fraud indicated the case dispositions shown in Table 29. Note: HEIs were asked to select all that apply over the last three years.

Table 29

HEIs' Fraud Case Disposition within the Past Three Years

Case Disposition	(%)
Perpetrator fired	75
Funds returned to Institution	52
Perpetrator prosecuted	38
Accusation dismissed	22
Perpetrator received written reprimand	22
Case disposition publicly disclosed	15
Perpetrator received oral reprimand	8
N = 60	

The thirty-one HEIs reporting funds returned to the institution (52%, N = 60 in the previous question) were asked to “List aggregate dollar amount of funds that were returned to the institution.” The recovery amounts varied widely. We do not know the exact percentage of funds recovered for a majority of reported cases (due to how the questionnaire was worded). Eighteen HEIs (30%, N = 60) were able to recover funds as follows from frauds occurring in the past three years (Table 30).

Table 30

HEIs' Aggregate Fraud Funds Returned to the Institution

Aggregate Funds Returned	(%)
Less than \$10,000	59
\$10,000 to \$50,000	29
\$50,001 to \$88,000	12
	100

N = 18

All HEIs reporting fraud were asked, “Was the CCM the source of discovering the fraud for any of the cases?” Fifty-six of the sixty HEIs reporting fraud responded, with twelve institutions (21%, N = 56) indicating the CCM was the source of discovering fraud. Forty-four institutions (79%, N = 56) indicated the CCM was not the source of fraud discovery.

HEIs responding “No” to, “Was the CCM the source of discovering the fraud for any of the cases?” were asked “How was the fraud discovered?” These Higher Education Institutions discovered fraud through a wide variety of means. The top three non-CCM sources of fraud discovery were management review (48%), account reconciliation (45%), and document examination (41%). These and the other means by which HEIs discovered fraud apart from the confidential complaint mechanism are indicated in Table 31. Note: HEIs were asked to select all that apply in the last three years; some HEIs reported multiple discovery means.

Table 31

Non-CCM Source of Fraud Discovery

Discovery Source if not CCM	(%)
Management Review	48
Account Reconciliation	45
Document Examination	41
Other (See Text)	20
Internal Audit	18
By Accident	18
Surveillance/ Monitoring	18
Confession	11
IT Controls	5
Notified by Law Enforcement (not part of CCM)	2
External Audit	0

N = 44

Lastly, all HEIs were asked: “Does having a CCM make sense for your institution? 129 HEIs responded “Yes” (88%, N = 146), while 17 HEIs responded “No” (12%, N = 146). Ninety-nine institutions responded to the follow-on prompt, “Why, what are the key reasons?” This question was intended to capture the decision maker’s one key item by which the rational actor assesses whether implementing anti-fraud and/or whistleblower protection measures are worth the cost. This one key element could be a benefit, barrier, or whatever the elite decision maker values relative to implementation.

Implementers and non-implementers identified key reasons why CCM makes sense (or does not make sense) in the following rank-ordered categories. Primary reasons HEIs reported realizing value in the CCM was to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information (45%). The second highest reason HEIs assessed CCM benefits dealt with ethics, culture, accountability, and deterrence issues (20%). Additional CCM value was recognized in governance, stewardship, reputation, and internal control items (11%). Several items had both positive and negative reviews: cost-benefit and risk analysis (7%), barriers (5%), institutional climate/situation (4%), and a State-level CCM exists (2%). The remaining value-adding items consisted of the CCM was valued as a reporting mechanism (5%), and Other (1%). Grouped by common themes and sorted high-to-low by overall percentage resulted in responses summarized in Table 32.

Table 32

Does CCM Make Sense for the Institution? – HEI’s Self-Assessment

Does CCM make sense for your Institution?

Key Reasons	Combined	Yes	No
Access to Asymmetric Information and/or Whistleblower Protection	45	48	–
Ethics/Culture/Accountability/Deterrence	20	22	–
Governance/Stewardship/Reputation/Internal Control	11	12	–
Cost-Benefit and Risk Analysis	7	7	13
Reporting Mechanism	5	6	–
Barriers	5	1	50
Institution Climate/Situation	4	2	25
State Level CCM Exists	2	1	12
Other	1	1	–
Total	100	100	100
N	99	91	8

Thus, descriptive analyses of frequency distributions indicate HEIs have adopted a plethora of locally-tailored SOX Best Practices policies. These policies included institutionally-supported and third-party vendor-supported CCMs, as shown in Tables 24 and 25. HEIs likewise voluntarily implemented various means by which whistleblowers’ confidentiality is protected, as depicted in Table 26. These locally-tailored policies came at a cost. What results did HEIs realize? Frequency distributions indicate 77% of CCM implementers assess their

program as successful. Key indicators were participation: number and significance of complaints (65%), satisfactory investigation and resolution (21%), and trust in the system (12%). Another results area deals with fraud. 38% of responding HEIs reported fraud which occurred in the past three years. HEIs reporting fraud within the past three years had one case (53%) or two cases (25%). The remaining 22% of HEIs reported three or more cases. The fifty-one HEIs reporting fraud cases and aggregate losses primarily experienced damages totaling less than \$60,000 (64%) and frauds affecting aggregate funds totaling \$60,001 to \$120,000 (16%). Further details are in Table 28. 30% of reporting HEIs were able to recover funds from frauds occurring in the past three years. 21% of HEIs reporting fraud indicated the Confidential Complaint Mechanism was the source of fraud discovery. Other sources of fraud discovery are shown in Table 40. Lastly, implementers and non-implementers identified key reasons why the CCM makes sense (or does not make sense). The primary reason HEIs reported realizing value in the CCM was to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information (45%).

These descriptive analyses of frequency distributions have been informative for analyzing the dichotomous variables dividing survey respondents into CCM implementers and non-implementers in order to analyze their assessment of locally-tailored HEI SOX Best Practices policies and their CCM implementation decision. We now turn to the relationship method using Pearson's Chi-Square to analyze the nominal variables and quantify the reliability of association. All expected frequencies were at least five. With the small non-implementer sample, this was an issue. Chi-Square analysis of the Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation yielded four Independent Variables with a Pearson Chi-Square value which exceeded the critical value of chi-square (3.84) with 1 degree of freedom at the .05

significance level. The Null Hypothesis, which stated there is no relationship between locally-tailored anti-fraud policy implementation and/or whistleblower protection policy implementation and tangible/intangible results, is rejected.

The reliable association was significant for four relationships. First, the Pearson Chi-Square value for the Independent Variable “Institutionally-supported CCM” (Q24) regarding HEIs who had implemented at least one of the structural CCM options showed a Chi-Square (9.02) with regards to the Dependent Variable “CCM Makes Sense” (Q53) with 1 degree of freedom at the .05 significance level.

Second, the Pearson Chi-Square value for the Independent Variable “Whistleblower Protected By At Least One Method” (Q48) regarding HEIs who had implemented at least one of the whistleblower protection options showed a chi-square (4.62) with regards to the Dependent Variable “Discover Fraud” (Q45) with 1 degree of freedom at the .05 significance level.

Third, the Pearson Chi-Square value for the Independent Variable “Whistleblower Protected By At Least One Method” (Q48) regarding HEIs who had implemented at least one of the whistleblower protection options showed a chi-square (24.31) with regards to the Dependent Variable “CCM Makes Sense” (Q53) with 1 degree of freedom at the .05 significance level.

Fourth, the Pearson chi-square value for the Independent Variable “Whistleblower Protected By At Least One Method” (Q48) regarding HEIs who had implemented at least one of the whistleblower protection options and “CCM Implemented” (Q21) regarding HEIs who had implemented CCM showed a chi-square (34.64) with regards to the Dependent Variable “CCM Makes Sense” (Q53) with 1 degree of freedom at the .05 significance level. These significant relationships are summarized in Table 33.

Table 33

Significant HEI Locally-tailored CCM and Whistleblower Protection Measures and Results

Independent Variable	Dependent Variable
Institutionally-supported CCM (Q24)	CCM Makes Sense (Q53)
Whistleblower Protected By At Least One Method (Q48)	Discover Fraud (Q45)
Whistleblower Protected By At Least One Method (Q48)	CCM Makes Sense (Q53)
Whistleblower Protected By At Least One Method (Q48) AND CCM Implemented (Q21)	CCM Makes Sense (Q53)

Research Question 4 discerns if locally-tailored implementation is related to results by asking, “Is locally tailored HEI SOX Best Practices (Anti-Retaliation & Confidential Complaint Mechanism) policy implementation associated with positive self-assessed tangible/intangible results?” The associated Hypothesis 4.1 is, “Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results.” I use the Modified Rational Actor Model (MRAM) to explain HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation decision making. The MRAM suggests elite HEI decision makers weigh costs and benefits of voluntarily implementing anti-fraud and whistleblower protection measures. MRAM suggests if HEIs assess sufficient value added through positive self-assessed tangible/intangible results from anti-retaliation and/or CCM implementation, elite institutional leaders may view the cost is worth the benefit. Hypothesis 4.1 results are summarized in Tables 34–51 and Figure 4. I will address each significant relationship successively.

Hypothesis 4.1, Institutionally-supported CCM and CCM makes sense. For institutions having at least one institutionally-supported CCM policy, relative to assessing whether having a Confidential Complaint Mechanism makes sense for their institution:

Table 34

Crosstab CCM Implementers and Results (CCM makes sense) by Percent

	Combined	CCM Makes Sense (Q53)	
		Yes	No
Institutionally-supported CCM (Q24)	(%)	(%)	(%)
Yes	46	50	12
No	54	50	88
Total	100	100	100
N	146	129	17

$X^2 = 9.02$ ($p < .05$)

Overall, 88% of HEIs assessed having a CCM makes sense for their institution. HEIs perceiving sufficient CCM value were comprised of Higher Education Institutions with and without an institutionally-supported CCM. These results were expected for implementers, as the review of literature indicated CCM advocates (implementers) could generally be expected to realize tangible and/or intangible results from implementing locally tailored CCM and whistleblower protection policies, thus assessing that having a CCM makes sense for their institution. The equally-strong CCM support by non-implementers was not expected. In an optional textual response field, 99 respondents provided details on why (or why not) the CCM

makes sense for their institution. Of the 99 responses, 91 (92%) stated the CCM made sense for their institution, while 8% stated the CCM did not make sense for their institution. Qualitative, inductive Grounded Theory's Pile Sorting grouped open-ended text (Bernard, 2006) to provide a summary of responses to key reasons institutions found the CCM either makes sense (or not) for their specific conditions, shown in Table 35.

Implementers and non-implementers identified key reasons why CCM makes sense (or does not make sense) in the following rank-ordered categories. Primary reasons HEIs reported realizing value in the CCM was to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. The second highest reason HEIs assessed CCM benefits dealt with ethics, culture, accountability, and deterrence issues. Additional CCM value was recognized in governance, stewardship, reputation, and internal control items. 84% of implementers and 75% of non-implementers reported these top three areas as key reasons why a Confidential Complaint Mechanism program makes sense for their institution. Several items had both positive and negative reviews: cost-benefit and risk analysis, barriers, institutional climate/situation, and a State-level CCM exists. The remaining value-adding items consisted of the CCM was valued as a reporting mechanism, and Other.

The largest CCM incentive HEIs identified was gaining access to whistleblower's asymmetric information and/or protecting whistleblowers to gain access to their critical information. Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud. The HEI-identified prominent value of obtaining whistleblower's asymmetric information concerning fraud ties to the conceptual framework shown in Figure 1.

Of the 12% of HEIs that felt CCM does not make sense, 88% were non-implementers. Non-implementers assessing that the CCM does not make sense for their institution and providing textual details stated concerns with barriers, cost versus benefits, their institutional climate or situation, and having a state-level CCM program. Among implementers, only 3% felt implementing CCM policies does not make sense. One implementer assessing that the CCM does not make sense for their institution stated concern with barriers regarding their institutional climate being incompatible. Table 35 compares implementers and non-implementers bifurcated into institutions finding CCM makes sense (or CCM does not make sense).

Table 35

Institutionally-supported CCM and Categorized Results (CCM Makes Sense) (%)

Key Reasons	Has HEI Implemented Institutionally-supported CCM?			
	Yes		No	
	Does CCM make sense for your Institution?			
	Yes	No	Yes	No
Access to Asymmetric Information and/or Whistleblower Protection	52	–	25	–
Ethics/ Culture/ Accountability/ Deterrence	22	–	25	–
Governance/ Stewardship/ Reputation/ Internal Control	10	–	25	–
Cost - Benefit & Risk Analysis	6	–	9	14
Reporting Mechanism	6	–	–	–
Barriers	–	100	8	43
Institution Climate/ Situation	3	–	–	29
State Level CCM Exists	–	–	8	14
Other	1	–	–	–
Total	100	100	100	100
N	79	1	12	7

Further analysis of the tangible and/or intangible results from implementing locally tailored CCM policies reveals the largest reason a CCM makes sense is to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. CCM implementers assessing that the CCM makes sense for their institution shows they valued gaining access to whistleblower's asymmetric information when stating, "Situations are revealed that would not otherwise be disclosed that could harm the institution." Peer institutions reported there was the "Potential to uncover otherwise undetected fraud" through providing a CCM. In fact, one respondent reported it is "Better that someone should let management know before the problem festers out of control." Valuing the safe disclosure avenue for essential feedback when others make poor choices, another HEI stated "Fraud happens and we need multiple ways for faculty, staff, students and public to report." Realizing administrators could stifle whistleblower disclosures, one HEI stated the CCM could "Assure that employees have a place to go with complaints or concerns if they don't think they can go to their supervisor or other management." Other HEIs valued the CCM's ability to prevent and/or mitigate retaliation, while gaining "communication from individuals who prefer to avoid conflict." Numerous HEIs responded how vital it is for everyone to trust the disclosure process. Employees must know it is safe to report. Properly handling the complaint and protecting the whistleblower's anonymity encourages objective, timely reporting. In summary, fraud is going to occur, so implementing anti-fraud and whistleblower protection policies "is the right thing to do!"

There were many other comments through which HEIs expressed their assessment that implementing a CCM was worthwhile. One HEI stated, "Necessary to have a mechanism in place. However, this mechanism is useful primarily because of the anonymity. I do not believe

ours is effective because it is not clear to the user who will be addressing the issue and the promise of no retaliation is not perceived to be genuine.”

Potential whistleblower’s trust in the institution’s response to their disclosure is paramount, as many whistleblowers have endured retaliation after disclosure (Lowney & Robbins, 2011; Rothschild & Miethe, 1999). Three (3%; N = 99) non-implementers assessing that the CCM makes sense for their institution stated, “Allows for confidential reporting”; “A CCM provides an avenue for which employees can feel protected against retribution while disclosing important information. It also serves as a deterrent for those who may otherwise consider carrying out fraudulent activities”; and “May eliminate perceived possibility of retaliation with current non-confidential process.”

Further analysis of the tangible and/or intangible results from implementing locally tailored CCM policies reveals the second largest reason a CCM makes sense regards ethics, culture, accountability and deterrence. CCM implementers assessing that the CCM makes sense for their institution shows they valued CCM’s positive effect on their institutional culture, employee morale, and work environment. These implementers also valued CCM’s ability to empower whistleblowers to disclose, and increase accountability throughout the institution.

Three non-implementers assessed the CCM makes sense for their institution by concentrating on transparency and trust. These HEIs stated, “It would provide a mechanism for a sense of greater transparency”; “If it weeds out unethical practices and behaviors. Management is extremely untrusting of emotions and resentment flourishes”; and “Desire for transparency; correct deficiencies before they become catastrophic; maintain public trust.”

The third largest reason a CCM makes sense regards governance, stewardship, reputation, and internal controls. CCM implementers assessing that the CCM makes sense for their

institution shows they valued CCM's effect on their institutional well-being, reputational risk, compliance with the law, responsibility to the public, and audit preparation through effective internal controls. One HEI stated, "It is a good business practice and provides a mechanism for identifying potential issues that could harm the college." Another HEI reported, "We are very dependent on donations and very sensitive to reputational risk." Focusing on stewardship, other decision makers stated implementing CCM fulfills their responsibility as a public institution by allowing the institution to evaluate all claims, determine validity, and take necessary corrective action when appropriate. Three non-implementers assessed the CCM makes sense for their institution by concentrating on internal controls, process improvement, and governance.

The fourth largest reason a CCM makes sense regards costs versus benefits and mitigating risk. CCM implementers assessing that the CCM makes sense for their institution valued CCM's effect in terms of being a sound business decision. One non-implementer assessing that the CCM makes sense for their institution stated, "Every institution should have one." One non-implementer assessing that the CCM does not make sense for their institution stated, "No known instances of fraud in past 10 years. Would create more work with little anticipated REAL benefit."

The fifth largest reason a CCM makes sense regards providing a reporting mechanism. CCM implementers assessing that the CCM makes sense for their institution shows they valued CCM's effect in terms of being a viable reporting opportunity. These HEIs reported it is always important to have a confidential reporting mechanism of potential activities in case there is a need, but it is just one of many tools.

The sixth largest reason affecting whether a CCM makes sense regards barriers. Looking at the one CCM implementer assessing that the CCM does not make sense for their institution

shows they encountered an institutional climate which was not conducive to CCM implementation. This institution's Likert scale responses to Barriers (Q51) reflects a "Moderate affect" with CCM being incompatible with the institutional climate, while also reporting a "Slight Affect" with "Institutional resistance/pushback from Central Administration" & "Low sense of urgency." Reiterating, this CCM implementer said the CCM does not make sense for their institution, having experienced resistance in these three barrier areas (CCM incompatible with the institutional climate, institutional pushback/resistance from Central Administration, and Low sense of urgency). One non-implementer assessed the CCM makes sense for their institution, but did not implement, stating "Makes sense to have a confidential reporting mechanism, but haven't received buy-in from key decision makers at this time; Concern that confidentiality could lead to false reports." Three non-implementers assessing that the CCM does not make sense for their institution had reservations with whistleblowers' information. These HEIs stated barriers dealt with, "Manpower and accuracy and viability of information collected"; "No way to completely investigate if a tip is confidential"; and "There are many avenues of reporting; some very discreet (if not confidential). Anonymous information is difficult to follow up on." Such negative aspects of dealing with incomplete information and potential "noise" complaints are consistent with the literature (Kidder, 2005).

The seventh largest reason affecting whether a CCM makes sense regards their institutional climate or situation. The two CCM implementers assessing the CCM makes sense for their institution appreciated the value added to their large, decentralized organizations. These HEIs stated "Large size and multi-campus facility with centralized internal audit"; and "Decentralized organization — helpful to provide a resource so individuals can report concerns and not wonder if it was reported to the right source." Two non-implementers assessing the

CCM does not make sense for their institution stated, “Small institution”; and “Small institution with wide breadth of cross-training.”

The eighth largest reason affecting whether a CCM makes sense regards their State already having a state-level CCM. While both of these HEIs did not implement a local CCM, they differed on their assessment of whether having a CCM for their institution makes sense. The HEI in the affirmative stated “Current whistleblower programs in effect at the State level and not at the University level”, while the HEI in the negative stated “We have a statewide public institution CCM.” I see no substantive difference in the textual responses indicating why each HEI had polar opposite assessments of whether a CCM makes sense for their institution.

The lowest reason affecting whether a CCM makes sense regards how (versus why) the HEI implemented CCM, with the lone responding CCM implementer stating “Ours is an informal system encouraging "whistle blowers" to contact supervisors in person or by email.”

Research Question 4 discerns if locally-tailored implementation is related to results by asking, “Is locally tailored HEI SOX Best Practices (Anti-Retaliation & Confidential Complaint Mechanism) policy implementation associated with positive self-assessed tangible/intangible results?” The associated Hypothesis 4.1 is, “Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results.” I use the Modified Rational Actor Model (MRAM) to explain HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation decision making. The MRAM suggests elite HEI decision makers weigh costs and benefits of voluntarily implementing anti-fraud and whistleblower protection measures. MRAM suggests if HEIs assess sufficient value added through positive self-assessed tangible/intangible results from anti-retaliation and/or CCM implementation, elite institutional leaders may view the cost is worth the benefit. We have

reviewed the relationship between one locally-tailored HEI SOX Best Practices policy implementation (institutionally-supported CCM) and results (CCM implementation making sense for their institution). Analysis of the tangible and/or intangible results from implementing locally tailored CCM policies reveals the largest reason a CCM makes sense is to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. Multiple other results were also discussed. Another significant relationship concerns institutions having at least one whistleblower protection mechanism in-place, relative to discovering fraud.

Hypothesis 4.1, Whistleblower protection and discovering fraud. The second significant, reliable association concerns Institutions having at least one whistleblower protection mechanism, relative to discovering fraud. The Pearson chi-square value for the Independent Variable “Whistleblower Protected By At Least One Method” (Q48) regarding HEIs who had implemented at least one of the whistleblower protection options showed a chi-square (4.62) with regards to the Dependent Variable “Discover Fraud” (Q45) with 1 degree of freedom at the .05 significance level. The Null Hypothesis, which stated there is no relationship between locally-tailored anti-fraud policy implementation and/or whistleblower protection policy implementation and tangible/intangible results, is rejected. Results are summarized in Table 36.

Table 36

Crosstab Whistleblower Protectors and Results (CCM Discovered Fraud)

Whistleblower Protected By At Least One Method (Q48)	Discover Fraud through CCM (Q45) (%)		
	Combined	Yes	No
Yes	77	100	70
No	23	0	30
Total	100	100	100
N	56	12	44

$X^2 = 4.62$ ($p < .05$)

Seventy seven percent (77%) of responding HEIs implemented at least one whistleblower protection policy, as shown in Table 36. Twelve responding HEIs (21%, N = 56) with at least one whistleblower protection policy were able to discover fraud through the Confidential Complaint Mechanism. Of note, all of the responding HEIs without at least one whistleblower protection policy were unable to discover fraud through the Confidential Complaint Mechanism. HEIs differed in the method(s) by which whistleblower’s confidentiality is protected, as illustrated in Table 25. Note: the HEIs were asked to select all whistleblower protection policies that apply.

Twelve HEIs (28%, N = 43) providing at least one whistleblower protection mechanism were able to discover fraud through the CCM in the past three years. These CCM implementers having at least one whistleblower protection mechanism realized value in having a CCM and

whistleblower protection in-place to discover actual frauds that occurred at their institution in the past three years. Forty-four other HEIs experienced fraud in the past three years, with the source of discovery being a method other than the CCM. Thirteen of these HEIs (30%, N = 44) did not provide at least one whistleblower protection method. Five of the thirteen HEIs experiencing fraud in the past three years had implemented CCM but did not protect whistleblowers. When fraud occurred, the CCM was not the source of discovery. See Table 37 for the methods of fraud discovery by five HEIs who implemented CCM, did not protect whistleblowers by at least one mechanism, and experienced fraud in the previous three years. Note: the HEIs were asked to select all fraud discovery sources that apply in the last three years.

Table 37

Discovery Source for Five Implementers with Fraud who did not Protect Whistleblowers

Discovery Source other than CCM	(%)
Management Review	40
Account Reconciliation	40
Internal Audit	20
Document Examination	20

N = 5

The other eight of the thirteen HEIs experiencing fraud in the past three years had not implemented a CCM and did not protect whistleblowers. When fraud occurred, the method of fraud discovery was neither a CCM nor External Audit. See Table 38 for the methods of fraud discovery by eight HEIs who did not implement CCM, did not protect whistleblowers by at least

one mechanism, and experienced fraud in the previous three years. Note: the HEIs were asked to select all fraud discovery sources that apply in the last three years.

Table 38

Discovery Source for Eight Non-Implementers with Fraud who did not Protect Whistleblowers

Discovery Source other than CCM	(%)
Management Review	50
By Accident	50
Account Reconciliation	50
Document Examination	50
Surveillance/ Monitoring	38
Internal Audit	25
Notified by Law Enforcement (not part of CCM)	25
Confession	25
Other (See Text)	25
IT Controls	13
External Audit	0

N = 8

All of the responding HEIs (23%, N = 56) experiencing fraud that did not implement at least one whistleblower protection policy did not discover fraud through the CCM in the past 3 years. This is very significant. One conclusion could be: if you do not protect whistleblowers, they are not going to talk and you are denying yourself access to their asymmetric information

concerning fraud. These results were expected for implementers, as the review of literature indicated CCM advocates (implementers) could generally be expected to realize tangible and/or intangible benefits from implementing locally tailored CCM and whistleblower protection policies.

Sixty HEIs (38%; N = 157) experienced fraud within the previous three years. Fifty-six of these HEIs reported the fraud discovery source. Twelve HEIs with a CCM (9%; N = 131) reported fraud occurring within the previous three years which was discovered by the CCM. These HEIs represent 21% of institutions reporting fraud and the discovery source (N = 56). The remaining forty-four frauds (79%, N = 56) were discovered through means other than CCM disclosure. Management review (48%), account reconciliation (45%), and document examination (41%) were the primary sources of fraud discovery apart from the CCM. Of note, external audit was not reported as a discovery source for any of this study's HEI frauds in the past three years. Details concerning all discovery sources are contained in Table 39 (rank-ordered by percent the discovery source was used). Note: the HEIs were asked to select all non-CCM fraud discovery sources that apply in the last 3 years.

Table 39

Non-CCM Source of Fraud Discovery, Rank Ordered by Percent Use

Discovery Source other than CCM	Use (%)	Aggregate Funds Returned (%)
Management Review	48	33
Account Reconciliation	45	35
Document Examination	41	44
Other (See Text)	20	33
Internal Audit	18	38
By Accident	18	88
Surveillance/Monitoring	18	75
Confession	11	60
IT Controls	5	50
Notified by Law Enforcement (not part of CCM)	2	100
External Audit	0	0

N = 44

The “Other” sources of fraud discovery with CCM implementers who provided whistleblower protection were: “Student reported issue”, “Alerted by cashiers”, “Employee (witness) came forward to management”, “Media report”, “Staff members approached CFO with discrepancies”, “Vendor notification”, and “An employee reported an irregularity to their supervisor directly.” The “Other” sources of fraud discovery with CCM non-implementers who did not provide whistleblower protection were: “Student complaint”, and “Tip from another employee.”

Another aspect of tangible/intangible results from CCM implementation deals with institutions that have experienced fraud with respect to the funds affected by the fraud and fraud funds subsequently returned to the institution. The literature review revealed the CCM can oftentimes mitigate an organization’s losses due to fraud by timely discovery (Report to the Nations on Occupational Fraud and Abuse, 2014). The literature also revealed organizations generally do not significantly recover fraud losses (Report to the Nations on Occupational Fraud and Abuse, 2014). The survey asked several questions to discover if HEIs had recently experienced fraud in the past three years, the aggregate monetary funds affected, whether the CCM was the source of discovering the fraud, and the amount of funds actually returned to the institution.

Table 40 shows an overall summary of the number of HEIs with aggregate funds affected by fraud (Q41), funds returned to the institution (Q43) & whether the CCM was the fraud discovery source (Q45).

Table 40

Aggregate Fraud Funds Affected versus Was CCM Source of Discovery (%)

Aggregate Funds Affected	Combined	Was the CCM the source of fraud discovery?	
		Yes	No
Less than \$60,000	56	–	59
\$60,001 to \$120,000	28	–	29
Greater than \$240,000	16	100	12
Total	100	100	100
N	18	1	17

Of the eighteen responding HEIs experiencing fraud in the last three years, 95% discovered the fraudulent activity by means other than the CCM (see Table 40). Fifty-six percent of HEI frauds affected aggregate funds totaling less than \$60,000. Twenty-eight percent of the frauds affected aggregate funds totaling \$60,001 to \$120,000. Sixteen percent of the frauds affected funds greater than \$240,000 (see Table 40). The CCM was the source of fraud discovery for only one HEI (5%, N = 18); however, the aggregate funds affected by fraud at this CCM implementer totaled over \$240,000. The other frauds were discovered by management review, account reconciliation, document examination, Internal Audit, accident, surveillance/monitoring, confession, and notification by law enforcement which was not part of the CCM. The only available discovery option available but not reported as a source of fraud discovery was External Audit. Concerning CCM implementers versus non-implementers, implementers reported thirteen (72%) of the eighteen frauds, summarized in Table 41.

Table 41

CCM Implementer Aggregate Fraud Funds Affected versus Was CCM Source of Discovery (%)

		Was the CCM the source of fraud discovery?	
		Yes	No
Aggregate Funds Affected	Combined		
Less than \$60,000	62	–	67
\$60,001 to \$120,000	31	–	33
Greater than \$240,000	7	100	–
Total	100	100	100
N	13	1	12

Of the 131 CCM implementers, thirteen HEIs (10%) reported frauds occurring within the last three years. Of the 31 non-implementers, five HEIs (16%) reported frauds occurring within the last three years. A majority (75%) of HEIs implementing a CCM and reporting frauds occurring within the last three years involved aggregate funds totaling less than \$60,000. HEIs not implementing a CCM and reporting frauds occurring within the last three years involved aggregate funds fairly evenly spaced within the three listed ranges (totaling less than \$60,000, \$60,001 to \$120,000, and Greater than \$240,000) in Tables 41–42. This slight difference in fraud rates and aggregate funds affected through fraud could indicate several possibilities. First, CCM implementers could be discovering frauds, in general, earlier than non-implementers. This early discovery could be mitigating the funds affected by fraud. Second, CCM implementers could be discovering types of frauds, in general, affecting funds at a lower aggregate level. Third, more frauds could be occurring at non-implementing HEIs which have not been discovered and disclosed. Perhaps this variance in implementer’s lower fraud rate and reported fraud occurring in lower thresholds could be due to the CCM’s deterrent influence and effects on early detection, thus mitigating losses (Report to the Nations on Occupational Fraud and Abuse, 2014). Further research could help illuminate what is occurring and what part (if any) CCM implementation and whistleblower protection plays in HEI fraud prevention and discovery. On a positive note, the lone implementer reporting a fraud which was discovered by the CCM within the last three years affecting aggregate funds greater than \$240,000 has already been able to recover \$50,000. This institution reported additional funds are expected to be received over time. The two non-implementers reporting a fraud which was not discovered by the CCM within the last three years affecting aggregate funds greater than \$240,000 have been able to recover \$17,000 and \$30,000 (respectively), with no additional recovery potential noted. Non-

implementers reported five of the eighteen frauds, summarized in Table 42. Since no HEIs reported aggregate frauds in two data collection ranges (\$120,001 to \$180,000 and \$180,001 to \$240,000), these ranges are excluded from the Tables and discussion.

Table 42

CCM Non-Implementer Aggregate Fraud Funds Affected versus Was CCM Source of Discovery (%)

		Was the CCM the source of fraud discovery?	
		Yes	No
Aggregate Funds Affected	Combined <u>N</u>		
Less than \$60,000	40	–	40
\$60,001 to \$120,000	20	–	20
Greater than \$240,000	40	–	40
Total	100	–	100
N	5	–	5

Of the eighteen HEIs experiencing fraud in the last three years who could identify the range of aggregate funds affected by fraud, all CCM implementers and non-implementers were able to recover at least a portion of the affected funds (see Table 43). Keeping in mind we do not know the exact percentage of funds recovered for a majority of reported cases (due to how the questionnaire was worded), this recovery level was higher than expected. This recovery rate stands in sharp contrast to the ACFE’s 2014 survey report that 58% of victim organizations do not recover any of their fraud losses, which is up from 49% in 2012 (Report to the Nations on Occupational Fraud and Abuse, 2014).

Table 43

Aggregate Funds Returned (Q43) regarding Aggregate Fraud Funds Affected (Q41) vs. Source of Discovery (Q45)

Aggregate Funds Affected	Was the CCM the source of fraud discovery?	
	Yes	No
Less than \$60,000		(1) <10,000; (2) \$3,000 of an \$11,000 embezzlement; (3) \$1,500; (4) \$1,500; (5) \$10,000; (6) 100%; (7) \$2,000; (8) \$20,000; (9) \$7,500; (10) \$9,000
\$60,001 to \$120,000		(1) \$10,000; (2) \$50,000; (3) \$86,573; (4) \$88,000; (5) Not sure — being returned in payments over time.
Greater than \$240,000	\$50,000 (additional funds expected to be received)	(1) \$17,000; (2) \$30,000

The thirteen CCM implementers that reported fraud were able to recover funds as summarized in Table 44. The CCM was the source of fraud discovery in only one of the identified frauds. However, the CCM was able to be of use by revealing the only CCM implementer’s fraud affecting funds over \$240,000. Additionally, \$50,000 was recovered, with additional funds expected to be received. Details of the other frauds not revealed by the CCM are available in Table 44. The five CCM non-implementers that reported fraud were able to recover funds as summarized in Table 45.

Table 44

CCM Implementer Aggregate Funds Returned regarding Aggregate Fraud Funds Affected versus Source of Discovery

		Was the CCM the source of fraud discovery?	
		Yes	No
<hr/>			
Aggregate Funds Affected			
<hr/>			
Less than \$60,000			(1) <10,000; (2) \$3,000 of an \$11,000 embezzlement; (3) \$1,500; (4) \$10,000; (5) 100%; (6) \$2,000; (7) \$20,000; (8) \$7,500
\$60,001 to \$120,000			(1) \$10,000; (2) \$86,573; (3) \$88,000; (4) Not sure — being returned in payments over time.
Greater than \$240,000	\$50,000 (additional funds expected to be received)		
<hr/>			
N = 13			

Table 45

CCM Non-Implementer Aggregate Funds Returned (Q43) regarding Aggregate Fraud Funds Affected (Q41) vs. Source of Discovery

Aggregate Funds Affected	Was the CCM the source of fraud discovery?	
	Yes	No
Less than \$60,000		(1) \$1,500; (2) \$9,000
\$60,001 to \$120,000		\$50,000
Greater than \$240,000		(1) \$17,000; (2) \$30,000
N = 5		

The source of discovery for non-implementer HEIs able to recover funds is shown in Table 46, which is rank-ordered according discovery method by percent having at least some funds returned to the institution. Note: the HEIs were asked to select all non-CCM fraud discovery sources that apply in the last 3 years.

Table 46

CCM Non-Implementer Aggregate Funds Returned versus Source of Discovery, Rank-ordered by % Aggregate Returned

	Discovery Source	Aggregate Funds Returned
Discovery Source other than CCM	(%)	(%)
Notified by Law Enforcement (not part of CCM)	2	100
By Accident	18	88
Surveillance/ Monitoring	18	75
Confession	11	60
IT Controls	5	50
Document Examination	41	44
Internal Audit	18	38
Account Reconciliation	45	35
Management Review	48	33
Other (See Text)	20	33
External Audit	0	0

N = 44

The one HEI notified of fraud by a whistleblower who had contacted law enforcement (not part of the CCM Program) was able to recover at least a portion of the affected funds. The next highest source of fraud discovery rank-ordered by percentage of recovery percentage (not rank-ordered by actual dollars recovered), was in the “By Accident” category. This fraud

discovery source had seven of the eight frauds (88%) able to recover at least some fraudulently obtained funds. Further research could ascertain whether the source of fraud discovery is related to the effectiveness of having funds returned to the institution. Of note, only “External Audit” was not cited as a source of fraud discovery in which funds were subsequently returned to the institution. This absence is congruous with the 2014 ACFE Report, which states, Independent audits “should not be relied upon as organization’s primary anti-fraud mechanism” (Report to the Nations on Occupational Fraud and Abuse, 2014). Although such audits were the most commonly implemented control [in the ACFE’s 2014 study] and they detected only 3% of the frauds reported to [the ACFE], independent audits ranked extremely low in limiting fraud losses (Report to the Nations on Occupational Fraud and Abuse, 2014).

In summary, implementing at least one locally-tailored whistleblower protection mechanism was significantly associated with discovering fraud. Twelve CCM implementers having at least one whistleblower protection mechanism realized value in having a CCM and whistleblower protection in-place to discover actual frauds that occurred at their institution in the past three years. Forty-four other HEIs experienced fraud in the past three years, with the source of discovery being a method other than the CCM. Thirteen of these HEIs (30%, N = 44) did not provide at least one whistleblower protection method. Five of the thirteen HEIs (38%) experiencing fraud in the past three years had implemented CCM but did not protect whistleblowers. When fraud occurred, the CCM was not the source of discovery. The other eight of the thirteen HEIs (62%) experiencing fraud in the past three years had not implemented a CCM and did not protect whistleblowers. When fraud occurred, the methods of fraud discovery were neither a CCM nor External Audit. All of the responding HEIs (23%, N = 56) experiencing fraud that did not implement at least one whistleblower protection policy did not

discover fraud through the CCM in the past 3 years. This is very significant. One conclusion could be: if you do not protect whistleblowers, they are not going to divulge their knowledge of perceive or actual illegal activity. Thus, you are denying yourself access to their asymmetric information concerning fraud. Initial data indicate implementing at least one locally-tailored whistleblower protection mechanism could be associated with mitigating fraud losses.

Research Question 4 discerns if locally-tailored implementation is related to results by asking, “Is locally tailored HEI SOX Best Practices (Anti-Retaliation & Confidential Complaint Mechanism) policy implementation associated with positive self-assessed tangible/intangible results?” The associated Hypothesis 4.1 is, “Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results.” I use the Modified Rational Actor Model (MRAM) to explain HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation decision making. The MRAM suggests elite HEI decision makers weigh costs and benefits of voluntarily implementing anti-fraud and whistleblower protection measures. MRAM suggests if HEIs assess sufficient value added through positive self-assessed tangible/intangible results from anti-retaliation and/or CCM implementation, elite institutional leaders may view the cost is worth the benefit. We first reviewed the relationship between one locally-tailored HEI SOX Best Practices policy implementation (institutionally-supported CCM) and the CCM implementation making sense for their institution. We next reviewed the relationship between institutions having at least one whistleblower protection mechanism in-place, relative to discovering fraud. The third statistically significant relationship is between whistleblower protection mechanisms and the HEI assessing whether having a CCM makes sense for their institution.

Hypothesis 4.1, Whistleblower protection and results (CCM makes sense). The third significant, reliable association involves institutions having at least one whistleblower protection mechanism, relative to assessing whether having a CCM makes sense for their institution. The Pearson chi-square value for the Independent Variable “Whistleblower Protected By At Least One Method” (Q48) regarding HEIs who had implemented at least one of the whistleblower protection options showed a chi-square (24.31) with regards to the Dependent Variable “CCM Makes Sense” (Q53) with 1 degree of freedom at the .05 significance level. The Null Hypothesis, which stated there is no relationship between locally-tailored anti-fraud policy implementation and/or whistleblower protection policy implementation and tangible/intangible results, is rejected. Results are summarized below in Table 47.

Table 47

Whistleblower Protectors and Results (CCM makes sense) by %

Whistleblower Protected By At Least One Method (Q48)	Combined	CCM Makes Sense (Q53)	
		Yes	No
Yes	80	86	35
No	20	14	65
Total	100	100	100
N	146	129	17

$X^2 = 24.31$ ($p < .05$)

Eighty percent (80%) of responding HEIs implemented at least one whistleblower protection policy, as shown in Table 47. HEIs differed in the method(s) by which

whistleblower's confidentiality is protected, as illustrated in Table 26. Note: the HEIs were asked to select all whistleblower protection policies that apply, so some institutions indicated multiple types of whistleblower protection mechanisms.

HEIs with and without at least one whistleblower protection mechanism saw sufficient value in having a CCM, as a combined 88% of institutions assessed that having a CCM makes sense for their institution. These results were expected for the 111 HEIs (86%, N = 129) providing whistleblower protection, as the review of literature indicated whistleblower protectors could generally be expected to realize tangible and/or intangible results from implementing whistleblower protection policies, thus assessing that having a CCM makes sense for their institution. The CCM support by the 18 HEIs (14%, N = 129) not providing whistleblower protection was not expected. In an optional textual response field, 99 respondents provided details on why (or why not) the CCM makes sense for their institution. Of the 99 responses, 91 (92%) stated the CCM made sense for their institution, while 8 stated the CCM did not make sense for their institution. Qualitative, inductive Grounded Theory's Pile Sorting grouped open-ended text (Bernard, 2006) to provide a summary of responses to key reasons institutions found the CCM either makes sense (or not) for their specific conditions, shown in Table 48.

Implementers and non-implementers identified key reasons why CCM makes sense (or does not make sense) in the following rank-ordered categories. Primary reasons HEIs reported realizing value in the CCM was to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. The second highest reason HEIs assessed CCM benefits dealt with ethics, culture, accountability, and deterrence issues. Additional CCM value was recognized in governance, stewardship, reputation, and internal control items. 85% of HEIs providing whistleblower protection and 70% of HEIs not providing

whistleblower protection reported these three top areas as key reasons why a Confidential Complaint Mechanism program makes sense for their institution. Several items had both positive and negative reviews: cost-benefit and risk analysis, barriers, institutional climate/situation, and a State-level CCM exists. The remaining value-adding items consisted of the CCM was valued as a reporting mechanism, and Other.

The largest CCM incentive HEIs identified was gaining access to whistleblower's asymmetric information and/or protecting whistleblowers to gain access to their critical information. Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud. The HEI-identified prominent value of obtaining whistleblower's asymmetric information concerning fraud ties to the conceptual framework shown in Figure 1.

Of the 12% of HEIs that felt CCM does not make sense, 65% of them did not provide at least one whistleblower protection mechanism. Non-implementers assessing that the CCM does not make sense for their institution and providing textual details stated concerns with barriers, cost versus benefits, their institutional climate or situation, and having a state-level CCM program. Six HEIs (4%, N = 146) providing at least one whistleblower protection mechanism felt implementing CCM policies does not make sense. One implementer assessing that the CCM does not make sense for their institution stated concern with barriers regarding their institutional climate. Table 48 compares whistleblower protectors and non-protectors bifurcated into institutions finding CCM makes sense (or CCM does not make sense).

Table 48

HEIs With and Without at least One Whistleblower Protection Method versus CCM Makes Sense

Key Reasons	Has HEI Implemented Whistleblower Protection?			
	Yes		No	
	Does CCM make sense for your Institution?			
	Yes	No	Yes	No
Access to Asymmetric Information and/or Whistleblower Protection	52	–	20	–
Ethics/ Culture/ Accountability/ Deterrence	24	–	10	–
Governance/ Stewardship/ Reputation/ Internal Control	9	–	40	–
Cost - Benefit & Risk Analysis	6	–	10	17
Reporting Mechanism	6	–	–	–
Barriers	–	100	10	33
Institution Climate/ Situation	2	–	–	33
State Level CCM Exists	–	–	10	17
Other	1	–	–	–
Total	100	100	100	100
N	81	2	10	6

Further analysis of the tangible and/or intangible results from implementing locally tailored CCM policies reveals the largest reason a CCM makes sense is to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. CCM implementers providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution shows they valued gaining access to whistleblower's asymmetric information when stating the following: "Situations are revealed that would not otherwise be disclosed that could harm the institution." Peer institutions reported there was the "Potential to uncover otherwise undetected fraud" through providing a CCM. In fact, one respondent reported it is "Better that someone should let management know before the problem festers out of control." Valuing the safe disclosure avenue for essential feedback when others make poor choices, another HEI stated "Fraud happens and we need multiple ways for faculty, staff, students and public to report." Realizing administrators could stifle whistleblower disclosures, one HEI stated the CCM could "Assure that employees have a place to go with complaints or concerns if they don't think they can go to their supervisor or other management." Other HEIs valued the CCM's ability to prevent and/or mitigate retaliation, while gaining "communication from individuals who prefer to avoid conflict." Numerous HEIs responded how vital it is for everyone to trust the disclosure process. Employees must know it is safe to report. Properly handling the complaint and protecting the whistleblower's anonymity encourages objective, timely reporting. In summary, fraud is going to occur, so implementing anti-fraud and whistleblower protection policies "is the right thing to do!"

There were many other comments through which HEIs expressed their assessment that implementing a CCM was worthwhile. One HEI stated, "Necessary to have a mechanism in place. However, this mechanism is useful primarily because of the anonymity. I do not believe

ours is effective because it is not clear to the user who will be addressing the issue and the promise of no retaliation is not perceived to be genuine.” Potential whistleblower’s trust in the institution’s response to their disclosure is paramount, as many whistleblowers have endured retaliation after disclosure (Rothschild & Miethe, 1999; Lowney & Robbins, 2011). Two HEIs not providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution stated, “Allows for confidential reporting”; and “A CCM provides an avenue for which employees can feel protected against retribution while disclosing important information. It also serves as a deterrent for those who may otherwise consider carrying out fraudulent activities.”

Further analysis of the tangible and/or intangible results from implementing locally tailored CCM policies reveals the second largest reason a CCM makes sense regards ethics, culture, accountability and deterrence. The nineteen HEIs providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution shows they valued CCM’s effect on their institutional culture, employee morale, and work environment. These HEIs also valued CCM’s ability to empower whistleblowers to disclose, and increase accountability throughout the institution.

Two HEIs providing at least one whistleblower protection mechanism assessed the CCM makes sense for their institution by concentrating on transparency and trust. These HEIs stated implementation “would provide a mechanism for a sense of greater transparency” and would be worthwhile “If it weeds out unethical practices and behaviors. Management is extremely untrusting of emotes and resentment flourishes.” One HEI not providing at least one whistleblower protection mechanism yet assessing that the CCM makes sense for their institution by concentrating on transparency and trust stated, “Desire for transparency; correct deficiencies

before they become catastrophic; maintain public trust.” This HEI stated CCM implementation makes sense, yet they did not provide protect their whistleblowers. Investigation of their reported barriers reveals the HEI experienced barriers as follows: “Significant affect” with Institutional resistance/pushback from Faculty, Institutional resistance/pushback from Central Administration, Low sense of urgency, the Institutional climate being incompatible, Too many decision makers, and Program administrator responsibility issues; “Moderate affect” with Stakeholder disagreements, CCM complexity, CCM Cost outweighing the Benefit, Institutional resistance/pushback from the Board of Trustees, Institutional resistance/pushback from the Office of President/Chancellor, Policy disagreement, CCM advocate support waned (left position, diverted attention to higher priority, etc.), and Time constraints.

The third largest reason a CCM makes sense regards governance, stewardship, reputation, and internal controls. The seven HEIs providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution shows they valued CCM’s effect on their institutional well-being, reputational risk, compliance with the law, responsibility to the public, and audit preparation through effective internal controls. One HEI stated “It is a good business practice and provides a mechanism for identifying potential issues that could harm the college.” Another HEI reported, “We are very dependent on donations and very sensitive to reputational risk.” Focusing on stewardship, other decision makers stated implementing CCM fulfills their responsibility as a public institution by allowing the institution to evaluate all claims, determine validity, and take necessary corrective action when appropriate. Four HEIs not providing at least one whistleblower protection mechanism assessed the CCM makes sense for their institution by concentrating on internal controls, process improvement, and governance.

The fourth largest reason a CCM makes sense regards costs versus benefits and mitigating risk. The five HEIs providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution shows they valued CCM's effect in terms of being a sound business decision. One HEI not providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution stated, "Every institution should have one." One HEI not providing at least one whistleblower protection mechanism assessing that the CCM does not make sense for their institution stated, "No known instances of fraud in past 10 years. Would create more work with little anticipated REAL benefit."

The fifth largest reason a CCM makes sense regards providing a reporting mechanism. The five HEIs providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution valued CCM's effect in terms of being a viable reporting opportunity.

The sixth largest reason affecting whether a CCM makes sense regards barriers. Looking at the one HEI providing at least one whistleblower protection mechanism assessing that the CCM does not make sense for their institution shows they encountered an institutional climate which was not conducive to CCM implementation. This institution's Likert scale responses to Barriers (Q51) reflects a "Moderate affect" with CCM being incompatible with the institutional climate, while also reporting a "Slight Affect" with "Institutional resistance/pushback from Central Administration" and "Low sense of urgency." Reiterating, this CCM implementer said the CCM does not make sense for their institution, having experienced resistance in these three barrier areas (CCM incompatible with the institutional climate, institutional pushback/resistance from Central Administration, and low sense of urgency). One HEI not providing at least one

whistleblower protection mechanism assessed the CCM makes sense for their institution, but did not implement, stating “Makes sense to have a confidential reporting mechanism, but haven't received buy-in from key decision makers at this time; Concern that confidentiality could lead to false reports.” Two HEIs not providing at least one whistleblower protection mechanism assessing that the CCM does not make sense for their institution had reservations with whistleblowers’ information. These HEIs stated, “Manpower and accuracy and viability of information collected”; and “There are many avenues of reporting; some very discreet (if not confidential). Anonymous information is difficult to follow up on.”

The seventh largest reason affecting whether a CCM makes sense regards their institutional climate or situation. The two HEIs providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution appreciated the value added to their large, decentralized organizations. These HEIs stated “Large size and multi-campus facility with centralized internal audit”; and “Decentralized organization — helpful to provide a resource so individuals can report concerns and not wonder if it was reported to the right source.” Two HEIs not providing at least one whistleblower protection mechanism assessing that the CCM does not make sense for their institution stated, “Small institution”; and “Small institution with wide breadth of cross-training.”

The eighth largest reason affecting whether a CCM makes sense regards their State already having a State-level CCM. While both of these HEIs did not provide at least one whistleblower protection mechanism, they differed on their assessment of whether having a CCM for their institution makes sense. The HEI in the affirmative stated “Current whistleblower programs in effect at the State level and not at the University level”, while the HEI in the negative stated “We have a statewide public institution CCM.” I see no substantive difference in

the textual responses indicating why each HEI had polar opposite assessments of whether a CCM makes sense for their institution.

The lowest reason affecting whether a CCM makes sense regards how (versus why) they implement CCM, with the lone responding CCM Implementer stating, “Ours is an informal system encouraging "whistle blowers" to contact supervisors in person or by email.”

We have reviewed the relationship between one locally-tailored HEI SOX Best Practices policy implementation (institutionally-supported CCM) and the CCM implementation making sense for their institution. We next reviewed the relationship between institutions having at least one whistleblower protection mechanism in-place, relative to discovering fraud. The next statistically significant relationship was between whistleblower protection mechanisms and the HEI assessing whether having a CCM makes sense for their institution. We will now see survey results of the last statistically significant relationship between institutions simultaneously having at least one whistleblower protection mechanism and implementing CCM, relative to assessing whether having a CCM makes sense for their institution.

Hypothesis 4.1, Whistleblower protection, CCM implementation and CCM makes sense. Research Question 4 discerns if locally-tailored implementation is related to results by asking, “Is locally tailored HEI SOX Best Practices (Anti-Retaliation & Confidential Complaint Mechanism) policy implementation associated with positive self-assessed tangible/intangible results?” The associated Hypothesis 4.1 is, “Locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results.” I use the Modified Rational Actor Model (MRAM) to explain HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation decision making. The MRAM suggests elite HEI decision makers weigh costs and benefits of voluntarily implementing

anti-fraud and whistleblower protection measures. MRAM suggests if HEIs assess sufficient value added through positive self-assessed tangible/intangible results from anti-retaliation and/or CCM implementation, elite institutional leaders may view the cost is worth the benefit. The fourth significant, reliable association concerns institutions having at least one whistleblower protection mechanism and implementing CCM, relative to assessing whether having a CCM makes sense for their institution. The Pearson Chi-Square value for the Independent Variable “Whistleblower Protected By At Least One Method” (Q48) regarding HEIs who had implemented at least one of the whistleblower protection options and “CCM Implemented” (Q21) regarding HEIs who had implemented CCM showed a chi-square (34.64) with regards to the Dependent Variable “CCM Makes Sense” (Q53) with 1 degree of freedom at the .05 significance level. Including CCM implementation with whistleblower protection results in a chi-square increase of 10.33 (from 24.31 to 34.64) relative to the Dependent Variable. This 42% increase reflects the value added by combining a Confidential Complaint Mechanism and a Whistleblower Protection Mechanism. Even HEIs who had only implemented one (or none) of the Independent Variables positively assessed the value in CCM implementation.

HEIs differed in the method(s) by which whistleblower’s confidentiality is protected, as illustrated in Table 26. Note: the HEIs were asked to select all whistleblower protection policies that apply, so some institutions indicated multiple types of whistleblower protection mechanisms.

One hundred forty-six HEIs responded to the three variables regarding CCM implementation, whistleblower protection, and whether having the CCM makes sense for their institution. The 80% of HEIs providing at least one method of whistleblower protection are comprised of CCM implementers (77%) and CCM non-implementers (3%). The 20% of HEIs

not providing at least one method of whistleblower protection are comprised of CCM implementers (4%) and CCM non-implementers (16%). Relationships are depicted in Table 49.

Table 49

Crosstab CCM Implementation and Whistleblower Protection by %

		CCM Implemented (Q21)		
		Yes	No	
Whistleblower Protected By	Yes	80	95	15
At Least One Method (Q48)	No	20	5	85
Total		100	100	100
N		146	119	27

The above summary encompasses HEIs assessing whether having the CCM makes sense for their institution as follows (Makes Sense and Does Not Make Sense). Some 129 HEIs (88%) assessed the CCM makes sense for their institution (comprised of 108 CCM and whistleblower protection implementers, 3 whistleblower protection implementers, 6 CCM implementers, and 12 CCM & whistleblower protection non-implementers). Seventeen (17) HEIs assessed the CCM does not make sense for their institution (comprised of 5 CCM and whistleblower protection implementers, 1 whistleblower protection implementer, and 11 CCM and whistleblower protection non-implementers). Results are shown in Table 50.

Table 50

Crosstab CCM Implementation, WB Protection and Results (CCM makes sense) by %

	Has HEI Implemented CCM? (Q21)			
	Yes		No	
	Does CCM make sense for your Institution? (Q53)			
Whistleblower Protected By				
At Least One Method (Q48)	Yes	No	Yes	No
Yes	95	100	20	8
No	5	–	80	92
Total	100	100	100	100
N = 146	114	5	15	12

CCM-implementing and non-implementing HEIs with and without at least one whistleblower protection mechanism saw sufficient value in having a CCM, as a combined 88% of institutions assessed that having a CCM makes sense for their institution. These results were expected for the HEIs providing and CCM and whistleblower protection, as the review of literature indicated CCM implementers and whistleblower protectors could generally be expected to realize tangible and/or intangible results from implementing CCM and whistleblower protection policies, thus assessing that having a CCM makes sense for their institution. The CCM support by the HEIs not providing a CCM and/or whistleblower protection was not expected. In an optional textual response field, 99 respondents provided details on why (or why not) the CCM makes sense for their institution. Of the 99 responses, 92% stated the CCM made sense for their institution, while 8% stated the CCM did not make sense for their institution. Qualitative, inductive Grounded Theory's Pile Sorting grouped open-ended text (Bernard, 2006)

to provide a summary of responses to key reasons institutions found the CCM either makes sense (or not) for their specific conditions, shown in Table 51.

Implementers and non-implementers identified key reasons why CCM makes sense (or does not make sense) in the following rank-ordered categories. Primary reasons HEIs reported realizing value in the CCM was to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. The second highest reason HEIs assessed CCM benefits dealt with ethics, culture, accountability, and deterrence issues. Additional CCM value was recognized in governance, stewardship, reputation, and internal control items. 84% of implementers and 67% of non-implementers reported these three top areas as key reasons why a Confidential Complaint Mechanism program makes sense for their institution. Several items had both positive and negative reviews: cost-benefit and risk analysis, barriers, institutional climate/situation, and a State-level CCM exists. The remaining value-adding items consisted of the CCM was valued as a reporting mechanism, and Other.

The largest CCM incentive HEIs identified was gaining access to whistleblower's asymmetric information and/or protecting whistleblowers to gain access to their critical information. Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud. The HEI-identified prominent value of obtaining whistleblower's asymmetric information concerning fraud ties to the conceptual framework shown in Figure 1.

Table 51

HEIs With and Without at least One CCM/Whistleblower Protection Method versus Categorized Results (CCM Makes Sense) by %

Key Reasons	Has HEI Implemented CCM/Whistleblower Protection?			
	Yes		No	
	Does CCM make sense for your Institution?			
	Yes	No	Yes	No
Access to Asymmetric Information and/or Whistleblower Protection	53	–	22	–
Ethics/Culture/Accountability/Deterrence	22	–	11	–
Governance/ Stewardship/ Reputation/ Internal Control	9	–	34	–
Cost – Benefit and Risk Analysis	6	–	11	17
Reporting Mechanism	6	–	–	–
Barriers	–	100	11	33
Institution Climate/ Situation	3	–	–	33
State Level CCM Exists	–	–	11	17
Other	1	–	–	–
Total	100	100	100	100
N	78	1	9	6

Of the 8% of HEIs that felt CCM does not make sense and providing textual explanations, 75 % did not implement a CCM and a whistleblower protection policy, 12 % implemented a CCM and a whistleblower protection policy, and 13% provided at least one whistleblower protection mechanism but no CCM. Non-implementers assessing that the CCM does not make sense for their institution and providing textual details stated concerns with barriers, cost versus benefits, their institutional climate or situation, and having a state-level CCM program. One CCM and whistleblower protection implementer assessing that the CCM does not make sense for their institution stated concern with barriers regarding their institutional climate.

Further analysis of the tangible and/or intangible results from implementing locally tailored CCM policies reveals the largest reason a CCM makes sense is to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. CCM implementers providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution shows they valued gaining access to whistleblower's asymmetric information when stating, "Situations are revealed that would not otherwise be disclosed that could harm the institution." Peer institutions reported there was the "Potential to uncover otherwise undetected fraud" through providing a CCM. In fact, one respondent reported it is "Better that someone should let management know before the problem festers out of control." Valuing the safe disclosure avenue for essential feedback when others make poor choices, another HEI stated "Fraud happens and we need multiple ways for faculty, staff, students and public to report." Realizing administrators could stifle whistleblower disclosures, one HEI stated the CCM could "Assure that employees have a place to go with complaints or concerns if they don't think they can go to their supervisor or other management." Other HEIs

valued the CCM's ability to prevent and/or mitigate retaliation, while gaining "communication from individuals who prefer to avoid conflict." Numerous HEIs responded how vital it is for everyone to trust the disclosure process. Employees must know it is safe to report. Properly handling the complaint and protecting the whistleblower's anonymity encourages objective, timely reporting. In summary, fraud is going to occur, so implementing anti-fraud and whistleblower protection policies "is the right thing to do!"

There were many other comments through which HEIs expressed their assessment that implementing a CCM was worthwhile. One HEI stated, "Necessary to have a mechanism in place. However, this mechanism is useful primarily because of the anonymity. I do not believe ours is effective because it is not clear to the user who will be addressing the issue and the promise of no retaliation is not perceived to be genuine." Potential whistleblower's trust in the institution's response to their disclosure is paramount, as many whistleblowers have endured retaliation after disclosure (Lowney & Robbins, 2011; Rothschild & Miethe, 1999). Two HEIs not implementing CCM and not providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution stated, "Allows for confidential reporting"; and "A CCM provides an avenue for which employees can feel protected against retribution while disclosing important information. It also serves as a deterrent for those who may otherwise consider carrying out fraudulent activities." One HEI not implementing CCM but providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution stated, "May eliminate perceived possibility of retaliation with current non-confidential process."

Further analysis of the tangible and/or intangible results from implementing locally tailored CCM policies reveals the second largest reason a CCM makes sense regards ethics,

culture, accountability and deterrence. The seventeen HEIs CCM implementers providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution valued CCM's effect on their institutional culture, employee morale, and work environment. These implementers also valued CCM's ability to empower whistleblowers to disclose, and increase accountability throughout the institution.

Two HEIs providing at least one whistleblower protection mechanism but not implementing CCM assessed the CCM makes sense for their institution by concentrating on transparency and trust. One HEI stated, "It would provide a mechanism for a sense of greater transparency." The other responded implementation would be worthwhile, "If it weeds out unethical practices and behaviors. Management is extremely untrusting of emotes and resentment flourishes."

One HEI not implementing CCM and not providing at least one whistleblower protection mechanism yet assessed the CCM makes sense for their institution by concentrating on transparency and trust. This elite decision maker stated, "Desire for transparency; correct deficiencies before they become catastrophic; maintain public trust." This HEI stated CCM implementation makes sense, yet they did not provide protect their whistleblowers. Investigation of their reported barriers reveals the HEI experienced barriers as follows: "Significant affect" with institutional resistance/pushback from faculty, Institutional resistance/pushback from Central Administration, Low sense of urgency, the Institutional climate being incompatible, Too many decision makers, and Program administrator responsibility issues; "Moderate affect" with Stakeholder disagreements, CCM complexity, CCM Cost outweighing the benefit, Institutional resistance/pushback from the Board of Trustees, Institutional resistance/pushback from the

Office of President/Chancellor, Policy disagreement, CCM advocate support waned (left position, diverted attention to higher priority, etc.) and Time constraints.

The third largest reason a CCM makes sense regards governance, stewardship, reputation, and internal controls. The seven HEI CCM implementers providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution shows they valued CCM's effect on their institutional well-being, reputational risk, compliance with the law, responsibility to the public, and audit preparation through effective internal controls. One HEI stated, "It is a good business practice and provides a mechanism for identifying potential issues that could harm the college. Another HEI reported, "We are very dependent on donations and very sensitive to reputational risk. Focusing on stewardship, other decision makers stated implementing CCM fulfills their responsibility as a public institution by allowing the institution to evaluate all claims, determine validity, and take necessary corrective action when appropriate.

Three HEIs not implementing CCM and not providing at least one whistleblower protection mechanism assessed the CCM makes sense for their institution by concentrating on internal controls, process improvement, and governance. One HEI implementing CCM but not providing at least one whistleblower protection mechanism assessed the CCM makes sense for their institution stated, "Required by law."

The fourth largest reason a CCM makes sense regards costs versus benefits and mitigating risk. Looking at the five HEIs CCM implementers providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution shows they valued CCM's effect in terms of being a sound business decision.

One HEI not implementing CCM and not providing at least one whistleblower protection mechanism assessed the CCM makes sense for their institution, stating "Every institution should

have one.” One HEI not implementing CCM and not providing at least one whistleblower protection mechanism assessing that the CCM does not make sense for their institution stated, “No known instances of fraud in past 10 years. Would create more work with little anticipated REAL benefit.”

The fifth largest reason a CCM makes sense regards providing a reporting mechanism. Looking at a portion of the five HEIs CCM implementers and providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution shows they valued CCM’s effect in terms of being a viable reporting opportunity. These HEIs reported it is always important to have a confidential reporting mechanism of potential activities in case there is a need, but it is just one of many tools.

The sixth largest reason affecting whether a CCM makes sense regards barriers. Looking at the one HEI CCM implementer providing at least one whistleblower protection mechanism assessing that the CCM does not make sense for their institution shows they encountered an institutional climate which was not conducive to CCM implementation. This institution’s Likert scale responses to Barriers (Q51) reflects a “Moderate affect” with CCM being incompatible with the institutional climate, while also reporting a “Slight Affect” with “Institutional resistance/pushback from Central Administration” and “Low sense of urgency.” Reiterating, this CCM implementer said the CCM does not make sense for their institution, having experienced resistance in these three barrier areas (CCM incompatible with the institutional climate, institutional pushback/resistance from Central Administration, and low sense of urgency).

One HEI not implementing CCM and not providing at least one whistleblower protection mechanism assessed the CCM makes sense for their institution, but did not implement, stating “Makes sense to have a confidential reporting mechanism, but haven't received buy-in from key

decision makers at this time; Concern that confidentiality could lead to false reports.” Two HEIs not implementing CCM and not providing at least one whistleblower protection mechanism assessed the CCM does not make sense for their institution due to reservations with whistleblower information. These HEIs stated barriers dealt with, “Manpower and accuracy and viability of information collected”; and “There are many avenues of reporting; some very discreet (if not confidential). Anonymous information is difficult to follow up on.” One HEI not implementing CCM but providing at least one whistleblower protection mechanism assessing that the CCM does not make sense for their institution stated, “No way to completely investigate if a tip is confidential.”

The seventh largest reason affecting whether a CCM makes sense regards their institutional climate or situation. The two HEIs implementing CCM and providing at least one whistleblower protection mechanism assessing that the CCM makes sense for their institution appreciated the value added to their large, decentralized organizations. These HEIs stated “Large size and multi-campus facility with centralized internal audit”; and “Decentralized organization — helpful to provide a resource so individuals can report concerns and not wonder if it was reported to the right source.” Two HEIs not implementing CCM and not providing at least one whistleblower protection mechanism assessing that the CCM does not make sense for their institution stated, “Small institution”; and “Small institution with wide breadth of cross-training.”

The eighth largest reason affecting whether a CCM makes sense regards their State already having a State-level CCM. While both of these HEIs did implement CCM and did not provide at least one whistleblower protection mechanism, they differed on their assessment of whether having a CCM for their institution makes sense. The HEI in the affirmative stated

“Current whistleblower programs in effect at the State level and not at the University level”, while the HEI in the negative stated “We have a statewide public institution CCM.” I see no substantive difference in the textual responses indicating why each HEI had polar opposite assessments of whether a CCM makes sense for their institution.

The lowest reason affecting whether a CCM makes sense regards how (versus why) they implement CCM, with the lone responding CCM implementer who provided at least one whistleblower protection mechanism stating “Ours is an informal system encouraging "whistle blowers" to contact supervisors in person or by email.”

This research question assessed the relationship between locally-tailored implementation with respect to results by asking, “Is locally tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation associated with positive self-assessed tangible/intangible results?” Descriptive analyses of frequency distributions indicate HEIs have adopted a plethora of locally-tailored SOX Best Practices policies. These policies included institutionally-supported and third-party vendor-supported CCMs. HEIs likewise voluntarily implemented various means by which whistleblowers’ confidentiality is protected. These locally-tailored policies came at a cost. What results did HEIs realize? Frequency distributions indicate 77% of CCM implementers assess their program as successful. Key indicators were participation: number and significance of complaints (65%), satisfactory investigation and resolution (21%), and trust in the system (12%). Another results area deals with fraud. Thirty-eight percent (38%) of responding HEIs reported fraud which occurred in the past three years. The fifty-one HEIs reporting fraud cases and aggregate losses primarily experienced damages totaling less than \$60,000 (64%) and frauds affecting aggregate funds totaling \$60,001 to \$120,000 (16%). 30% of reporting HEIs were able to recover funds from frauds occurring in the past three years.

Relationship method of analysis indicates implementing at least one locally-tailored whistleblower protection mechanism was significantly associated with discovering fraud. Twelve CCM implementers having at least one whistleblower protection mechanism realized value in having a CCM and whistleblower protection in-place to discover actual frauds that occurred at their institution in the past three years. Forty-four other HEIs experienced fraud in the past three years, with the source of discovery being a method other than the CCM. Thirteen of these HEIs (30%, N = 44) did not provide at least one whistleblower protection method. Five of the thirteen HEIs (38%) experiencing fraud in the past three years had implemented CCM but did not protect whistleblowers. When fraud occurred, the CCM was not the source of discovery. The other eight of the thirteen HEIs (62%) experiencing fraud in the past three years had not implemented a CCM and did not protect whistleblowers. When fraud occurred, the methods of fraud discovery were neither a CCM nor External Audit. All of the responding HEIs (23%, N = 56) experiencing fraud that did not implement at least one whistleblower protection policy did not discover fraud through the CCM in the past 3 years. This is significant. One conclusion could be: if you do not protect whistleblowers, they are not going to divulge their knowledge of perceive or actual illegal activity. Thus, you are denying yourself access to their asymmetric information concerning fraud. Initial data indicate implementing at least one locally-tailored whistleblower protection mechanism could be associated with mitigating fraud losses. When locally-tailored Confidential Complaint Mechanism implementation is combined with at least one whistleblower protection mechanism, there is a strong association with HEIs' results. These results are reflected in HEIs' assessment that implementing a CCM makes sense for their organization. Analysis of the tangible and/or intangible results from implementing locally tailored CCM policies and whistleblower protection reveals the largest reason a CCM makes

sense is to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. Another significant HEI-identified reason for implementation relates to ethics, culture, accountability, and deterrence. Most expectations for ethics benefits were directly tied to improving the institutional culture of ethical conduct and accountability as well as increasing employee morale. HEIs also recognized the deterrent effect of providing an environment in which employees with knowledge of illegal activities could safely disclose their asymmetric information without retaliation. Multiple other results were also discussed.

The next research question assesses HEIs with impartial investigators with respect to their assessment of whether having a CCM makes sense for their institution.

Research Question 5

Research Question 5 assesses if HEIs with impartial investigators are related to results, asking, “Is there a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI’s satisfaction with voluntarily continuing CCM implementation?” Trust is paramount for an effective CCM to be viable. Whistleblowers need actionable assurance that their complaint will be confidentially handled and they will be protected against retaliation for filing the complaint. The associated Hypothesis 5.1 is “HEIs with impartial investigators of alleged retaliation and fraud complaints find the SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their institution at a higher level than HEIs without impartial investigators.”

CCM implementers and non-implementers were asked, “Who investigates/resolves the allegation/complaint?” For this question, HEIs could select all channels that apply, so some institutions indicated multiple means of investigating/resolving the allegation/complaint. CCM implementers primarily used Human Resources (61%), internal auditors (32%), and the Office of

the President (23%) to investigate and/or resolve fraud allegations and/or retaliation complaints. CCM non-implementers primarily used Human Resources (16%), the Office of the President (6%), and a Departmental administrator (6%) to investigate and/or resolve fraud allegations and/or retaliation complaints. HEIs implemented the following types of complaint investigation and resolution mechanisms, as shown in Table 52.

Table 52

Method by which HEI Investigates/Resolves Allegation/Complaint

	Combined	Implementers	Non-Implementers
Allegation/Complaint Investigator	(%)	(%)	(%)
Human Resources	52	61	16
Internal Auditors	26	32	–
Other	23	29	–
Office of the President	20	23	6
A Departmental Administrator	17	20	6
Ombudsman for the Institution	10	12	–
State-level Official	6	8	–
Third-party Vendor	4	5	–
	100	81	19
N	162	131	31

Lastly, all HEIs were asked: “Does having a CCM make sense for your Institution? 129 HEIs responded “Yes” (88%, N = 146), while 17 HEIs responded “No” (12%, N = 146). Ninety-

nine institutions responded to the follow-on prompt, “Why, what are the key reasons?” Of the 99 responses, 92% stated the CCM made sense for their institution, while 8% stated the CCM did not make sense for their institution. Qualitative, inductive Grounded Theory’s Pile Sorting grouped open-ended text (Bernard, 2006) to provide a summary of responses to key reasons institutions found the CCM either makes sense (or not) for their specific conditions.

Implementers and non-implementers identified key reasons why CCM makes sense (or does not make sense) in the following rank-ordered categories. Primary reasons HEIs reported realizing value in the CCM was to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. The second highest reason HEIs assessed CCM benefits dealt with ethics, culture, accountability, and deterrence issues. Additional CCM value was recognized in governance, stewardship, reputation, and internal control items. 85% of HEIs with an impartial investigator and 80% of HEIs without an impartial investigator reported these top three areas as key reasons why a Confidential Complaint Mechanism program makes sense for their institution. Several items had both positive and negative reviews: cost-benefit and risk analysis, barriers, institutional climate/situation, and a State-level CCM exists. The remaining value-adding items consisted of the CCM was valued as a reporting mechanism, and Other. Grouped by common themes and sorted high-to-low by overall percentage resulted in responses summarized in Table 32.

Chi-square analysis of HEIs with at least one impartial investigator of alleged retaliation and fraud complaints finds the SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their institution yielded two Independent Variables with a Pearson chi-square value which exceeded the critical value of chi-square (3.84) with 1 degree of freedom at the .05 significance level. The Null Hypothesis, which stated HEIs with impartial investigators of

alleged retaliation and fraud complaints find the SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their institution at the same level as HEIs without impartial investigators, is rejected.

To analyze the variables, the seven possible impartial investigators (Internal Auditors, Ombudsman for the Institution, Office of the President, Human Resources, a Departmental Administrator, State-level Official, and Third-Party Vendor) were combined into one scalar variable “ALL Impartial” (Q27) to ascertain whether overall impartial investigators were related to HEI’s assessment that SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their institution. The Pearson chi-square value for the Independent Variable “ALL Impartial” (Q27) was 16.61 with 1 degree of freedom at the .05 significance level.

Individually, the reliable association was significant for two specific relationships: First, the Pearson chi-square value for the Independent Variable “Internal Audit” (Q27-1) regarding HEIs who had their Internal Auditors investigating/resolving the allegation/complaint showed a chi-square (7.51) with regards to the Dependent Variable “CCM Makes Sense” (Q53) with 1 degree of freedom at the .05 significance level. Second, the Pearson chi-square value for the Independent Variable “Human Resources” (Q27-4) regarding HEIs who had their Human Resources investigating/resolving the allegation/complaint showed a chi-square (4.20) with regards to the Dependent Variable “CCM Makes Sense” (Q53) with 1 degree of freedom at the .05 significance level. All of the other Independent Variables (Ombudsman for the Institution, Office of the President, a Departmental Administrator, State-level official, Third-party vendor, and Other) were individually not significantly associated with HEIs’ satisfaction with voluntary CCM implementation. Results for significant Independent Variables are summarized in Table 53 and Figure 5.

For institutions having at least one impartial investigator of allegations/complaints, relative to assessing whether having a CCM makes sense for their institution, see Table 53.

Table 53

Crosstab HEIs with at least one Impartial Investigator and results (CCM makes sense) by %

ALL Impartial (Q27)	Combined	CCM Makes Sense (Q53)	
		Yes	No
Yes	75	81	35
No	25	19	65
Total	100	100	100
N	146	129	17

$X^2 = 16.61$ ($p < .05$)

One hundred four HEIs (81%, N = 129) with an independent investigator of allegations/complaints assessed that having a CCM makes sense for their institution. Twenty-five HEIs (19%, N = 129) without an independent investigator of allegations/complaints assessed that having a CCM makes sense for their institution. Both HEIs with and without an independent investigator of allegations/complaints saw sufficient value in having a CCM, as a combined 88% of institutions assessed that having a CCM makes sense for their institution. These results were expected for HEIs with independent investigators, as the review of literature indicated organizations with independent investigators could generally be expected to realize tangible and/or intangible results from providing whistleblowers a confidential, safe reporting and resolution mechanism, thus assessing that having a CCM makes sense for their institution. The strong CCM support by HEIs not providing an independent investigator was not expected.

In an optional textual response field, 79 respondents provided details on why (or why not) the CCM makes sense for their institution. The 79 responses are comprised of 74 HEIs

(94%) with at least one impartial investigator and 5 HEIs (6%) without at least one impartial investigator. Of the 79 responses, 77 (97%) stated the CCM made sense for their institution, while 2 (3%) stated the CCM did not make sense for their institution.

Qualitative, inductive Grounded Theory's Pile Sorting grouped open-ended text (Bernard, 2006) to provide a summary of responses to key reasons institutions found the CCM either makes sense (or not) for their specific conditions, shown in Table 32.

Implementers and non-implementers identified key reasons why CCM makes sense (or does not make sense) in the following rank-ordered categories. Primary reasons HEIs reported realizing value in the CCM was to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. The second highest reason HEIs assessed CCM benefits dealt with ethics, culture, accountability, and deterrence issues. Additional CCM value was recognized in governance, stewardship, reputation, and internal control items. Several items had both positive and negative reviews: cost-benefit and risk analysis, barriers, and institutional climate/situation. The remaining value-adding items consisted of the CCM was valued as a reporting mechanism, and Other.

The largest CCM incentive HEIs identified was gaining access to whistleblower's asymmetric information and/or protecting whistleblowers to gain access to their critical information. Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud. The HEI-identified prominent value of obtaining whistleblower's asymmetric information concerning fraud ties to the conceptual framework shown in Figure 1.

Of the 12% of HEIs that felt CCM does not make sense, 65% of them did not provide at least one independent investigator of allegations/complaints. One CCM non-implementer

providing one independent investigation mechanism (Human Resources) assessing that the CCM does not make sense for their institution and providing textual details stated concerns with barriers (“No way to completely investigate if a tip is confidential”). Among HEIs providing at least one independent investigation mechanism, only 5% felt implementing CCM policies does not make sense. One such HEI providing two independent investigation mechanisms (Human Resources and a Departmental Administrator) assessing that the CCM does not make sense for their institution stated concern with barriers regarding their institutional climate. Details are enclosed.

Table 54

HEIs With and Without at least One Impartial Investigator versus Satisfaction with CCM (%)

Key Reasons	Has HEI Implemented Impartial Investigator?			
	Yes		No	
	Does CCM make sense for your Institution?			
	Yes	No	Yes	No
Access to Asymmetric Information and/or Whistleblower Protection	53	–	25	–
Ethics/Culture/Accountability/Deterrence	21	–	50	–
Governance/Stewardship/Reputation/Internal Control	11	–	25	–
Cost – Benefit and Risk Analysis	6	–	–	–
Reporting Mechanism	5	–	–	–
Barriers	–	100	–	100
Institution Climate/ Situation	3	–	–	–
Other	1	–	–	–
Total	100	100	100	100
N	73	1	4	1

Further analysis of the tangible and/or intangible results from providing impartial investigators of fraud complaints and/or alleged retaliation reveals the largest reason a CCM makes sense is to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. CCM implementers assessing that the CCM makes sense for their institution shows they valued gaining access to whistleblower's asymmetric information when stating, "Situations are revealed that would not otherwise be disclosed that could harm the institution." Peer institutions reported there was the "Potential to uncover otherwise undetected fraud" through providing a CCM. In fact, one respondent reported it is "Better that someone should let management know before the problem festers out of control." Valuing the safe disclosure avenue for essential feedback when others make poor choices, another HEI stated "Fraud happens and we need multiple ways for faculty, staff, students and public to report." Realizing administrators could stifle whistleblower disclosures, one HEI stated the CCM could "Assure that employees have a place to go with complaints or concerns if they don't think they can go to their supervisor or other management." Other HEIs valued the CCM's ability to prevent and/or mitigate retaliation, while gaining "communication from individuals who prefer to avoid conflict." Numerous HEIs responded how vital it is for everyone to trust the disclosure process. Employees must know it is safe to report. Properly handling the complaint and protecting the whistleblower's anonymity encourages objective, timely reporting. In summary, fraud is going to occur, so implementing anti-fraud and whistleblower protection policies "is the right thing to do!"

There were many other comments through which HEIs with impartial investigators expressed their assessment that implementing a CCM was worthwhile. One HEI stated, "Necessary to have a mechanism in place. However, this mechanism is useful primarily because

of the anonymity. I do not believe ours is effective because it is not clear to the user who will be addressing the issue and the promise of no retaliation is not perceived to be genuine.” This institution utilized Internal Audit and Human Resources as potential investigators. Potential whistleblower’s trust in the institution’s response to their disclosure is paramount. One CCM non-implementer providing at least one impartial investigator means of fraud complaints and/or alleged retaliation assessing that the CCM makes sense for their institution shows they valued gaining access to whistleblower’s asymmetric information when stating, “May eliminate perceived possibility of retaliation with current non-confidential process.”

Further analysis of the tangible and/or intangible results from providing impartial investigators of fraud complaints and/or alleged retaliation reveals the second largest reason a CCM makes sense regards ethics, culture, accountability and deterrence. CCM implementers providing at least one impartial investigator means of fraud complaints and/or alleged retaliation assessing that the CCM makes sense for their institution valued CCM’s effect on their institutional culture, employee morale, and work environment. These implementers also valued CCM’s ability to empower whistleblowers to disclose, and increase accountability throughout the institution.

Two CCM non-implementers providing at least one impartial investigator means of fraud complaints and/or alleged retaliation assessed the CCM makes sense for their institution by concentrating on transparency and trust. These HEIs stated, “It would provide a mechanism for a sense of greater transparency”; and, “If it weeds out unethical practices and behaviors. Management is extremely untrusting of emotes and resentment flourishes.”

The third largest reason a CCM makes sense regards governance, stewardship, reputation, and internal controls. CCM implementers providing at least one impartial investigator means of

fraud complaints and/or alleged retaliation assessing that the CCM makes sense for their institution valued CCM's effect on their institutional well-being, reputational risk, compliance with the law, responsibility to the public, and audit preparation through effective internal controls. One HEI stated, "It is a good business practice and provides a mechanism for identifying potential issues that could harm the college." Another HEI reported, "We are very dependent on donations and very sensitive to reputational risk." Focusing on stewardship, other decision makers stated implementing CCM fulfills their responsibility as a public institution by allowing the institution to evaluate all claims, determine validity, and take necessary corrective action when appropriate. One CCM non-implementer providing at least one impartial investigator means of fraud complaints and/or alleged retaliation assessing that the CCM makes sense for their institution by concentrating on the value added to internal controls.

The fourth largest reason a CCM makes sense regards costs versus benefits and mitigating risk. CCM implementers providing at least one impartial investigator means of fraud complaints and/or alleged retaliation assessing that the CCM makes sense for their institution valued CCM's effect in terms of being a sound business decision. One HEI stated, "The growth of the institution makes having a CCM a sound decision." One CCM non-implementer previously assessing that the CCM does not make sense for their institution did not indicate whether they provide at least one impartial investigator means of fraud complaints and/or alleged retaliation.

The fifth largest reason a CCM makes sense regards providing a reporting mechanism. CCM implementers providing at least one impartial investigator means of fraud complaints and/or alleged retaliation assessing that the CCM makes sense for their institution valued CCM's effect in terms of being a viable reporting opportunity. These HEIs reported it is always

important to have a confidential reporting mechanism of potential activities in case there is a need, but it is just one of many tools.

The sixth largest reason affecting whether a CCM makes sense regards barriers. Looking at the one CCM implementer providing at least one impartial investigator means of fraud complaints and/or alleged retaliation assessing that the CCM does not make sense for their institution shows they encountered an institutional climate which was not conducive to CCM implementation. Looking at this institution's Likert scale responses to barriers (Q51), shows they reported a "Moderate affect" with CCM being incompatible with the institutional climate, while also reporting a "Slight Affect" with "Central Administration" and "Low sense of urgency." Reiterating, this CCM implementer said the CCM does not make sense for their institution, having experienced resistance in these three barrier areas (CCM incompatible with the institutional climate, institutional pushback/resistance from Central Administration, & low sense of urgency).

One CCM non-implementer providing at least one impartial investigator means of fraud complaints and/or alleged retaliation (Human Resources) assessed the CCM does not make sense for their institution stated, "No way to completely investigate if a tip is confidential." Two other CCM non-implementers previously assessing that the CCM does not make sense for their institution did not indicate whether they provide at least one impartial investigator means of fraud complaints and/or alleged retaliation.

The seventh largest reason affecting whether a CCM makes sense regards their institutional climate or situation. The two CCM implementers providing at least one impartial investigator means of fraud complaints and/or alleged retaliation assessing that the CCM makes sense for their institution appreciated the value added to their large, decentralized organizations.

These HEIs stated “Large size and multi-campus facility with centralized internal audit”; and “Decentralized organization -- helpful to provide a resource so individuals can report concerns and not wonder if it was reported to the right source.” Two CCM non-implementers previously assessing that the CCM does not make sense for their institution did not indicate whether they provide at least one impartial investigator means of fraud complaints and/or alleged retaliation.

The lowest reason affecting whether a CCM makes sense regards how (versus why) they implement CCM, with the lone responding CCM implementer providing at least one impartial investigator means of fraud complaints and/or alleged retaliation stating “Ours is an informal system encouraging "whistle blowers" to contact supervisors in person or by email.” HEI responses to the “Other” impartial investigator category are shown in Appendix 2.

We have been reviewing results of the significant relationship between HEIs with at least one impartial investigator of alleged retaliation and fraud complaints and the HEI’s assessment that the SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their institution. HEIs providing at least one impartial investigator of alleged retaliation and fraud complaints placed a slightly higher value on gaining access to asymmetric information and/or protecting whistleblowers to gain access to their critical information (51%) than the other hypotheses’ implementation options. For instance, HEIs implementing an institutionally-supported CCM reported gaining access to asymmetric information and/or protecting whistleblowers to gain access to their critical information (45%, N = 99). The next significant relationship is for HEIs providing at least one impartial investigator means of addressing fraud complaints and/or alleged retaliation, relative to discovering fraud.

Hypothesis 5.1. The second significant, reliable association concerns institutions providing at least one impartial investigator means of addressing fraud complaints and/or alleged

retaliation, relative to discovering fraud, as shown in Table 55. Chi-square analysis of HEIs with at least one impartial investigator of alleged fraud complaints and retaliation finds the SOX Best Practices (Anti-Retaliation & CCM) policy implementation yielded one significant Independent Variable with a Pearson chi-square value (4.16) with 1 degree of freedom at the .05 significance level. The Null Hypothesis, which stated there is no relationship between institutions providing at least one impartial investigator means of addressing fraud complaints and/or alleged retaliation and results, is rejected.

Table 55

Crosstab HEIs with at least One Impartial Investigator and Results (Discover Fraud) by %

Impartial Investigator (Q27)	Discover Fraud through CCM (Q45)		
	Combined	Yes	No
Yes	79	100	73
No	21	0	27
Total	100	100	100
N	56	12	44

$X^2 = 4.16$ ($p < .05$)

Note: Excludes Departmental Administrators as impartial investigators.

Fifty-six HEIs reported fraud occurring in the past three years. 79% of HEIs reporting fraud provided at least one impartial investigator to investigate and resolve actual frauds or retaliation complaints that occurred at their institution in the past three years, while 21% of HEIs

reporting fraud did not provide at least one impartial investigator. Twelve of the HEIs (21%, N = 56) experiencing fraud and having at least one impartial investigator were able to discover fraud through the CCM in the past three years. These twelve CCM implementers having at least one impartial investigator mechanism realized value in having a CCM and at least one impartial investigator mechanism in-place to investigate and resolve actual frauds or retaliation complaints that occurred at their institution in the past three years. Forty-four other HEIs experienced fraud in the past three years, with the source of discovery being a method other than the CCM. Twelve of these HEIs (27%, N = 44) did not provide at least one impartial investigator method. Four of the twelve HEIs experiencing fraud in the past three years had implemented CCM but did not provide at least one impartial investigator mechanism. When fraud occurred, the CCM was not the source of discovery. See Table 56 for the methods of fraud discovery by four HEIs who implemented CCM, did not provide at least one impartial investigator mechanism, and experienced fraud in the previous three years. Note: the HEIs were asked to select all fraud discovery sources that apply in the last three years.

Table 56

*Discovery Source for Four Implementers with Fraud who did not Provide Impartial**Investigators (HEIs selected all that apply)*

Fraud Discovery Source other than CCM	(%)
Management Review	75
Document Examination	50
Account Reconciliation	25
By Accident	25
Surveillance/ Monitoring	25
Confession	25
Other (See Text)	25

N = 4

The other eight of the twelve HEIs experiencing fraud in the past three years had not implemented a CCM and did not provide at least one impartial investigator mechanism. When fraud occurred, the method of fraud discovery was neither a CCM nor External Audit. See Table 57 for the methods of fraud discovery by eight HEIs who did not implement CCM, did not provide at least one impartial investigator mechanism, and experienced fraud in the previous three years. Note: the HEIs were asked to select all fraud discovery sources that apply in the last three years.

Table 57

*Discovery Source for 8 Non-Implementers with Fraud who did not provide Impartial**Investigators (HEIs selected all that apply)*

Fraud Discovery Source other than CCM	(%)
Management Review	50
Document Examination	50
Account Reconciliation	50
By Accident	50
Surveillance/ Monitoring	38
Confession	25
Other (See Text)	25
Internal Audit	25
Notified by Law Enforcement (not part of CCM)	13
IT Controls	13

N = 8

All of the responding HEIs (21%, N = 56) experiencing fraud that did not provide at least one impartial investigator mechanism did not discover fraud through the CCM in the past three years. This is very significant. One logical conclusion could be: if you do not provide whistleblowers with an impartial mechanism for investigating and resolving fraud and/or retaliation complaints, they are not going to internally disclose and you could be denying yourself access to their asymmetric information concerning fraud. These results were expected for implementers, as the review of literature indicated CCM advocates (implementers) could generally be expected to realize tangible and/or intangible benefits from implementing locally

tailored CCM and whistleblower protection policies (such as an impartial mechanism for investigating and resolving fraud and/or retaliation complaints).

The Independent Variable “Impartial Investigator” (Q27) excludes Departmental Administrators; the Independent Variable “ALL Impartial” (Q27) includes Departmental Administrators. The Null Hypothesis stated there is no correlation between HEIs with impartial investigators of alleged retaliation and fraud complaints and results. When HEIs assign Departmental Administrators as investigators to address fraud complaints and/or alleged retaliation (as in Independent Variable “ALL Impartial”) and subsequently report fraud in the Survey, the Pearson chi square value (3.32) relative to the critical value (3.84) with 1 degree of freedom at the .05 significance level was not large enough to reject the null hypothesis.

However, when Departmental Administrators are excluded as Independent Investigators to address fraud complaints and/or alleged retaliation, the Pearson Chi Square Value (4.16) relative to the Critical Value (3.84) with 1 degree of freedom at the .05 significance level was large enough to reject the Null Hypothesis. This association of impartial investigators (excluding Departmental Administrators) supports the literature concerning Departmental Administrators being perceived as potentially biased with regards to fraud complaint investigations, resolution, and protection of whistleblowers from retaliation, all of which can stifle whistleblower disclosure and HEI’s access to insider asymmetric information concerning fraudulent activity.

We have been reviewing results of the significant relationship between HEIs with at least one impartial investigator of alleged retaliation and fraud complaints and the HEI’s assessment that the SOX Best Practices (Anti-Retaliation & CCM) policies make sense for their Institution. We also addressed the significant relationship for HEIs providing at least one impartial investigator means of addressing fraud complaints and/or alleged retaliation, relative to

discovering fraud. The next research question looks at engaged leadership/governance with respect to positive policy effectiveness in Research Question 6.

Research Question 6

Research Question 6 assesses if HEIs with engaged leadership/governance are related to results by asking, “Is high-level decision maker involvement in CCM implementation correlated to HEI self-assessed CCM program effectiveness?” If organizational leadership does not consistently establish a workplace environment which supports and defends loyal employees’ efforts to report and/or eradicate potentially harmful activities to the organization’s clientele and/or existence, the legally authorized leaders will have lost the opportunity to adequately establish and influence an environment in which timely, pertinent, and salient information can flow to unbiased authorities so that appropriate corrective or mitigation actions can take place. Thus, employees with critical (asymmetric) insider information dealing with potentially-fraudulent activities can be intentionally or inadvertently structurally dissuaded from internally disclosing perceived or observed harmful activities. In this case, HEIs can see diminished (or non-existent) returns on their anti-fraud efforts and scarce resource expenditures. Thus, HEIs with high-level decision-maker involvement in establishing a trustworthy reporting environment could have greater self-assessed program effectiveness than HEIs without executive leadership or governance support. Hypothesis 6.1 states, “HEIs with high-level decision-maker involvement in Anti-Retaliation and CCM policy implementation had greater self-assessed program effectiveness than HEIs without executive leadership/governance support.”

An associated Survey open-ended question asked, “Who led the decision making process?” HEIs indicated high-level decision maker involvement in CCM implementation in Table 58.

Table 58

Frequencies of CCM Implementing HEIs' Decision-Making Process Leaders

CCM Leader (Q22)	%
President, Chancellor, or their Staff	77
Internal Audit	11
Board of Trustees or Audit Committee	9
State	2
External Audit	1

N = 112

The above-stated categories included the following leader classification details. First, “President, Chancellor, or their Staff” included: Chancellor, University President, AVP for Finance, VP Finance and Administration, Director of Human Resources, CEO, CFO, Risk Compliance Officer, Controller, Vice Chancellor, Chancellor’s Office, Chief of Staff, Compliance Director, Comptroller, Counsel, Executive Team, In-house Attorney, Management, Senior Management, Senior Administration, SVP of Institutional Administration, The College Legal Staff, and VP for Business Affairs. Second, “Internal Audit” included: AVP Audit and Advisory Services, Director of Internal Audit, and Internal Auditors. Third, “Board of Trustees or Audit Committee” included: Audit Committee, Audit Committee member, Board Chair, Board of Regents, Chair of Audit Committee. Fourth, “State” and “External Audit” are self-explanatory.

Over two-thirds of HEIs utilized members of the President/Chancellor’s executive team to provide leadership in the CCM implementation process. When the President/Chancellor’s

executive team is combined with the Internal Auditors and the Board of Trustees/BOT Audit Committee, 97% of these HEIs with CCM executive leadership are represented.

All HEIs were asked: “Does having a CCM make sense for your institution?” 129 HEIs responded “Yes” (88%, N = 146), while 17 HEIs responded “No” (12%, N = 146). Ninety-nine institutions responded to the follow-on prompt, “Why, what are the key reasons?” Of the 99 responses, 92% stated the CCM made sense for their institution, while 8% stated the CCM did not make sense for their institution. The positive CCM assessments from 129 institutions (88%, N = 129) were a combination of 90 HEIs (70%) with a CCM leader and 39 HEIs (30%) without a CCM leader. These results were expected for HEIs with identifiable leadership participation, as the review of literature indicated institutions with influential decision-maker involvement could generally be expected to realize tangible and/or intangible results from implementing locally tailored CCM and whistleblower protection policies, thus assessing that having a CCM makes sense for their institution. The strong CCM support by HEIs without identifiable leadership participation was not expected. In an optional textual response field, 70 respondents provided details on why (or why not) the CCM makes sense for their institution. Of the 70 responses, 68 (97%) stated the CCM made sense for their institution, while 2 stated the CCM did not make sense for their institution.

Qualitative, inductive Grounded Theory’s Pile Sorting grouped open-ended text (Bernard, 2006) to provide a summary of responses to key reasons institutions found the CCM either makes sense (or not) for their specific conditions. Primary reasons HEIs reported realizing value in the CCM was to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud. The HEI-identified prominent value

of obtaining whistleblower's asymmetric information concerning fraud ties to the conceptual framework shown in Figure 1. The second highest reason HEIs assessed CCM benefits dealt with ethics, culture, accountability, and deterrence issues. Additional CCM value was recognized in governance, stewardship, reputation, and internal control items. 79% of responding HEIs reported these top three areas as key reasons why a Confidential Complaint Mechanism program makes sense for their institution. Several other items had positive reviews: cost-benefit and risk analysis, and institutional climate/situation. The remaining value-adding items consisted of the CCM was valued as a reporting mechanism, and Other. Only barriers had negative reviews. Table 59 shows HEIs having at least one Official (by Title) who led the CCM implementation decision-making process and realized tangible and intangible benefits. HEI responses are grouped by common themes and sorted high-to-low by overall percentage.

Table 59

HEIs with at least One CCM Leader and Results (Satisfaction with CCM) by %

Key Reasons	Does CCM make sense for your Institution?		
	Combined	Yes	No
Access to Asymmetric Information and/or Whistleblower Protection	47	49	–
Ethics/Culture/Accountability/Deterrence	21	22	–
Governance/Stewardship/Reputation/Internal Control	11	12	–
Cost – Benefit and Risk Analysis	7	7	–
Reporting Mechanism	6	6	–
Barriers	3	–	100
Institution Climate/ Situation	3	3	–
Other	1	1	–
Total	100	100	100
N	70	68	2

Of the 12% of HEIs that felt CCM does not make sense, 65% of them did not have high-level decision-maker involvement in the CCM implementation process. Two HEIs assessing that the CCM does not make sense for their institution and providing textual details stated concerns with barriers and their institutional climate or situation. The institution that did not implement CCM and did have at least one Official who led the CCM implementation decision-making process responded, “No way to completely investigate if a tip is confidential.” The institution that did implement CCM and did have at least one Official who led the CCM implementation decision-making process responded, “Institutional climate” as a barrier to the CCM being worthwhile for their institution. This CCM implementer experienced barriers and assessed Likert scale barrier affect explanations as follows. First, the HEI experienced a “Moderate affect” barrier concerning the institutional climate being incompatible. Second, the HEI experienced barriers with “Slight affect” concerning institutional pushback/resistance from Central Administration and low sense of urgency. For institutions having at least one official (by Title) who led the CCM implementation decision-making process, relative to assessing whether having a CCM makes sense for their institution, the Crosstab is shown in Table 60.

Table 60

Crosstab HEIs with at least One CCM Leader and Results (CCM Makes Sense) by %

CCM Leader (Q22)	Combined	CCM Makes Sense (Q53)	
		Yes	No
Yes	66	70	35
No	34	30	65
Total	100	100	100
N	146	129	17

$X^2 = 7.93$ ($p < .05$)

Further analysis of the tangible and/or intangible results from providing high-level decision maker involvement in the Anti-Retaliation and CCM implementation process reveals the largest reason a CCM makes sense is to gain access to asymmetric information and/or protect whistleblowers to gain access to their critical information. CCM implementers with at least one Official who led the CCM implementation decision-making process and subsequently assessing that the CCM makes sense for their institution valued gaining access to whistleblower’s asymmetric information when stating, “No institution is perfect; having a CCM provides an established outlet for safely reporting issues for further investigation.” A large institution with complex reporting lines valued CCM’s ability to provide an easy avenue to report perceived or observed wrongdoings. Peer institutions reported “Situations are revealed that would not otherwise be disclosed that could harm the institution.” In fact, one respondent noted it is “Better that someone should let management know before the problem festers out of control.” Valuing the safe disclosure avenue for essential feedback when others make poor choices,

another HEI stated, “Fraud happens and we need multiple ways for faculty, staff, students and public to report.” Realizing administrators could stifle whistleblower disclosures, one HEI stated the CCM could “Assure that employees have a place to go with complaints or concerns if they don't think they can go to their supervisor or other management.” Other HEIs valued the CCM’s ability to prevent and/or mitigate retaliation, while gaining “communication from individuals who prefer to avoid conflict.” Numerous HEIs responded how vital it is for everyone to trust the disclosure process. Employees must know it is safe to report. Properly handling the complaint and protecting the whistleblower’s anonymity encourages objective, timely reporting. In summary, fraud is going to occur, so implementing anti-fraud and whistleblower protection policies “is the right thing to do!”

There were many other comments through which HEIs providing high-level decision maker involvement in the Anti-Retaliation and CCM implementation process expressed their assessment that implementing a CCM was worthwhile. One HEI stated, “Necessary to have a mechanism in place. However, this mechanism is useful primarily because of the anonymity. I do not believe ours is effective because it is not clear to the user who will be addressing the issue and the promise of no retaliation is not perceived to be genuine.”

Further analysis of the tangible and/or intangible results from providing high-level decision maker involvement in the Anti-Retaliation and CCM implementation process reveals the second largest reason a CCM makes sense regards ethics, culture, accountability and deterrence. CCM implementers with at least one Official who led the CCM implementation decision-making process and subsequently assessing that the CCM makes sense for their institution valued CCM’s effect on their institutional culture, employee morale, and work

environment. These HEIs also valued CCM's ability to empower whistleblowers to disclose, and increase accountability throughout the institution.

The third largest reason a CCM makes sense regards governance, stewardship, reputation, and internal controls. CCM implementers with at least one Official who led the CCM implementation decision-making process and subsequently assessing that the CCM makes sense for their institution valued CCM's effect on their institutional well-being, reputational risk, compliance with the law, responsibility to the public, and audit preparation through effective internal controls. One HEI stated, "It is a good business practice and provides a mechanism for identifying potential issues that could harm the college." Another HEI reported, "We are very dependent on donations and very sensitive to reputational risk." Focusing on stewardship, other decision makers stated implementing CCM fulfills their responsibility as a public institution by allowing the institution to evaluate all claims, determine validity, and take necessary corrective action when appropriate.

The fourth largest reason a CCM makes sense regards costs versus benefits and mitigating risk. CCM implementers with at least one official who led the CCM implementation decision-making process and subsequently assessing that the CCM makes sense for their institution valued CCM's effect in terms of being a sound business decision.

The fifth largest reason a CCM makes sense regards providing a reporting mechanism. CCM implementers with at least one official who led the CCM implementation decision-making process and subsequently assessing that the CCM makes sense for their institution valued CCM's effect in terms of being a viable reporting opportunity. These HEIs reported it is always important to have a confidential reporting mechanism of potential activities in case there is a need, but it is just one of many tools.

The sixth largest reason affecting whether a CCM makes sense regards barriers. Looking at the one CCM implementer with at least one official who led the CCM implementation decision-making process and subsequently assessing that the CCM does not make sense for their institution shows they encountered an institutional climate which was not conducive to CCM implementation. In this institution's Likert scale responses to barriers (Q51) the elite decision maker reported a "Moderate affect" with CCM being incompatible with the institutional climate, while also reporting a "Slight Affect" with "Central Administration" & "Low sense of urgency." Reiterating, this CCM implementer said the CCM does not make sense for their institution, having experienced resistance in these three barrier areas (CCM incompatible with the institutional climate, institutional pushback/resistance from Central Administration, & low sense of urgency). Of note, this HEI experienced two cases of fraud in the previous three years, none of which was discovered by the CCM. The respondent was unsure of the aggregate funds affected by fraud. Discovery methods were by accident, document examination, and IT Controls. No complaints have been filed through the third-party Vendor CCM. The perpetrator was fired. The one CCM non-implementer who was "Undecided – may or may not implement" with at least one official who led the CCM implementation decision-making process and subsequently assessing that the CCM does not make sense for their institution assessed the CCM does not make sense for their institution stated, "No way to completely investigate if a tip is confidential."

The seventh largest reason affecting whether a CCM makes sense regards their institutional climate or situation. The two CCM implementers with at least one official who led the CCM implementation decision-making process and subsequently assessing that the CCM makes sense for their institution appreciated the value added to their large, decentralized

organizations. These HEIs stated “Large size and multi-campus facility with centralized internal audit”; and “Decentralized organization -- helpful to provide a resource so individuals can report concerns and not wonder if it was reported to the right source.”

The lowest reason affecting whether a CCM makes sense regards how (versus why) they implement CCM, with the lone responding CCM implementer with at least one official who led the CCM implementation decision-making process stating, “Ours is an informal system encouraging "whistle blowers" to contact supervisors in person or by email.”

Thus, frequency distributions indicate institutions having at least one Official (by Title) who led the CCM and Anti-Retaliation implementation decision-making process had greater self-assessed program effectiveness than HEIs without executive leadership/governance support. 62% of institutions having at least one Official (by Title) who led the Confidential Complaint Mechanism and Anti-Retaliation implementation decision-making process assessed having a CCM makes sense for their institution, compared to 27% of institutions not identifying such leadership. Conversely, 8% of institutions not identifying at least one Official (by Title) who led the CCM and Anti-Retaliation implementation decision-making process assessed having a CCM does not make sense for their institution, compared to 4% of institutions identifying such leadership. In short, involved leadership matters with respect to program effectiveness.

These descriptive analyses of frequency distributions have been informative for analyzing the dichotomous variables dividing survey respondents into HEIs with- and without engaged leadership in order to analyze their self-assessed satisfaction with having a CCM. We now turn to the relationship method using Pearson’s chi-square to analyze the nominal variables and quantify the reliability of association. All expected frequencies were at least five. With the small non-implementer sample, this was an issue. Chi-square analysis of institutions identifying

at least one Official (by Title) who led the CCM implementation decision-making process yielded one significant Independent Variable with a Pearson Chi-Square value (7.93) with 1 degree of freedom at the .05 significance level. The Null Hypothesis, which stated there is no relationship between HEIs with engaged leadership and the HEI's satisfaction with having a Confidential Complaint Mechanism, is rejected. Results are summarized in Figure 6.

Descriptive analyses of frequency distributions and the relationship method using Pearson's Chi-Square indicate institutions having at least one Official (by Title) who led the CCM and Anti-Retaliation implementation decision-making process had greater self-assessed program effectiveness than HEIs without executive leadership/governance support. HEIs overwhelmingly acknowledged the value gained and responsibility of consistently establishing a workplace environment which supports and defends loyal employees' efforts to report and/or eradicate potentially harmful activities to the organization's clientele and/or existence. Higher Education Institution elite decision makers recognize and value their opportunity to establish and influence an environment in which timely, pertinent, and salient information can flow to unbiased authorities so that appropriate corrective or mitigation actions can take place. Thus, employees with critical (asymmetric) insider information dealing with potentially-fraudulent activities can be afforded the opportunity to internally disclose perceived or observed harmful activities. HEIs saw enhanced returns on their anti-fraud efforts and scarce resource expenditures. One HEI with engaged CCM leadership experienced barriers (CCM incompatible with the institutional climate, institutional pushback/resistance from Central Administration, & low sense of urgency) and fraud incidents not disclosed through the CCM program. HEIs unable to work through and overcome barriers did not realize CCM program benefits. In general, HEIs with high-level decision-maker involvement in establishing a trustworthy reporting environment

had greater self-assessed program effectiveness than HEIs without executive leadership or governance support. In short, involved leadership matters with respect to results.

Fraud drains scarce resources – estimated at 5% annually on average – from all institutional sectors – private and public companies, governmental, and not-for-profit (Report to the Nations on Occupational Fraud and Abuse, 2014). The frequency and extent of fraud can be mitigated – as a review of the literature establishes in Chapter 2. However, fraud continues to occur, organizations do not implement published anti-fraud measures, and individuals with knowledge of suspected or observed fraudulent activities (labeled potential “whistleblowers”) do not timely disclose their insider information to prevent and/or mitigate the adverse effects of fraud. In Chapter 3 we reviewed the research hypotheses and study methodology. Chapter 4 discussed the research findings from elite administrators representing 162 U.S. Higher Education Institutions (HEIs).

There is a gap in current and generalizable peer-reviewed HEI literature as most research on whistleblowers and SOX over the last twelve years has mainly dealt with corporate entities. Generalizable Higher Education Institution data indicating whether voluntary implementation of SOX whistleblowing Best Practices benefits HEIs does not exist. Generalizable HEI data concerning what whistleblowing policies were implemented and why they were chosen is non-existent. Likewise, generalizable data indicating what factors (i.e., barriers) were present with non-implementing HEIs is also lacking.

This quest for insight led to the following research questions. First, has the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels? Second, if the level of SOX Best Practices whistleblowing policy implementation changed from 2007 NACUBO survey levels, why has this change occurred? Third, does HEIs’

assessment of whistleblowers' motivation affect their institutional level of SOX Best Practices (Anti-Retaliation & CCM) implementation? Fourth, is locally-tailored HEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation associated with positive self-assessed tangible/intangible results? Fifth, is there a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI's satisfaction with voluntarily continuing CCM implementation? Sixth, is high-level decision maker involvement in CCM implementation correlated to HEI self-assessed CCM program effectiveness?

This study significantly contributes to the body of knowledge concerning HEIs' level of implementation, expectations and effects from voluntarily implementing National Association of College and University Business Officers' (NACUBO)-recommended Sarbanes-Oxley (SOX) Act of 2002 whistleblowing Best Practices (BP) provisions. The study provides insight into the following key topical elements and policy implications. First, the level of HEI CCM implementation has risen from 65% (2007) to 81% (2013). Second, many HEIs expected benefits in CCM implementation dealing with financial, governance, and ethics issues, despite the existence of significant barriers. Third, HEIs' assessment of whistleblowers' motivation was not found to be associated with their institutional level of SOX BP implementation. Fourth, locally-tailored HEI SOX BP policy implementation resulted in positive self-assessed tangible/intangible results. Fifth, there is a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI's satisfaction with voluntarily continuing CCM implementation. Sixth, high-level decision maker involvement in CCM implementation is correlated to HEI self-assessed CCM program effectiveness. With these concepts in mind, we now review the research implications.

CHAPTER 5. RESEARCH IMPLICATIONS

The purpose of this exploratory study is to determine Higher Education Institutions' (HEI) level of implementation, expectations and effects from voluntarily implementing National Association of College and University Business Officers' (NACUBO)-recommended Sarbanes-Oxley (SOX) Act of 2002 whistleblowing Best Practices (BP) provisions. Following a series of high-profile corporate financial scandals, the U.S. Congress enacted SOX for publicly traded companies. At present, SOX is not federally mandated for public and private universities and colleges. However, data indicate fraud can be an even bigger issue in HEIs than in publicly traded corporations.

It may be possible to reap numerous benefits from selectively implementing locally appropriate SOX whistleblowing provisions while mitigating the adverse effects from full-scale SOX implementation. In light of cutback budgets and potential sustainable SOX benefits, a review of the literature indicates HEIs should consider voluntarily selecting and implementing applicable SOX principles and NACUBO recommendations tailored to their specific circumstances. Alleviating information asymmetry is of paramount importance to timely discovering and/or mitigating fraud. Obtaining whistleblower's asymmetric information concerning fraud lies within three realms: the HEI's decision-making process, the whistleblower's disclosure calculation, and the HEI environment.

Utilizing a quantitative (Web-based survey) research method with a Modified Rational Actor Model (MRAM), the study gained insight into key topical elements and policy

implications from participants. First, the level of CCM implementation has risen from 65% (2007) to 81% (2013). HEIs who have already implemented should be encouraged by their decision to implement CCM, as peer institutions have likewise seen the value added in so doing. HEIs who have not already implemented may wonder what expectations and benefits support their peers' implementation decisions and continued CCM efforts. Therein lays answers to why HEIs have expended scarce resources to provide a confidential complaint mechanism and/or whistleblower protection.

The Modified Rational Actor Model (MRAM) suggests costs and benefits motivate rational actors. Hypothesis 2 investigates this theoretical possibility in several areas. Applied to the Higher Education Institution (HEI) setting, MRAM suggests elite decision makers weigh costs and benefits when deciding whether to voluntarily implement anti-fraud and whistleblower protection measures. The study indicates HEIs expected financial, governance, and ethics benefits in CCM implementation, despite the existence of associated costs and significant barriers. We will now review the salient benefits, costs, and implications.

Descriptive and comparative analysis of Hypothesis 2.1 data indicates most significant expectations for financial benefits were directly tied to fraud prevention, enhancing funding opportunities, and increasing confidence in HEI stewardship of funds. More remote, indirect effects of CCM (like lowering operating costs) were not seen as significantly associated with the institution's CCM implementation decision. Analysis of Hypothesis 2.2 data indicate most expectations for governance benefits were directly tied to protecting the HEI's reputation. Internal improvement efforts (such as improving the institution's decision-making and improving internal information flow) were not significantly associated with the institution's CCM implementation decision. Hypothesis 2.3 data indicate most expectations for ethics benefits were

directly tied to improving the institutional culture of ethical conduct and accountability as well as increasing employee retention and morale. More remote, indirect effects of CCM (like building local capacity for self-governance and attracting students) were not seen as significantly associated with the institution's CCM implementation decision.

For practitioners, the data suggest several noteworthy associations. First, if the HEI decision maker desires to reap several financial benefits, then the HEI can implement a Confidential Complaint Mechanism. These financial benefits reside in several areas. The HEI could enhance their grant proposals and funding solicitations, improve confidence in the institution's stewardship of public funds, and decrease fraud through CCM implementation. Other HEI-identified financial benefits include providing an edge over non-implementers and gaining insider's knowledge on alleged fraud. In addition to financial benefits of CCM, HEIs could realize one governance benefit regarding proactively protecting the institution's reputation through CCM implementation. Per study participant responses, institutions are highly sensitive to protecting their reputation, as attendant revenue streams are critical to HEI fiscal survival. The study data suggest several ethics benefits HEI decision makers can obtain through CCM implementation. First, the CCM can assist in recruiting and retaining ethical employees. Second, the CCM can improve the HEI culture and signal that the institution supports ethical conduct and accountability. Hiring and retaining ethical employees is critical in the decentralized HEI environment, especially considering employees' lower salaries and frustration with bureaucratic malaise. The association between the aforementioned benefits and CCM implementation is shown in Figure 2.

If the HEI wants:

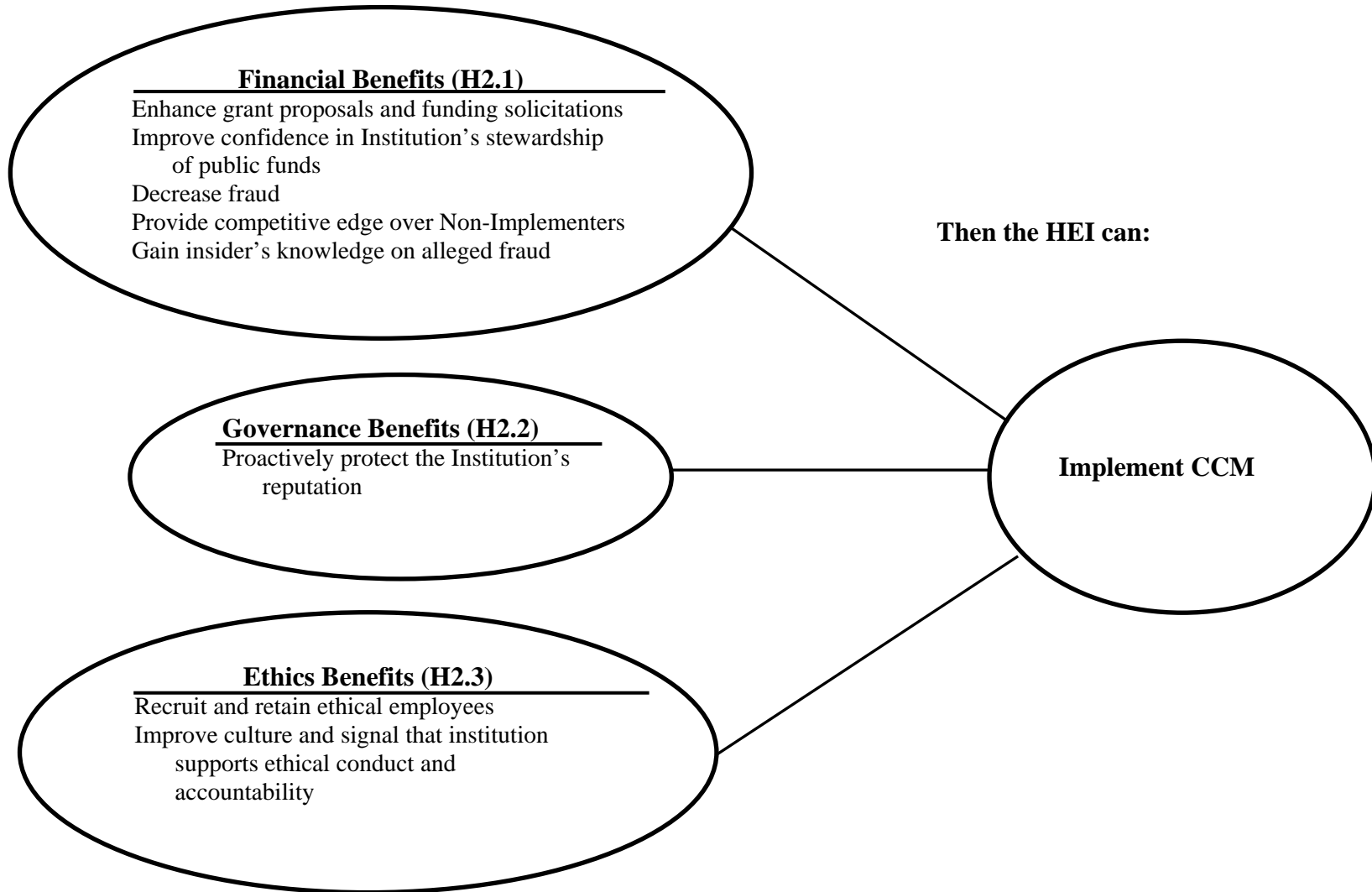
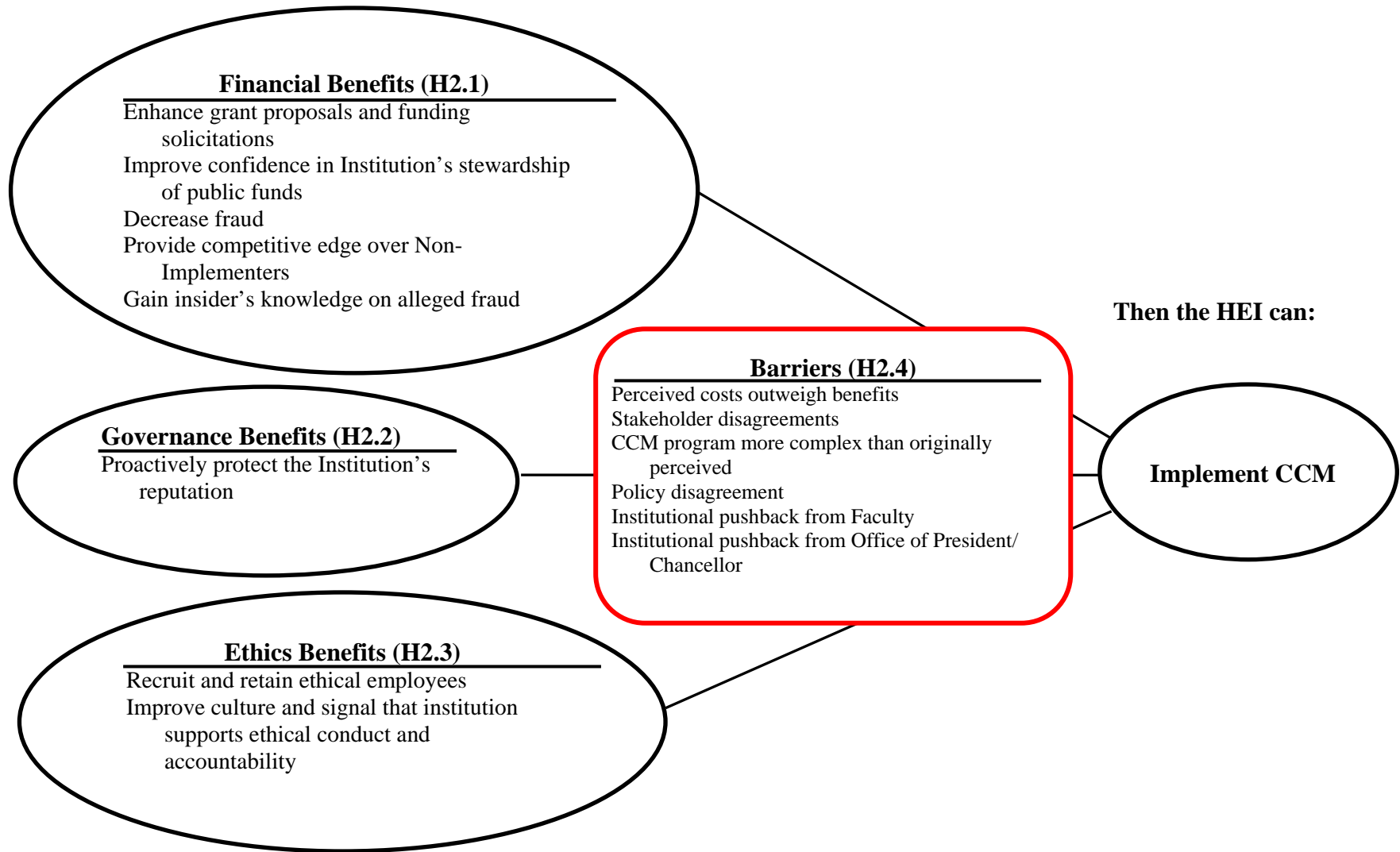


Figure 2. HEIs' significant expected benefits from CCM implementation.

These benefits were not without obstacles in the form of barriers, which is addressed in Hypothesis 2.4. Hypothesis 2.4 data indicate CCM implementers' and non-implementers' primary barrier was related to deciding whether the program was worth the cost (perceived costs outweighed benefits and dealing with time constraints). Another significant barrier indicated in Hypothesis 2.4 data involves leadership (resolving stakeholder disagreements, CCM complexity, and institutional pushback from faculty and the Office of the President/Chancellor). The association between the aforementioned barriers and CCM implementation is shown in Figure 3.

These associations are congruous with the Modified Rational Actor Model. In MRAM, the Higher Education Institution decision maker is a unified actor operating with incomplete information to make a value-maximizing, rational (in their viewpoint) decision through a cost-benefit calculation. As a risk-averse entity operating with limited resources, the actor makes satisficing decisions using information provided by biased, competing agents whose preferences tailor information and options provided and/or withheld. The CCM implementation level increased from 2007 to 2013. The study data indicate elite HEI decision makers assessed financial, governance, and ethics benefits to voluntarily implementing anti-fraud and whistleblower protection measures. Viewed through MRAM, HEIs assessed financial, governance, and ethics benefits which outweighed costs. MRAM suggests as HEIs calculated the cost-benefit ratio as a positive benefit, the level of voluntary anti-fraud and whistleblower protection measures increased. Thus, Hypotheses 2.1, 2.2, and 2.3 are supported. Although HEIs experienced barriers, the implementation level has not decreased or remained steady. Thus, Hypothesis 2.4 is not supported. Table 61 summarizes Hypotheses 2 results.

If the HEI wants:



237

Figure 3. HEIs' significant barriers to CCM implementation.

Table 61

Hypothesis 2 Relationship Summary

Hypothesis	MRAM Expectation	Supported?
2.1	HEIs assessed financial cost-benefit advantages to voluntarily implementing anti-fraud and whistleblower protection measures as the implementation level increased	Yes
2.2	HEIs assessed governance cost-benefit advantages to voluntarily implementing anti-fraud and whistleblower protection measures as the implementation level increased	Yes
2.3	HEIs assessed ethics cost-benefit advantages to voluntarily implementing anti-fraud and whistleblower protection measures as the implementation level increased	Yes
2.4	HEIs assessed cost-benefit disadvantages (barriers) to voluntarily implementing anti-fraud and whistleblower protection measures as the implementation level decreased or remained steady	No

Although barriers were not substantial enough for the implementation level to decrease or remain steady, six of the sixteen barrier Independent Variables suggest a significant association with CCM implementation. The top three statistically-significant barriers dealt with HEIs perceiving costs outweigh benefits, HEIs experiencing significant stakeholder disagreements, and HEIs assessing the CCM program as more complex than originally perceived.

Continuing research can glean further details as to why non-implementers assessed barriers higher, on average, than implementers. In essence, what made these barriers so

significant to non-implementers, while implementers were able to mitigate the adverse effects of similar or identical barriers? This research could focus on distinguishing possible variances in barriers experienced by the three types of current non-implementers. HEIs classified as non-implementers include those who plan to implement, HEIs who are undecided – may or may not implement, and those who declared they definitely will not implement. One possible method to ascertain this phenomenon could entail interviewing a sample of willing participants, most likely via phone. One hurdle to overcome is gaining access to, and trust of, non-implementers, who have historically been reluctant to divulge the rationale for their CCM choices. It could also prove helpful to interview implementers who experienced the same barriers, yet were able to work through these challenges and subsequently assess CCM implementation beneficial to their institution.

Applied to Higher Education Institutions, the Economic Model suggests HEIs could adjust their anti-fraud and/or whistleblower protection implementation based upon the HEI's assessment of the whistleblower's motivation to disclose. Descriptive and comparative analysis of Hypothesis 3.1 data indicates HEIs' assessment of whistleblowers' motivation does not affect their institutional level of SOX Best Practices (Anti-Retaliation & CCM) implementation. Encouragingly, frequency distributions indicate 89% of responding CCM implementers and 93% of CCM non-implementers viewed whistleblowers' disclosure motivation positively as either "Following their moral code" or "Correcting or preventing harm while doing more good than harm." Only 11% of CCM implementers and 7% of CCM non-implementers viewed whistleblowers' disclosure motivation negatively as "Disgruntled or opportunistic person desiring to cause problems within the organization." The study data do not support Hypothesis 3.1. Thus, Hypothesis 3.1 is not confirmed.

For practitioners, one has to wonder how to reconcile HEIs' overwhelmingly positive viewpoint of whistleblowers when the literature indicates whistleblowers are experiencing life-changing retaliation worldwide. Specifically, when 89% of HEI Confidential Complaint Mechanism implementers and 93% of CCM non-implementers viewed whistleblowers' disclosure motivation positively while only 11% of CCM implementers and 7% of non-implementers viewed whistleblowers' disclosure motivation negatively, how can there still be so much reported retaliation? This rosy HEI picture is juxtaposed with the alarming retaliation image presented by the literature review. This contradiction is ripe soil for further inquiry.

One of the major complaints publicly traded companies have of SOX is that full-scale implementation is too costly. One feasible option is for organizations to selectively implement CCM elements that, given the HEI's unique circumstances, add sufficient value to be worthwhile. The MRAM suggests elite HEI decision makers weigh costs and benefits of voluntarily implementing anti-fraud and whistleblower protection measures. MRAM suggests if HEIs assess sufficient value added through positive self-assessed tangible/intangible results from anti-retaliation and/or CCM implementation, elite institutional leaders may view the cost is worth the benefit. Hypotheses 2 investigated financial, governance, and ethics expectations.

Hypothesis 4.1 expands upon Hypotheses 2's expectations by discerning benefits HEIs' realized through implementing anti-fraud and/or whistleblower protection measures. These results go beyond the expectations investigated in Hypothesis 2. Thus, Hypothesis 4.1 investigates whether HEI elite decision makers realized tangible and/or intangible benefits when voluntarily implementing anti-fraud and whistleblower protection measures. The study indicates HEIs realized distinct benefits in CCM implementation, depending upon which locally tailored policy was selected. We will now review the salient implications.

Locally-tailored Higher Education Institution (HEI) SOX Best Practices (Anti-Retaliation & CCM) policy implementation is associated with positive self-assessed tangible/intangible results for four relationships. First, institutions having at least one institutionally-supported CCM found multiple statistically-significant benefits. Of note, this positive association was not supported for institutions having at least one third-party vendor-supported CCM. The institutionally-supported CCM methods can take many forms, as indicated in Table 24. Foremost amongst these results was the HEI's ability to gain access to whistleblower's asymmetric information about perceived or observed illegal activities. This is congruous with the literature review, which indicated employees' whistleblower tips are the most prolific means to fraud discovery. This access to whistleblowers' asymmetric information also agrees with my Anti-Fraud Conceptual Framework in Figure 1. HEIs recognized the Confidential Complaint Mechanism's deterrent effect on fraudulent activities. This is in agreement with the 2014 Association of Certified Fraud Examiners (ACFE) report, which found whistleblower tips are the leading source of fraud discovery and have a significant deterrent effect. HEI decision makers also valued CCM's ability to protect the institution's well-being and reputation. Safeguarding institutional reputation was esteemed by CCM implementers and non-implementers alike, as HEIs recognized the significant adverse effects from a loss of reputation. The association between institutions having at least one institutionally-supported CCM and results is shown in Figure 4. We will now review a second locally tailored policy area in which results are positively associated.

Hypothesis 4.1 investigates whether HEI elite decision makers realized tangible and/or intangible benefits when voluntarily implementing anti-fraud and whistleblower protection measures. There is a significant relationship for HEIs providing at least one whistleblower

protection mechanism and discovering fraud. Twenty eight percent of CCM implementers experiencing fraud were able to discover fraud through the CCM in the past three years. Eleven percent of HEIs experiencing fraud in the past three years had implemented CCM but did not protect whistleblowers. When fraud occurred, the CCM was not the source of discovery. All of the responding HEIs (23%) experiencing fraud that did not implement at least one whistleblower protection policy did not discover fraud through the CCM in the past 3 years. This is very significant. One conclusion could be: if you do not protect whistleblowers, those with insider information concerning illegal activities are not going to voluntarily disclose their knowledge of observed or perceived fraudulent activities. Thus, you are denying yourself access to their asymmetric information concerning fraud.

Another aspect of tangible results concerns recovering funds when fraud occurs. Of the eighteen HEIs experiencing fraud in the last three years who could identify the range of aggregate funds affected by fraud, all CCM implementers and non-implementers experiencing fraud were able to recover at least a portion of the affected funds. These frauds were discovered by a variety of methods (the CCM, Notified by law enforcement – not part of CCM, By accident, Surveillance/Monitoring, Confession, IT Controls, Document examination, Internal Audit, Account Reconciliation). The CCM is not a magical solution to all fraud discoveries. HEIs were able to discover fraud through means other than the CCM. However, the CCM did provide a fraud discovery means for many institutions. However, only external audit was not cited as a source of fraud discovery in which funds were subsequently returned to the institution. If an institution is counting on its external auditors to discover fraud and subsequently recover funds related to the fraud, think again – the literature review and HEI data do not support this reliance.

Third, institutions having at least one whistleblower protection mechanism found multiple benefits. These whistleblower protection methods can take many forms, as indicated in Table 26. Foremost amongst the results associated with having at least one whistleblower protection mechanism was the HEI's ability to gain access to whistleblower's asymmetric information about perceived or observed illegal activities. This is congruous with the literature review, which indicated employees' whistleblower tips are the most prolific means to fraud discovery. HEIs recognized how protecting whistleblowers can empower these risk-averse, loyal agents and deter fraudulent activities. This is in agreement with the 2014 ACFE report, which found whistleblower tips are the leading source of fraud discovery and have a significant deterrent effect. HEI decision makers also valued anti-retaliation policy's ability to keep people accountable by creating a reporting environment in which insiders with asymmetrical knowledge of illegal activities feel safe to report their shrouded information. The association between institutions having at least one whistleblower protection mechanism and results is shown in Figure 4. We will now review a fourth locally tailored policy area in which results are positively associated.

Fourth, institutions having at least one whistleblower protection mechanism and implementing a locally tailored CCM found a multitude of benefits. While this relationship is intuitively obvious from previous discussions of significant results in Hypothesis 4.1, the data indicate there was a 42% increase in the association between having at least one whistleblower protection mechanism and HEIs assessing tangible/intangible results when implementing a locally tailored CCM was included in the analysis. The synergistic benefits of this combination of having at least one whistleblower protection mechanism and implementing CCM are the same as previously discussed in Hypothesis 4.1 and shown in Figure 4. Thus, Hypothesis 4.1 is confirmed.

If the HEI implements:

Then the HEI can expect tangible/intangible results:

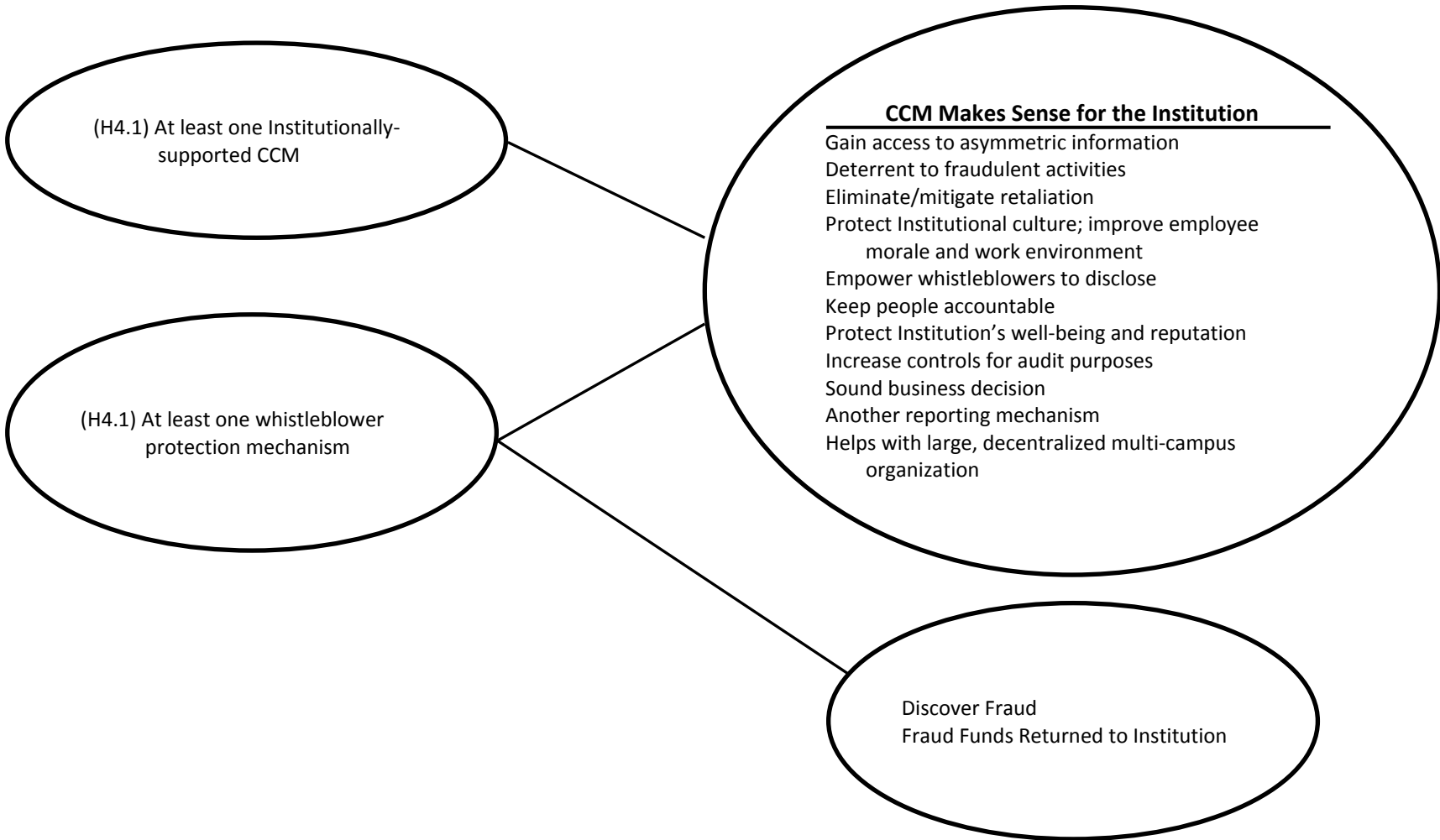


Figure 4. HEIs' Significant Locally-Tailored Policies Related to Results.

We have seen that one of the major complaints publicly traded companies have of SOX is that full-scale implementation is too costly. Organizations can selectively implement options that, given the HEI's unique circumstances, add sufficient value to be worthwhile. The MRAM suggests elite HEI decision makers weigh costs and benefits of voluntarily implementing anti-fraud and whistleblower protection measures. MRAM suggests if HEIs assess sufficient value added through positive self-assessed tangible/intangible results, elite institutional leaders may view the cost is worth the benefit. Hypothesis 4.1 investigated whether HEI elite decision makers realized tangible and/or intangible benefits when voluntarily implementing anti-fraud and whistleblower protection measures. Hypothesis 5.1 investigated whether HEIs realized distinct benefits in having impartial investigators of fraud complaints and/or alleged retaliation. We will now review the salient implications.

The study data suggest there is a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI's satisfaction with voluntarily continuing CCM implementation. This correlation was significant for one overall variable (representing seven types of impartial investigators) and two individual impartial investigator variables (internal auditors and human resources) relative to HEI's assessments of whether a CCM was beneficial to their institution. Second, there is a significant correlation for institutions providing at least one impartial investigator means of addressing fraud complaints and/or alleged retaliation, relative to discovering fraud. Of note, this relationship is only significant when departmental administrators are *excluded* from consideration as impartial investigators. Thus, only when impartial investigators that address fraud complaints and/or alleged retaliation are considered (i.e., Internal Auditors, Ombudsman for the Institution, Office of the President, Human Resources, state-level official and third-party vendor) is discovery of fraud significantly

related. This association of impartial investigators (excluding departmental administrators) supports the literature concerning departmental administrators being perceived as potentially biased regarding fraud complaint investigations, resolution, and protection of whistleblowers from retaliation, all of which can stifle whistleblower disclosure and HEI's access to insider asymmetric information concerning perceived or observed fraudulent activity. That said, even though internal auditors and human resources showed a strong relationship with whether HEIs assessed a CCM beneficial to their institution, this positive experience was not universal. One HEI reported, "Human Resources is the most negative contributor" when asked about barriers. Each institution's situation and climate must be dealt with given their unique circumstances.

There is a significant relationship for HEIs providing at least one impartial investigator and discovering fraud. Twenty eight percent of CCM implementers were able to discover fraud through the CCM in the past three years. Twelve CCM implementers having at least one impartial investigator realized value in having a CCM and at least one impartial investigator mechanism in-place to investigate and resolve actual frauds or retaliation complaints that occurred at their institution in the past three years. All of the responding HEIs experiencing fraud that did not provide at least one impartial investigator mechanism did not discover fraud through the CCM in the past 3 years. This is very significant. One conclusion could be if you do not provide whistleblowers with an impartial mechanism for investigating and resolving fraud and/or retaliation complaints, those with insider information concerning illegal activities are not going to disclose. Thus, you are denying yourself access to their asymmetric information concerning fraud. Thus, Hypothesis 5.1 is confirmed. The benefits of having at least one impartial investigator of fraud complaints and/or alleged retaliation and results are shown in Figure 5.

If the HEI implements:

Then the HEI can expect tangible/intangible results:

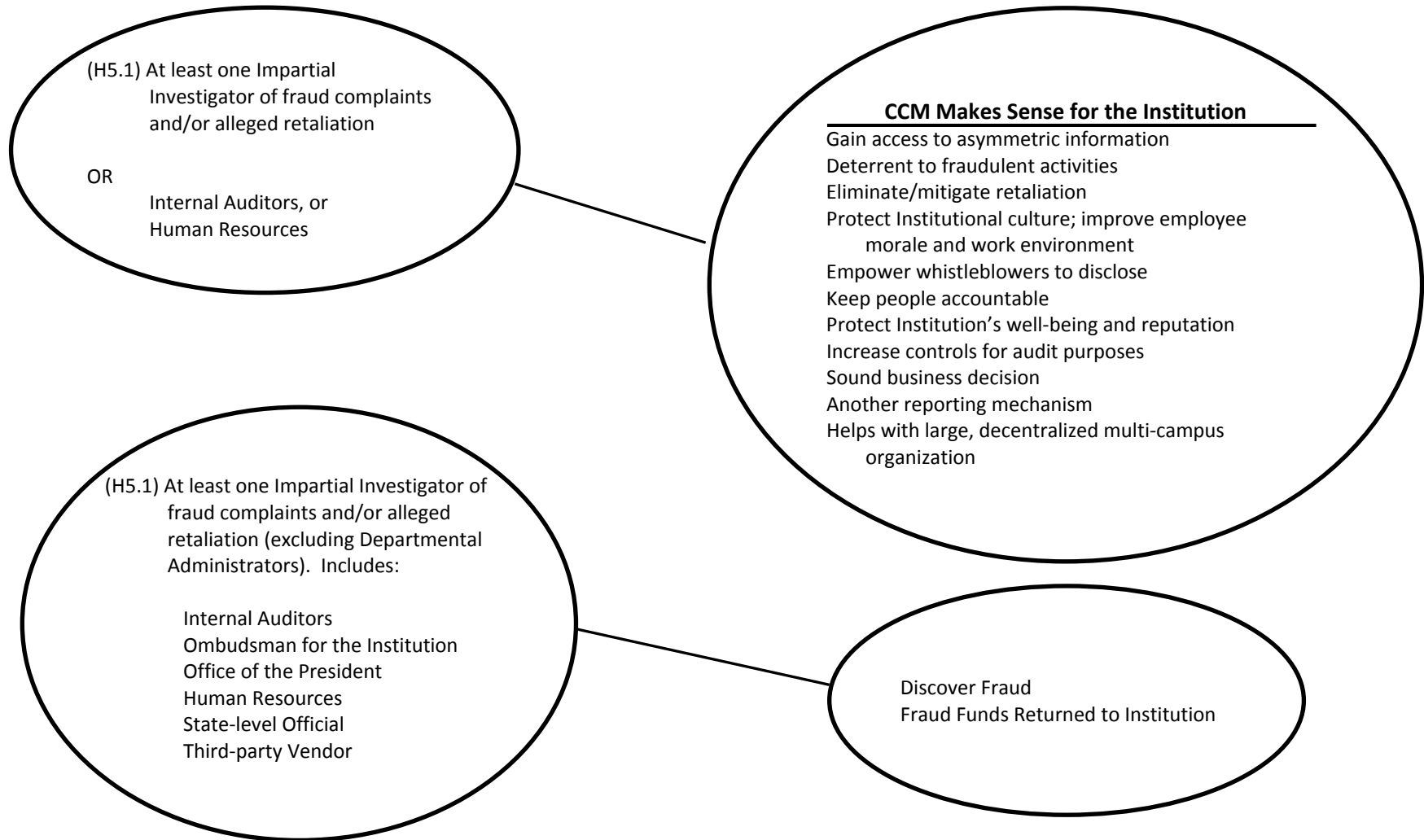


Figure 5. HEIs' Impartial Investigator Related to Results.

MRAM suggests if HEIs assess sufficient value added through positive self-assessed tangible/intangible results, elite institutional leaders may view the cost is worth the benefit. Hypothesis 5.1 investigated whether HEIs realized distinct benefits in having impartial investigators of fraud complaints and/or alleged retaliation. Hypothesis 6.1 investigated whether high-level decision maker involvement in CCM implementation is correlated to HEI self-assessed CCM program effectiveness. Study data suggest institutions having at least one official (by title) who led the CCM and Anti-Retaliation implementation decision-making process had greater self-assessed program effectiveness than HEIs without executive leadership/governance support. 62% of institutions having at least one official (by title) who led the CCM and Anti-Retaliation implementation decision-making process assessed having a CCM beneficial to their institution, compared to 27% of institutions not identifying such leadership. Conversely, 7% of institutions not identifying at least one official (by title) who led the CCM and Anti-Retaliation implementation decision-making process assessed having a CCM was not beneficial to their institution, compared to 4% of institutions identifying such leadership. In short, involved leadership matters with respect to results. The benefits of having high-level decision maker involvement in CCM implementation and results are similar to those found in Hypothesis 4.1 and 5.1. These relationships are shown in Figure 6. Thus, Hypothesis 6.1 is confirmed.

If the HEI has:

Then the HEI can expect tangible/intangible results:

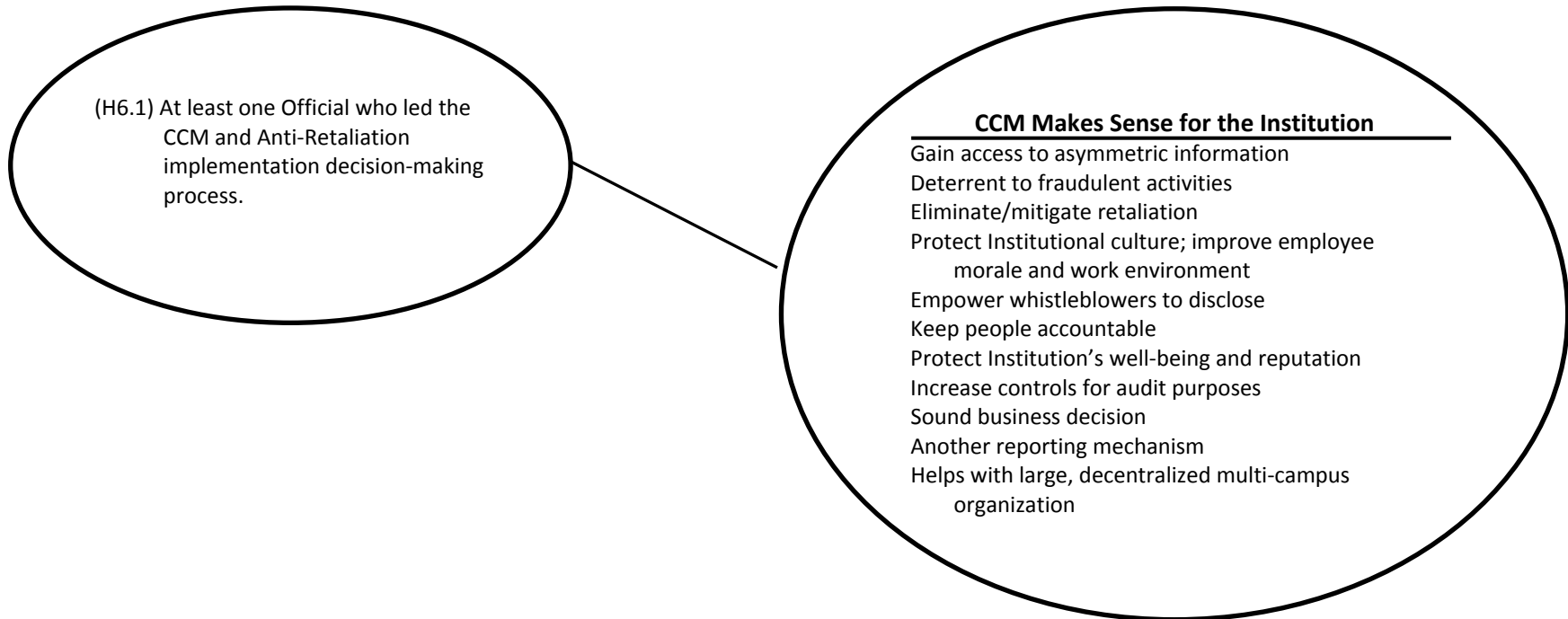


Figure 6. HEIs' Engaged Leadership Related to Results.

Fraud depletes entities' resources by an estimated annual average of 5% (Report to the Nations on Occupational Fraud and Abuse 2014). The frequency and extent of fraud can be mitigated – as a review of the literature establishes. However, fraud continues to occur, organizations do not implement published anti-fraud measures, and individuals with knowledge of suspected or observed fraudulent activities (labeled potential “whistleblowers”) do not timely disclose their insider information to prevent and/or mitigate the adverse effects of fraud. One could wonder, “Given the preponderance of evidence that fraud can be prevented or its effects mitigated, *why* does this cycle of anti-fraud non-implementation continue?” In other words, why do some organizations voluntarily implement anti-fraud measures while other organizations do not? There was a gap in the literature concerning Higher Education Institutions' (HEI) anti-fraud and whistleblower protection decisions. The purpose of this exploratory study is to determine HEI level of implementation, expectations and effects from voluntarily implementing National Association of College and University Business Officers' (NACUBO)-recommended Sarbanes-Oxley (SOX) Act of 2002 whistleblowing Best Practices (BP) provisions.

Utilizing a quantitative (Web-based survey) research method with a Modified Rational Actor Model (MRAM), the study gained insight into key topical elements and policy implications. This study significantly contributes to the body of knowledge concerning HEIs' level of implementation, expectations and effects from voluntarily implementing National Association of College and University Business Officers' (NACUBO)-recommended Sarbanes-Oxley (SOX) Act of 2002 whistleblowing Best Practices (BP) provisions. The study provides insight into the following key topical elements and policy implications. First, the level of HEI CCM implementation has risen from 65% (2007) to 81% (2013). Many HEIs expected financial, governance, and ethics benefits in CCM implementation. These expectations occurred despite

the existence of significant barriers. Third, HEIs' assessment of whistleblowers' motivation was not found to be associated with their institutional level of SOX BP implementation. Locally-tailored HEI SOX BP policy implementation resulted in positive self-assessed tangible/intangible results. Fifth, there is a correlation between HEIs with impartial investigators of fraud complaints and/or alleged retaliation and the HEI's satisfaction with voluntarily continuing CCM implementation. High-level decision maker involvement in CCM implementation is correlated to HEI self-assessed CCM program effectiveness.

Practitioners can only imagine sitting in their ivory tower on a calm, clear morning. In walks an outsider who offers the following proposition. "If you will merely listen to what your peer institutions have learned and implement those measures you determine to be appropriate for your circumstances, I forecast you will save your institution an average of five percent of your annual revenues." Since your curiosity is heightened, you ask, "Of what possible measures are you speaking?" The conversation turns to the financial, governance, and ethics benefits many HEIs expected from implementing a Confidential Complaint Mechanism. At this point you review Figure 2. Since there are a variety of viewpoints with associated pros and cons to most things in life, the discussion evolves to barriers. A representative sample of the salient barriers is shown in Figure 3. Once the practitioner understands peer institutions have worked through similar challenges, the focus turns to what policy options are associated with specific results. Significant locally-tailored policies include having at least one institutionally-supported CCM available, as well as providing at least one whistleblower protection mechanism. These showed both tangible and intangible benefits to peer HEIs. These positive benefits were also present if HEIs provided at least one impartial investigator of fraud complaints and/or alleged retaliation, as well as with HEIs identifying at least one official who led the CCM and/or anti-retaliation

efforts. Additionally, providing at least one whistleblower protection mechanism and/or at least one impartial investigator significantly helped with discovering fraud and having fraud funds returned to the institution. At this point you review Figures 4 through 6. Now you wonder, “What are the ramifications if I dismiss the message and return to my routine?” Recall Chapter 1’s glowing introduction to *Sullied University*. Incoming parents were greeted with news of occupational fraud and increased tuition invoices as a result of the HEI’s disregard for implementing published anti-fraud and whistleblower protection measures. By implementing locally-appropriate measures, your institution can re-write the story as follows.

Mentally place yourself as an incoming freshman’s parent attending a group orientation session in the following hypothetical scenario prior to the first day of class, as a distinguished institutional administrator states: “A warm welcome and congratulations on your graduating high school senior’s admission to *Courageous University*! As you settle into your seat, we need to update you on recent changes. A few years ago we were named “*Sullied University*” because the predecessor administration failed to implement adequate anti-fraud and whistleblower protection measures. After a considerable delay due to benign negligence, they discovered several incidents of occupational fraud amounting to \$45 million. The combined incidents of asset misappropriation, corruption schemes, and financial statement fraud could have been avoided and/or significantly mitigated with an effective confidential complaint mechanism and anti-retaliation policies. Those administrators chose to disregard NACUBO Best Practices recommendations as well as well-publicized lessons learned and recommendations from the Association of Certified Fraud Examiners. They were not able to recover any of the fraudulently-obtained funds. The administrators sincerely apologized for any inconvenience to incoming families this loss entailed. Students’ estimated cost of attendance resultantly increased

5%, effective immediately. Adverse publicity resulted in decreased state appropriations, a loss of benevolent donor contributions, and decreased student enrollment. However, we have entirely new leadership with a clear vision of creating a healthy environment in which illegal activities are mitigated or prevented, funds are used as intended for your students' education, and our collective future prospers. In fact, we have a new name: *Courageous University*. In the few years since the frauds were discovered and executive leadership changed, we have been able to return tuition to pre-fraud rates as anti-fraud and whistleblower protection program efficiencies have been realized. Again, welcome to Courageous University!"

This turn-around takes leadership. The HEI leadership at Courageous University can be likened to Theodore Roosevelt's Man in the Arena:

It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. **The credit belongs to the man who is actually in the arena**, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; **who spends himself in a worthy cause**; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall **never** be with those cold and timid souls who neither know victory nor defeat. (Roosevelt, 1910)

In place of the "man" in the arena, substitute "whistleblower." In the current context, the whistleblower is voluntarily in the arena, oftentimes with the risk of great personal peril. As a loyal employee, the whistleblower sees their disclosure as a worthy cause. Although the risk can be substantial, at least the whistleblower realizes the noble nature of their courageous actions.

What does the whistleblower need? Essentially, the whistleblower needs an advocate. This advocate can be a Higher Education Institution administrator, scholar, taxpayer, legislator, and student's parent. Fraud directly or indirectly affects all of us.

Higher Education Institution leaders have an opportunity to answer the call and jump into the arena. Considering the literature and HEI data, I perceive two possible reasons HEI leaders would not voluntarily implement anti-fraud and whistleblower protection measures. First, the leaders could be part of the occupational fraud problem. The HEI data included responses from at least one institution whose former executive administrators were labeled as "corrupt." Other respondents stated their environment was not receptive to mitigating and/or preventing fraud. Leaders establish the HEI environment by setting the tone at the top, which permeates throughout the institution. A second possible reason for HEI leader's hesitancy to voluntarily implement anti-fraud and whistleblower protection measures could rest in either complacency or cowardice. This study and Theodore Roosevelt's stirring Man in the Arena speech can serve as a wakeup call to stand up and get into the arena. HEI leaders can be courageous by leading their Institution one step closer to having an effective anti-fraud and anti-retaliation program. If sufficient time elapses and HEI leaders have not taken advantage of this opportunity for a new era of stewardship, governance bodies (such as the Board of Trustees) can clean house and recruit a bold management team that will ensure adequate anti-fraud and whistleblower protection policies are implemented. It is time to lead, follow, or get out of the way.

Now that we have seen the research implications from this exploratory study, it is appropriate to peer down the road ahead.

The Future Path

This exploratory study is merely the beginning. I have attempted to inform the discussion with available, generalizable data obtained via online survey of NACUBO-invited, elite HEI decision makers. The study's Modified Rational Actor Model (MRAM) does not build the complete picture concerning what occurred, who influenced the outcome, and why negotiations and bargaining resulted in the associated course of action. MRAM methodologically used available information. Future research can add to the discussion and further our understanding of detailed, complex explanations to CCM implementation expectations, effects and barriers, potentially combined with subsequently obtainable views on communications, organizational behavior and bargaining players. This study has focused on elite decision makers' viewpoints. It would be enlightening to gather and analyze perspectives from other stakeholders (faculty, staff, potential whistleblowers, Board of Trustees, State-level officials, community members, governmental regulatory agencies, HEI accreditation agencies, etc.). Doing so could mitigate the effects of MRAM's shortcomings. These gaps include overlooking evidence, group member's experiences, beliefs, attitudes and styles, how the problem was framed, players' perceptions, information processing and calculations. Additionally, MRAM does not address action-channels, details on actors' interactions, power broker's calculations, misunderstandings and foul-ups. MRAM also ignores players' loyalty, preferences, and stance.

Surprisingly, the few responding CCM non-implementers had higher mean scores on many Likert scale financial, governance, and ethics expectations than implementers. One possible explanation resides in implementers dealing with the reality of tangible and intangible benefits versus actual costs, whereas non-implementers are dealing with a hypothetical situation

where benefits and costs are unknown. Another possible explanation resides in non-implementer's actual barriers. For instance, one HEI indicated they will definitely not implement CCM but assessed the CCM had would be highly beneficial in several areas. This HEI saw great value in the CCM's ability to improve confidence in the institution's stewardship of public funds. However, they experienced significant barriers with stakeholder disagreements, anticipating too many "noise" complaints, too many decision makers, and institutional resistance/pushback from Central Administration. The HEI encountered other less severe (albeit substantial) barriers, such as assessing the CCM cost outweighing the benefit, and institutional climate being incompatible with anti-fraud and whistleblower protection measures. Continuing research can address why non-implementers assessed benefits higher, on average, than implementers. Continuing research can address why non-implementers assessed financial, governance, and ethics benefits higher, on average, than implementers. One possible method to ascertain this unexplained riddle could entail interviewing a sample of willing non-implementing research participants. One hurdle to overcome is gaining access to, and trust of, non-implementers, who have historically been reluctant to divulge the rationale for their CCM choices.

As expected, the few responding non-implementers had mean scores higher on Likert scale barriers than implementers for sixteen of the seventeen items. Continuing research can glean details as to why non-implementers assessed barriers higher, on average, than implementers. This research could focus on distinguishing possible variances in barriers experienced by the three types of current non-implementers (Plan to implement; Undecided – may or may not implement; and Definitely will not implement), discovering why these institutions were unable to overcome their barriers. One possible method to ascertain this

unexplained riddle could entail interviewing a sample of willing participants. One hurdle to overcome is gaining access to, and trust of, non-implementers, who have historically been reluctant to divulge the rationale for their CCM choices. It could also prove helpful to interview implementers who experienced the same barriers, yet were able to work through these challenges and subsequently assess CCM implementation to be beneficial to their institution. Other research could possibly find an optimal way for implementers and non-implementers to safely share their successes and failures in a safe environment in which they can learn what worked, what did not work, and how some HEIs successfully overcame barriers to implementation. One such mechanism could be a NACUBO professional seminar in which participants openly share their challenges and courses of action, with a common understanding that no statements will be attributed outside the setting to an institution or individual.

The study indicates there is a difference in fraud rates between CCM implementers and non-implementers. Of the 131 CCM implementers, thirteen HEIs (10%) reported frauds occurring within the last three years. Of the 31 non-implementers, five HEIs (16%) reported frauds occurring within the last three years. Additionally, the study indicates there are differences in the aggregate funds affected by fraud between CCM implementers and non-implementers. A majority (75%) of HEIs implementing a CCM and reporting frauds occurring within the last three years involved aggregate funds totaling less than \$60,000 (the lowest survey response category). In comparison HEIs not implementing a CCM and reporting frauds occurring within the last three years involved aggregate funds fairly evenly spaced within the three listed ranges (totaling less than \$60,000, \$60,001 to \$120,000, and Greater than \$240,000) in Tables 44–45. This slight difference in fraud rates and aggregate funds affected through fraud could indicate several possibilities. First, CCM implementers are discovering frauds, in general,

earlier than non-implementers, thus mitigating the funds affected by fraud. A second possibility is CCM implementers are discovering types of frauds, in general, affecting funds at a lower aggregate level. With HEIs' overwhelming assessment that CCM is worthwhile to gain access to whistleblowers' asymmetric information, it could be worse than indicated above – even more frauds could be occurring at non-implementing HEIs which have not been discovered and disclosed due to whistleblower's reluctance to disclose without an established confidential complaint mechanism and/or whistleblower protection mechanism in-place. Perhaps the survey data's variance in implementer's lower fraud rate and reported fraud occurring in lower thresholds is due to the CCM's deterrent influence and effects on early detection, thus mitigating losses (Report to the Nations on Occupational Fraud and Abuse 2014). Further research could help illuminate what is occurring and what part (if any) CCM implementation and whistleblower protection plays in HEI fraud prevention and discovery.

Of the eighteen HEIs experiencing fraud in the last three years who could identify the range of aggregate funds affected by fraud, all CCM implementers and non-implementers experiencing fraud were able to recover at least a portion of the affected funds. Keeping in mind we do not know the exact percentage of funds recovered for a majority of reported cases (due to how the questionnaire was worded), this recovery level was higher than expected. This recovery rate stands in sharp contrast to the ACFE's 2014 survey report that 58% of victim organizations do not recover any of their fraud losses, which is up from 49% in 2012 (Report to the Nations on Occupational Fraud and Abuse 2014). For instance, the one HEI notified of fraud by a whistleblower who had contacted law enforcement (not part of the CCM Program) was able to recover at least a portion of the affected funds. The next highest source of fraud discovery rank-ordered by percentage of recovery percentage by disclosure method (not rank-ordered by actual

dollars recovered), “By Accident”, had seven of the eight frauds able to recover at least some fraud funds. Further research could ascertain whether the source of fraud discovery is related to the effectiveness of having funds returned to the institution. Of note, only “External Audit” was not cited as a source of fraud discovery in which funds were subsequently returned to the institution. This ties to the 2014 ACFE Report, which states, Independent audits “should not be relied upon as organization’s primary anti-fraud mechanism” (Report to the Nations on Occupational Fraud and Abuse 2014). Although such audits were the most commonly implemented control [in the ACFE’s 2014 study] and they detected only 3% of the frauds reported to [the ACFE], independent audits ranked extremely low in limiting fraud losses (Report to the Nations on Occupational Fraud and Abuse 2014).

Ample opportunities exist for researchers and practitioners to implement effective anti-fraud and anti-retaliation programs as well as inform the body of knowledge on fraud mitigation and prevention. Hopefully my humble efforts have helped.

References

- Albrecht, S. W. (2003). *Fraud examination* (4th ed.). Boston: Cengage Learning.
- Allison, G., & Zelikow, P. (1999). *Essence of decision: Explaining the Cuban missile crisis* (2nd ed.). New York: Addison-Wesley Educational Publishers Inc.
- Bernard, H. R. (2006). *Research methods in anthropology: Qualitative and quantitative approaches*. New York: AltaMira Press.
- Carney, W. J. (2006). The costs of being public after Sarbanes-Oxley: The irony of 'going private'. *Emory Law Journal*, 141–160.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). Hoboken, NJ: John Wiley & Sons, Inc.
- Elster, J. (1986). *Rational choice*. Oxford: Basil Blackwell Ltd.
- Fisher, A. (2007). Helping those who are helping us: Sarbanes-Oxley whistleblower protection and its interplay with arbitration. *Cardoza Journal of Conflict Resolution*, 309.
- Frank, H. A., & Fink, D. R. (2008). Enhancing accountability: Should regulations similar to Sarbanes-Oxley be expanded to the local sector? *Journal of Public Budgeting, Accounting & Financial Management*, 510–536.
- Fry, B. R., & Jos, C. N. (2008). *Mastering Public Administration* (2nd ed. Raadschelders). Washington, DC: CQ Press.
- Goins, S., Giacomino, D. E., & Akers, M. D. (2009). Applying Sarbanes-Oxley principles to colleges and universities. *The CPA Journal*. <http://proquest.umi.com.pqdweb?did=>

1675111771&sid=1&Fmt=4&clientId=1997&RQT=309&VName=PQD (accessed June 23, 2009)

Grimm, L. G., & Yarnold, P. R. (1995). *Reading and understanding multivariate statistics*.

Washington DC: American Psychological Association.

Heyes, A., & Kapur, S. (2008). An economic model of whistle-blower policy. *The Journal of Law, Economics, & Organization*, 157–182.

Kidder, D. L. (2005). Is it ‘who I am’, “what I can get away with’, or “what you’ve done to me’? A multi-theory examination of employee misconduct. *Journal of Business Ethics*, 389–398.

Kohn, S. M. (2011). *The whistleblower’s handbook: A step-by-step guide to doing what’s right and protecting yourself*. Guilford, CT: Lyons Press.

Kranacher, M-J. (2005). Fraud edge: Cleaning our own house. De-frauding the halls of academe. *Fraud Magazine*.

Lowney, S., & Robbins, M. (2011). 2011 national business ethics survey: Workplace ethics in transition. Arlington, VA: Ethics Resource Center.

March, J. G., & Simon, H. A. (1958). *Organizations*. New York: John Wiley & Sons, Inc.

Marks, J. T. (2012). *A matter of ethics: Understanding the mind of a white-collar criminal*. Morristown, NJ.

Marx, G. (2006). *Future-focused leadership: Preparing schools, students, and communities for tomorrow’s realities*. Alexandria, VA: Association for Supervision and Curriculum Development.

- Mattie, J. (2004). Universities can apply lessons from Sarbanes-Oxley standards. *Kansas City Business Journal*. <http://www.bizjournals.com/kansascity/stories/2004/07/19/focus5.html?t=printable> (accessed July 9, 2009).
- Menditto, S. (2003). *NACUBO Advisory Report 2003-3*. New York: National Association of College and University Business Officers.
- Miller, G. J. (1992). *Managerial dilemmas: The political economy of hierarchy*. Cambridge: Cambridge University Press.
- Moberly, R. E. (2006). Sarbanes-Oxley's structural model to encourage corporate whistleblowers. *BYU Law Review*, 1107.
- Moe, T. M. (1979). On the scientific status of rational models. *American Journal of Political Science*, 23(1), 215–243.
- Moe, T. M. (1984). The new economics of organization. *American Journal of Political Science*, 739–777.
- National Center for Education Statistics. (2009). Digest of education statistics. <http://nces.ed.gov/programs/digest/d09/> (accessed June 30, 2010).
- Neustadt, R. E. (1990). *Presidential power and the modern presidents: The politics of leadership from Roosevelt to Reagan* (5th ed.). New York: Free Press.
- Pressman, J. L., & Wildavsky, A. B. (1984). *Implementation: How great expectations in Washington are dashed in Oakland: or, Why it's amazing that federal programs work at all, this being a saga of the economic development administration as told by two sympathetic observers who seek to build morals*. Berkeley, CA: University of California Press.

- Report to the Nations on Occupational Fraud and Abuse. (2014). *Association of Certified Fraud Examiners*. <http://www.acfe.com/rtnn/docs/2014-report-to-nations.pdf> (accessed June 26, 2014).
- Ribstein, L. E. (2002). Market vs. regulatory responses to corporate fraud: A critique of the Sarbanes-Oxley Act of 2002. *Journal of Corporation Law*, 1, 28.
- Robinson, K. (2012). Risk, fraud, and ethics... Avoiding the epic fail. *ASCPA, East Alabama Chapter Continuing Professional Education*, 34–38.
- Roosevelt, T (1910). Citizenship in a republic. <http://www.theodore-roosevelt.com/trsorbonnespeech.html> (accessed September 14, 2014).
- Rothschild, J., & Miethe, T. D. (1999). Whistle-blower disclosures and management retaliation: The battle to control information about organization corruption. *Work and Occupations*, 107–128.
- Seaman, J. K. (2009). An inquiry into the adoption of the best practices of Sarbanes-Oxley in institutions of higher education. Philadelphia: Drexel University.
- Shapiro, S. P. (2005). Agency theory. *Annual Review of Sociology*, 263–284.
- Simon, H. A. (1997). *Administrative behavior: A study of decision-making processes in administrative organizations*. New York: The Free Press.
- Smith, G. (2006). *Should the requirements of the Sarbanes-Oxley Act of 2002 (SOX) be applicable for universities and colleges?*
<http://www.jimsjournal.org/1%20Gene%20Smith.pdf> (accessed November 20, 2009).
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education, Inc.

Task Force on Mission. (2004, May 7). Welcome to Auburn University, Vision and Mission.

Auburn University. <http://www.ocm.auburn.edu/welcome/visionandmission.html>

(accessed December 8, 2009).

U.S. Department of Education Institute of Education Sciences (IES), National Center for

Education. (2010). *Revenues of Public Institutions*.

<http://nces.ed.gov/quicktables/result.asp?SrchKeyword=revenue&Topic=All> (accessed

June 30, 2010).

Van den Berg, A., & Meadwell, H. (2004). *The social sciences and rationality: Promise, limits,*

and problems. New Brunswick: Transaction Publishers.

Westman, D. P. (2005). The significance of Sarbanes-Oxley whistleblower provisions. *The*

Labor Lawyer, 142–143.

Appendix 1

HEIs responding to the “Other” category textual response provide an independent investigator as follows:

“Other” Method by which HEI investigates/resolves allegation/complaint (N = 38)

	(%)
Counsel	32
Audit Committee	11
CFO	8
VP Finance	8
Steering Committee -- HR, CFO, Counsel	3
Assoc. Provost for Faculty Affairs, VP Finance, Legal Affairs, Safety Officer	3
AVP for Admin & Assist to President	3
Board Chairman	3
Board member	3
Campus security, VP for Finance, or Provost	3
Controller	3
EO Officer	3
Ethics Officer -- Legal Office, Chief HR officer	3
Head of security (trained investigator)	3
Process owners	3
Public safety	3
Risk Compliance Officer	3
State IG	3
Third party if needed	3
Trustee designee	3

Appendix 2

Management, Governance, and Fraud Survey

Management, Governance, and Fraud

Default Question Block

[Turn on/off this block title](#)

Q1 Dear NACUBO Member,

Five years have passed since NACUBO's last survey on governance, internal controls, and ethics best practices. (The original surveys were inspired by the Sarbanes-Oxley Act of 2002 and NACUBO's related Advisory Report). Although over the past decade NACUBO has learned that many higher education institutions have altered their governance committee structures, instituted fiscal awareness programs, financial certification processes, ethical conduct codes, and confidential complaint mechanisms – it is time to understand how the higher education industry is evolving. Consequently, NACUBO invites you to participate in a survey on management, ethics, and fraud related issues. NACUBO is being assisted by ACUA and a doctoral candidate at Auburn University (Mr. Ken McMillan).

We are collecting institutional-level responses only. Results will be reported in the aggregate. Institution's identities will remain confidential.

The survey instrument has been tested by several controllers and feedback indicates that the time commitment is approximately 30 minutes. You can start, exit, and come back to the survey and your responses will be saved. Internal auditors at your institution (if you have internal auditors) are aware of the survey through their membership organization, ACUA, and will be available to assist you if necessary.

If you have any questions, please contact Sue Menditto (smenditto@nacubo.org) or Ken McMillan (kenmcmillan@auburn.edu) or 254-844-5521, or Ken's advisor, Dr. Cynthia Bowling (334-844-6152).

Please submit your survey by COB on Friday April 19th

NOTE – because NACUBO and ACUA are working with a doctoral candidate at Auburn University, all survey participants have access to an information letter that is required by Auburn University. You can access the information letter [here](#).

Q4 **Section I: Governance**

Q5 1.1 Are you a public institution where the audit committee represents a number of institutions within your system?

Yes

No

Q6 Please select the option that best reflects the implementation plans at your institution for each statement.

Please interpret the term "Audit Committee" broadly to mean the audit committee or equivalent at your institution or system.

If you are a public institution that does not have an audit committee, because the official committee is only at the System level, please answer from the perspective of the System.

	Yes	Plan to implement	Definitely will not implement	Undecided (may or may not implement)
1.2 An audit committee exists at your institution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.3 The audit committee is independent, meaning that management representatives do not have voting rights on the committee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.4 An audit committee charter exists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.5 The audit committee is required to perform a self-assessment against the responsibilities outlined in their charter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.6 At least one member of the audit committee is considered a "financial expert"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q61 1.7 How is the Form 990 tax return reviewed at your institution?

	Yes	No	N/A (we are a public institution)
A committee of the Board reviews	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The entire Board reviews	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 Section II: External Auditors and the Audit Committee

Q8 2.1-2.7 Please select the option that best reflects the implementation plans at your institution for each statement.

	Yes	Plan to implement	Definitely will not implement	Undecided (may or may not implement)
2.1 The audit committee has oversight of your institution's annual financial statement audit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2 The audit committee is involved in the selection of external auditors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.3 The audit committee evaluates the performance of the external auditors through a formal process.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4 The audit engagement letter is addressed to the audit committee rather than internal management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.5 The external auditors report the audit results directly to the audit committee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.6 The audit committee pre-approves non-audit services performed by the independent auditor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7 The external audit firm rotates the lead audit partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 2.8 Does your institution have a policy for rotating external audit firms?

Yes
 No
 N/A --We are a public institution that uses a state auditor

Q10 2.9 In addition to the financial statement audit, what additional work, if any, does your external audit firm perform? Select all that apply

Internal control review
 Fraud investigations
 Tax work
 IT systems implementations
 Indirect cost rate analysis
 Our external audit firm does not perform additional work
 N/A -- we are a public institution that uses a state auditor
 Other:

Q62 Section III: Financial Certifications

Q63 3.1-3.6 Please select the option that best reflects the implementation plans at your institution for each statement.

	Yes	Plan to implement	Definitely will not implement	Undecided (may or may not implement)	N/A - Public Institution (Form 990 question)
3.1 Managers with fiscal responsibility are required to certify financial results for which they are responsible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.2 The CFO publicly certifies financial statement results.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3 The CEO (president/Chancellor) publicly certifies financial statement results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.4 Your institution has formal fiscal training for managers with fiscal responsibility.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.5 The CFO signs the Form 990 Tax Return.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.6 The CEO signs the Form 990 Tax Return.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q64 **Section IV: Internal Controls**
The questions in this section apply to internal controls over financial reporting.

Q65 4.1 How does your institution assess internal controls over financial reporting? Select all that apply.

- Use the internal auditors
- Use the external auditors
- Outsource to a third party
- Use internal resources other than internal auditors
- We have no formal assessment
- Other:

Q66 4.2-4.3 Please select the option that best reflects the implementation plans at your institution for the following statements

	Yes	Plan to implement	Definitely will not implement	Undecided (may or may not implement)
4.2 Management periodically reports on internal controls to the audit committee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.3 Senior management is required to assert the adequacy of internal controls (over financial reporting) as such controls relate to the financial statements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q67 **Section V: Internal Audit**

Q68 **5.1 Does your institution have an internal audit function?**

Yes, we have an in-house internal audit function.

Yes, we outsource our internal audit function.

Yes, our internal audit function is a combination of in-house and outsourced.

No, we do not have an internal audit function.

Display This Question:
 If 5.1 Does your institution have an internal audit function? **Yes, we have an in-house internal audit function** is **Selected**

Or 5.1 Does your institution have an internal audit function? **Yes, we outsource our internal audit function** is **Selected**

Or 5.1 Does your institution have an internal audit function? **Yes, our internal audit function is a combination of in-house and outsourced** is **Selected**

Q69 **5.2-5.3 Please select the option that best reflects the environment at your institution for each statement.**

	Yes	Plan to implement	Definitely will not implement	Undecided (may or may not implement)
5.2 Your audit committee evaluates the performance of the internal auditors.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
5.3 The internal auditors report direct to the audit committee.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Display This Question:
 If 5.1 Does your institution have an internal audit function? **Yes, we have an in-house internal audit function** is **Selected**

Or 5.1 Does your institution have an internal audit function? **Yes, we outsource our internal audit function** is **Selected**

Or 5.1 Does your institution have an internal audit function? **Yes, our internal audit function is a combination of in-house and outsourced** is **Selected**

Q70 **5.4 Please indicate which functions your internal audit area performs. Select all that apply.**

Assessment of organizational governance such as audit committee surveys

Support to external auditors for financial statement audit

Assessment of compliance with code of ethics

Investigations of confidential complaints

Assurance to support the financial certification process

Assessment of internal controls over financial reporting

Internal audits of financial statements

Other: _____

Q11 **Section VI: Ethics**

The following questions concern both Ethics and Conflict of Interest policies, even if such matters are combined into one policy at your institution. Please answer all questions.

Q12

6.1-6.2 Please select the option that reflects the implementations plans at your institution for each statement.

	Yes	Plan to implement	Definitely will not implement	Undecided (may or may not implement)
6.1 Your institution has a <u>code of ethics</u> policy for senior management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.2 Your institution has a <u>code of ethics</u> policy for staff below the level of senior management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13

6.3 Does your institution require the governing board to approve the code of ethics policy?

Yes

No

Q14

6.4 Does your institution provide ethics training?

Yes

No

Q15

6.5 Please indicate which groups are required to attend the training. Select all that apply.

Executive management

Senior management

Staff

Deans

Faculty departments or unit heads

Faculty

Other

Q16

6.6-6.7 Please select the option that best reflects the implementation plans at your institution for each statement.

	Yes	Plan to implement	Definitely will not implement	Undecided (may or may not implement)
6.6 Your institution has a <u>conflict of interest</u> policy for senior management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.7 your institution has a <u>conflict of interest</u> policy for staff below the level of senior management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17

6.8 Does your institution require the governing board to approve the conflict of interest policy(ies)?

Yes

No

Q18 6.9 Does your institution provide conflict of Interest training?

Yes

No

Q19 6.10 Please indicate which groups are required to attend the training. Select all that apply.

Executive management

Senior management

Staff

Deans

Faculty department or unit heads

Faculty

Other:

Q20 **Section VII: Confidential Complaint Mechanisms**

The purpose of this series of questions is to determine your institution's level of Confidential Complaint Mechanism (CCM) policy implementation, expectations, affects, and barriers.

Q21

	Yes	Plan to implement	Definitely will not implement	Undecided (may or may not implement)
7.1 Your institution has a confidential complaint mechanism for employees (e.g. Hotline, Fax, Website, E-mail, Mailing Address, Physical Drop Box)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:
 If 7.1 Your institution has a confidential complaint mechanism for employees
 (e.g. Hotline, Fax, Website, E-mail, Mailing Address, Physical Drop Box). - Yes is Selected

Q34 7.1.1 When did you implement the confidential complaint mechanism?

Before July 2002

After July 2002

Not sure

Display This Question:
 If 7.1 Your institution has a confidential complaint mechanism for employees
 (e.g. Hotline, Fax, Website, E-mail, Mailing Address, Physical Drop Box). - Yes is Selected

Q22 7.1.2 Who led the decision making process? (Please list Official's title, not person's name)

Display This Question:
 IF 7.1 Your institution has a confidential complaint mechanism for employees-br /> (e.g. Hotline, Fax, Website, E-mail, Mailing Address, Physical Drop Box). - Yes' is Selected

Q23 7.1.3 What type of Confidential Complaint Mechanism does your institution use?
 Select all that apply.

Type of Confidential Complaint Mechanism	
Institutionally supported	<input checked="" type="checkbox"/>
Third-party vendor	<input type="checkbox"/>
Employees are directed to contact a designated law enforcement official	<input type="checkbox"/>
Other: <input type="text"/>	<input type="checkbox"/>

Display This Question:
 IF 7.1.3 What type of Confidential Complaint Mechanism is Selected **Institutionally supported - Type of Confidential Complaint Mechanism** is Selected

Q24 7.1.3.1 Which of the following channels does your institutionally-supported Confidential Complaint Mechanism use?
 Select all that apply.

- Hotline
- Fax
- Website
- E-mail
- Mailing address
- Physical drop box
- Employees are directed to contact an independent institutional official
- Other:

Display This Question:
 IF 7.1.3 What type of Confidential Complaint Mechanism is Selected **Third-party vendor - Type of Confidential Complaint Mechanism** is Selected

Q25 7.1.3.2 Which of the following channels does your third-party vendor supported Confidential Complaint Mechanism use?
 Select all that apply.

- Hotline
- Fax
- Website
- E-mail
- Mailing Address
- Physical drop box
- Other:

Display This Question:
 IF 7.1.3 What type of Confidential Complaint Mechanism is Selected **Other - Type of Confidential Complaint Mechanism** is Selected

Q26 7.1.3.3 If Other, to whom do Whistleblowers report the complaint?

Display This Question:
If **- Definitely will not implement** is Selected

Q54 7.1.4 Since your institution does not have a Confidential Complaint Mechanism, to whom do Whistleblowers report a complaint?

Display This Question:
If **- Yes** is Selected

Q27 7.2 Who investigates/resolves the allegation/complaint?
Select all that apply.

- Internal auditors
- Ombudsman for the institution
- Office of the President
- Human resources
- A departmental administrator
- State-level official
- Third-party vendor
- Other (please specify)

Display This Question:
If **- Definitely will not implement** is Selected

Q55 7.1.5 Who investigates/resolves the allegation/complaint?
Select all that apply.

- Internal auditors
- Ombudsman for the institution
- Office of the President
- Human resources
- A departmental administrator
- State-level official
- Third-party vendor
- Other (please specify)

Display This Question:
 If **-Yes** is Selected

Or **-Definitely will not implement** is Selected

Q48 7.3 How is the confidentiality of the Whistleblower protected?
 Select all that apply.

- Institutional policy prohibits Institutional agents (Management, Employees, etc.) from retaliating against Whistleblower
- Retaliator can be orally reprimanded
- Retaliator can be reprimanded in writing
- Retaliator can be dismissed
- Retaliator can be prosecuted
- Code of Ethics includes Whistleblower protection provisions
- Other (Specify)

Display This Question:
 If **-Yes** is Selected

Q28 7.4 In your opinion, how beneficial was the Confidential Complaint Mechanism program expected to be for **financial issues**?

	Highly beneficial	Very beneficial	Somewhat beneficial	Slightly beneficial	Not at all beneficial	N/A
Decrease fraud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gain insider's knowledge on alleged fraud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve confidence in institution's stewardship of public funds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhance grant proposals and funding solicitations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide competitive edge over non-implementers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lower operating costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify) <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:
 If **-Definitely will not implement** is Selected

Q56 7.1.6 In your opinion, how beneficial would you expect a Confidential Complaint Mechanism program to be for **financial issues**?

	Highly beneficial	Very beneficial	Somewhat beneficial	Slightly beneficial	Not at all beneficial	N/A
Decrease fraud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gain insider's knowledge on alleged fraud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve confidence in institution's stewardship of public funds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhance grant proposals and funding solicitations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide competitive edge over non-implementers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lower operating costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify) <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:
If **-Yes** is Selected

Q30 7.5 In your opinion, how beneficial was the Confidential Complaint Mechanism program expected to be for **governance issues**?

	Highly beneficial	Very beneficial	Somewhat beneficial	Slightly beneficial	Not at all beneficial	N/A
Proactively protect the institution's reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve internal information flow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve Institution's decision-making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify) <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:
If **-Definitely will not implement** is Selected

Q57 7.1.7 In your opinion, how beneficial would you expect a Confidential Complaint Mechanism program to be for **governance issues**?

	Highly beneficial	Very beneficial	Somewhat beneficial	Slightly beneficial	Not at all beneficial	N/A
Proactively protect the institution's reputation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve internal information flow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve Institution's decision-making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify) <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:
If **-Yes** is Selected

Q31 7.8 In your opinion, how beneficial was the Confidential Complaint Mechanism program expected to be for **ethics issues**?

	Highly beneficial	Very beneficial	Somewhat beneficial	Slightly beneficial	Not at all beneficial	N/A
Attract students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recruit & retain ethical employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Build local capacity for self-governance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve culture & signal that Institution supports ethical conduct & accountability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify) <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:
If -Definitely will not implement Is Selected

Q58 7.1.8 In your opinion, how beneficial would you expect a Confidential Compliant Mechanism program to be for ethics issues?

	Highly beneficial	Very beneficial	Somewhat beneficial	Slightly beneficial	Not at all beneficial	N/A
Attract students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recruit & retain ethical employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Build local capacity for self-governance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve culture & signal that Institution supports ethical conduct & accountability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:
If -Yes Is Selected

Q29 7.7 In your opinion, has the CCM Program been successful?

Yes
 No

Display This Question:
If -Yes Is Selected

Q52 7.8 How do you measure success/failure? What indicators do you look for?

Q38 **Section VIII: Fraud**

Q39 8.1 In the past three years, have there been cases of fraud at the Institution?

Yes
 No

Display This Question:
If 8.1 In the past three years, have there been cases of fra... Yes Is Selected

Q40 8.1.1 How many cases?

Display This Question:
If 8.1 in the past three years, have there been cases of fra. **Yes** is **Selected**

Q41 8.1.2 What aggregate levels of funds were affected by the frauds? (select one):

Less than \$60,000

\$60,001 to \$120,000

\$120,001 to \$180,000

\$180,001 to \$240,000

Greater than \$240,000

Not sure of aggregate amount of funds affected.

Display This Question:
If 8.1 in the past three years, have there been cases of fra. **Yes** is **Selected**

Q42 8.1.3 What was the case disposition? (Select all that apply over the last 3 years)

Accusation dismissed

Perpetrator received oral reprimand

Perpetrator received written reprimand

Perpetrator fired

Perpetrator prosecuted

Funds returned to the institution

Case disposition publicly disclosed

Unknown

Display This Question:
If 8.1.3 What was the case disposition? (Select all that app. **Funds returned to the institution** is **Selected**

Q43 8.1.3.1 List aggregate dollar amount of funds that were returned to the institution:

Display This Question:
If 8.1 in the past three years, have there been cases of fra. **Yes** is **Selected**

Q45 8.2 Was the Confidential Complaint Mechanism the source of discovering the fraud for any of the cases?

Yes

No

Not Sure

Display This Question:
If 8.2 Was the Confidential Complaint Mechanism the source of... **No** is Selected

Or 8.3 Was the Confidential Complaint Mechanism the source of... **Not Sure** is Selected

Q46 8.2.1 How was the fraud discovered? (Select all that apply in the last 3 years)

- Management Review
- Internal Audit
- By Accident
- Account Reconciliation
- Document Examination
- External Audit
- Notified by Law Enforcement (not part of the CCM)
- Surveillance/Monitoring
- Confession
- IT Controls
- Other (please specify)

Q49 8.3 In your opinion, a Whistleblower's primary motivation to disclose perceived/observed illegal acts is best described as:

- Following their moral code
- Correcting or preventing harm while doing more good than harm
- Disgruntled or opportunistic person desiring to cause problems within the organization
- Other:

Q50 8.4 Do you perceive there to be barriers that affect the use and/or success of the CCM for fraud reporting at your institution?

- Yes
- No

Display This Question:
 IF 8.43nbsp;Do you perceive there to be barriers that a **Yes** is Selected

Q51 8.4.1 In your opinion, to what extent did the following barriers adversely affect the Institution's level of CCM success? (select one answer for each available option):

	Significant affect	Moderate affect	Slight affect	No affect	N/A
Institutional pushback/resistance from Board of Trustees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutional pushback/resistance from the Office of the President/Chancellor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutional pushback/resistance from Faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutional pushback/resistance from Central Administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stakeholder disagreements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Policy disagreement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CCM program more complex than originally perceived	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perceived costs outweighed benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
External pushback/resistance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Low sense of urgency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CCM incompatible with institutional climate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Too many decision makers and/or unanticipated decision points	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Program administration/ responsibility issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anticipated too many "noise" disclosures would overwhelm institutional capacity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CCM advocate support waned (left position, diverted attention to higher priority, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Time constraints	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q53 8.5 Does having a CCM make sense for your institution? Why, what are the key reasons?

Yes _____

No _____

Q33 Please review your responses before advancing to the next page. You will not be able to edit your responses once you click the "Save and Continue" button.

Block 1
 (0 Questions) [Click to show questions.](#)

Appendix 3

Auburn University IRB Protocol 13-033 EX 1301 and Information Letter

**AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS
RESEARCH PROTOCOL REVIEW FORM**

For Information or help contact **THE OFFICE OF RESEARCH COMPLIANCE**, 115 Ramsay Hall, Auburn University
Phone: 334-844-5966 e-mail: hsubjec@auburn.edu Web Address: <http://www.auburn.edu/research/vpr/ohs/>

Revised 03.26.11 – DO NOT STAPLE, CLIP TOGETHER ONLY.

Save a Copy

1. PROPOSED START DATE of STUDY: Feb 1, 2013

PROPOSED REVIEW CATEGORY (Check one): FULL BOARD EXPEDITED EXEMPT

2. PROJECT TITLE: Management, Governance, and Fraud in Higher Education Institutions (HEIs)

3. Kenneth Neil McMillan Accountant III; CPA ACES Business Office 334-844-5528 mcmilke@auburn.edu
PRINCIPAL INVESTIGATOR TITLE DEPT PHONE AU E-MAIL

105 Duncan Hall, Auburn University, AL 36849 334-844-5345 kcmillan1903@charter.net
MAILING ADDRESS FAX ALTERNATE E-MAIL

4. SOURCE OF FUNDING SUPPORT: Not Applicable Internal External Agency: _____ Pending Received

5. LIST ANY CONTRACTORS, SUB-CONTRACTORS, OTHER ENTITIES OR IRBs ASSOCIATED WITH THIS PROJECT:

Collaborator: Sue Menditto, National Association of College and University Business Officers (NACUBO) Director of Accounting Policy

6. GENERAL RESEARCH PROJECT CHARACTERISTICS

6A. Mandatory CITI Training	6B. Research Methodology								
<p>Names of key personnel who have completed CITI: Kenneth N. McMillan <input checked="" type="checkbox"/> Cynthia J. Bowling <input checked="" type="checkbox"/></p> <p>CITI group completed for this study: <input checked="" type="checkbox"/> Social/Behavioral <input type="checkbox"/> Biomedical</p> <p align="center">PLEASE ATTACH TO HARD COPY ALL CITI CERTIFICATES FOR EACH KEY PERSONNEL</p>	<p>Please check all descriptors that best apply to the research methodology</p> <p>Data Source(s): <input checked="" type="checkbox"/> New Data Existing Data</p> <p>Will recorded data directly or indirectly identify participants? Yes <input checked="" type="checkbox"/> No</p> <p>Data collection will involve the use of:</p> <p><input type="checkbox"/> Educational Tests (cognitive diagnostic, aptitude, etc.) <input type="checkbox"/> Interview / Observation <input type="checkbox"/> Physical / Physiological Measures or Specimens (see Section 6E) <input checked="" type="checkbox"/> Surveys / Questionnaires <input checked="" type="checkbox"/> Internet / Electronic <input type="checkbox"/> Audio / Video / Photos <input type="checkbox"/> Private records or files</p>								
6C. Participant Information	6D. Risks to Participants								
<p>Please check all descriptors that apply to the participant population. <input checked="" type="checkbox"/> Males <input checked="" type="checkbox"/> Females <input type="checkbox"/> AU students</p> <p>Vulnerable Populations <input type="checkbox"/> Pregnant Women/Fetuses <input type="checkbox"/> Prisoners <input type="checkbox"/> Children and/or Adolescents (under age 19 in AL)</p> <p>Persons with:</p> <p><input type="checkbox"/> Economic Disadvantages <input type="checkbox"/> Physical Disabilities <input type="checkbox"/> Educational Disadvantages <input type="checkbox"/> Intellectual Disabilities</p> <p>Do you plan to compensate your participants? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Please identify all risks that participants might encounter in this research.</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> Breach of Confidentiality*</td> <td><input type="checkbox"/> Coercion</td> </tr> <tr> <td><input type="checkbox"/> Deception</td> <td><input type="checkbox"/> Physical</td> </tr> <tr> <td><input type="checkbox"/> Psychological</td> <td><input type="checkbox"/> Social</td> </tr> <tr> <td><input type="checkbox"/> None</td> <td><input type="checkbox"/> Other:</td> </tr> </table> <p>*Note that if the investigator is using or accessing confidential or identifiable data, breach of confidentiality is always a risk.</p>	<input checked="" type="checkbox"/> Breach of Confidentiality*	<input type="checkbox"/> Coercion	<input type="checkbox"/> Deception	<input type="checkbox"/> Physical	<input type="checkbox"/> Psychological	<input type="checkbox"/> Social	<input type="checkbox"/> None	<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> Breach of Confidentiality*	<input type="checkbox"/> Coercion								
<input type="checkbox"/> Deception	<input type="checkbox"/> Physical								
<input type="checkbox"/> Psychological	<input type="checkbox"/> Social								
<input type="checkbox"/> None	<input type="checkbox"/> Other:								
<p>Do you need IBC Approval for this study? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - BUA # _____ Expiration date _____</p>									

The Auburn University Institutional Review Board has approved this document for use from 1/23/13 to 1/22/16
 Protocol # 13-033 EX 1301

Received
 JAN 18 2013
 Research Compliance

FOR OHSR OFFICE USE ONLY	
DATE RECEIVED IN OHSR: 1-18-13 by <u>CB</u>	PROTOCOL # <u>13.033 EX 1301</u>
DATE OF IRB REVIEW: 1/23/13 by <u>CC</u>	APPROVAL CATEGORY: <u>45 CFR 46.101(b)(2)</u>
DATE OF IRB APPROVAL: _____ by _____	INTERVAL FOR CONTINUING REVIEW: <u>3 years</u>
COMMENTS: <u>no revisions</u>	

7. PROJECT ASSURANCES

PROJECT TITLE: Management, Governance, and Fraud in Higher Education Institutions (HEIs)

A. PRINCIPAL INVESTIGATOR'S ASSURANCES

1. I certify that all information provided in this application is complete and correct.
2. I understand that, as Principal Investigator, I have ultimate responsibility for the conduct of this study, the ethical performance this project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by the Auburn University IRB.
3. I certify that all individuals involved with the conduct of this project are qualified to carry out their specified roles and responsibilities and are in compliance with Auburn University policies regarding the collection and analysis of the research data.
4. I agree to comply with all Auburn policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of human subjects, including, but not limited to the following:
 - a. Conducting the project by qualified personnel according to the approved protocol
 - b. Implementing no changes in the approved protocol or consent form without prior approval from the Office of Human Subjects Research
 - c. Obtaining the legally effective informed consent from each participant or their legally responsible representative prior to their participation in this project using only the currently approved, stamped consent form
 - d. Promptly reporting significant adverse events and/or effects to the Office of Human Subjects Research in writing within 5 working days of the occurrence.
5. If I will be unavailable to direct this research personally, I will arrange for a co-investigator to assume direct responsibility in my absence. This person has been named as co-investigator in this application, or I will advise OHSR, by letter, in advance of such arrangements.
6. I agree to conduct this study only during the period approved by the Auburn University IRB.
7. I will prepare and submit a renewal request and supply all supporting documents to the Office of Human Subjects Research before the approval period has expired if it is necessary to continue the research project beyond the time period approved by the Auburn University IRB.
8. I will prepare and submit a final report upon completion of this research project.

My signature indicates that I have read, understand and agree to conduct this research project in accordance with the assurances listed above.

Kenneth Neil McMillan

Printed name of Principal Investigator


Principal Investigator's Signature
(SIGN IN BLUE INK ONLY)

Jan 18, 2013

Date

B. FACULTY ADVISOR/SPONSOR'S ASSURANCES

1. By my signature as faculty advisor/sponsor on this research application, I certify that the student or guest investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
2. I certify that the project will be performed by qualified personnel according to the approved protocol using conventional or experimental methodology.
3. I agree to meet with the investigator on a regular basis to monitor study progress.
4. Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them.
5. I assure that the investigator will promptly report significant adverse events and/or effects to the OHSR in writing within 5 working days of the occurrence.
6. If I will be unavailable, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the OHSR by letter of such arrangements. If the investigator is unable to fulfill requirements for submission of renewals, modifications or the final report, I will assume that responsibility.
7. I have read the protocol submitted for this project for content, clarity, and methodology

Cynthia J. Bowling

Printed name of Faculty Advisor / Sponsor


Signature (SIGN IN BLUE INK ONLY)

Jan 18, 2013

Date

C. DEPARTMENT HEAD'S ASSURANCE

By my signature as department head, I certify that I will cooperate with the administration in the application and enforcement of all Auburn University policies and procedures, as well as all applicable federal, state, and local laws regarding the protection and ethical treatment of human participants by researchers in my department.

Gerard Gryski

Printed name of Department Head


Signature (SIGN IN BLUE INK ONLY)

Jan 18, 2013

Date

8. PROJECT OVERVIEW: Prepare an abstract that includes:

(400 word maximum, in language understandable to someone who is not familiar with your area of study):

I.) A summary of relevant research findings leading to this research proposal:

(Cite sources; include a "Reference List" as Appendix A.)

II.) A brief description of the methodology;

III.) Expected and/or possible outcomes, and,

IV.) A statement regarding the potential significance of this research project.

The purpose of this descriptive study is to determine HEI management, governance, and the level of implementation, expectations and effects from voluntarily implementing National Association of College and University Business Officers' (NACUBO)-recommended Sarbanes-Oxley (SOX) Act of 2002 whistleblowing Best Practices (BP) provisions. Following a series of high-profile corporate financial scandals, the U.S. Congress enacted SOX for publicly traded companies. At present, SOX is not mandatory for public universities and colleges. However, data indicate fraud can be an even bigger issue in PHEIs than in publicly traded corporations. It may be possible to reap numerous benefits from selectively implementing locally appropriate SOX whistleblowing provisions while mitigating the adverse effects from full-scale SOX implementation. In light of cutback budgets and potential sustainable SOX benefits, a review of the literature indicates PHEIs should consider voluntarily selecting and implementing applicable SOX principles and NACUBO recommendations tailored to their specific circumstances.

Methodology: Utilizing a quantitative (Web-based survey) research method, the present researcher can gain insight into key topical elements and policy implications from participants.

Possible outcomes: I hypothesize that (H1) The level of SOX Best Practices implementation has increased from 2007 NACUBO survey levels as Public HEIs (PHEIs) have assessed cost-benefit advantages; (H2) PHEIs that assess whistleblowers as "Conscious clearing" or "Punitive" have lower levels of SOX Best Practices (Anti-Retaliation & CCM) implementation than PHEIs who assess whistleblowers as "Welfarists"; (H3) Locally-tailored PHEI SOX Best Practices (Anti-Retaliation & CCM) policy implementation resulted in positive self-assessed tangible/intangible results; (H4) PHEIs with impartial investigators of alleged retaliation and fraud complaints (impartial Institutional agent, Law Enforcement, Third-party Vendor, Other) recommend continuing the SOX Best Practices (Anti-Retaliation & CCM) policies; and, (H5) PHEIs with high-level decision-maker involvement in Anti-Retaliation & CCM policy implementation had increased self-assessed program effectiveness over those without executive leadership/governance support.

Potential significance of this research project: Higher Education Institutions (HEIs) are the fifth highest organizations where fraud is reportedly occurring (up from sixth place in 2010) (Report, 2012). "The typical organization loses 5% of its annual revenues to occupational fraud; to make matters worse, "40 – 50% of victim organizations do not recover any of their fraud losses" (Report, 2012). Applied to the most recently available [2007] total annual revenues, PHEIs could readily lose an average of \$13.4 billion per year due to occupational fraud. This loss would have been sufficient to replace all of the PHEI combined revenues for Alabama, Colorado and Mississippi during the 2007 academic year. With adequate Institutional survey participation, this research can add to the body of knowledge concerning the PHEI level of implementation, expectations and effects, and barriers to SOX whistleblowing implementation. This research could also encourage implementers to continue supporting their policy and encourage non-implementers to voluntarily implement by publishing the benefits of implementation. Peer-reviewed SOX whistleblower research over the last ten years has mainly dealt with corporate entities. The last NACUBO study found an increase in Public/Private HEI Confidential Complaint Mechanism (CCM) implementation from 47% (2004) to 65% (2007). While the CCM implementation increase can be viewed as an improvement, two overarching questions remain: (1) "Why are 35% of responding institutions still choosing to not implement CCM?", and (2) "Are responding institutions implementing effective whistleblowing protection provisions?" These two questions address key Structural Model and Anti-Retaliation Model issues, respectively. The following generalizable data do not exist: (1) whether or not voluntarily implementing SOX whistleblowing Best Practices benefits PHEIs, (2) what whistleblowing policies were implemented and why they were chosen, and (3) what factors (barriers) were present with non-implementing PHEIs.

9. PURPOSE.

a. Clearly state all of the objectives, goals, or aims of this project.

The goal of this descriptive research project is to assess the PHEI level of SOX Best Practices implementation, expectations & effects and barriers. The present research will concentrate on two of the above-stated SOX areas: whistleblowing policy and confidential complaint mechanism establishment. The whistleblowing policy, also known as the "Anti-Retaliation" Model, is geared towards protecting the whistleblower after disclosure (Moberly 2006). The confidential complaint mechanism, also known as the "Structural" Model, is optimally geared towards providing an internal "direct and legitimate" disclosure channel (Moberly 2006).

Properly assessing PHEIs' level of implementation, expectations and effects from voluntarily implementing NACUBO-recommended SOX Act whistleblowing best practices provisions requires gaining access to-, building trust with-, and inquiring of the appropriate, knowledgeable stakeholders. There is a dearth of literature on PHEIs' SOX whistleblowing best practices implementation/expectations/effects, as peer-reviewed SOX whistleblowing research over the last ten years has mainly dealt with corporate entities. A recent study utilized responses from Higher Education Institution General Counsel. Although the web-based survey was followed by telephonic interviews, the limited sampling frame and the researcher's low survey response rate reduces the generalizability of the study's results by neglecting alternative perspectives.

b. How will the results of this project be used? (e.g., Presentation? Publication? Thesis? Dissertation?)

The results of this project will be used in my Dissertation. Follow-on research, presentations and/or publications are also possibilities.

10a. **KEY PERSONNEL.** Describe responsibilities. Include information on research training or certifications related to this project. **CITI is required.** Be as specific as possible. (Attach extra page if needed.) All non AU-affiliated key personnel must attach CITI certificates of completion.

Principle Investigator Kenneth Neil McMillan Title: Accountant III E-mail address mcmilke@auburn.edu
 Dept / Affiliation: ACES Business Office, Auburn University AL 36849

Roles / Responsibilities:

Literature Review, prepare survey instrument, conduct survey, analyze data, report results.

Individual: Cynthia J. Bowling Title: Assoc. Professor E-mail address bowlicj@auburn.edu
 Dept / Affiliation: AU Political Science

Roles / Responsibilities:

Dissertation Chair.

Individual: _____ Title: _____ E-mail address _____
 Dept / Affiliation: _____

Roles / Responsibilities:

Individual: _____ Title: _____ E-mail address _____
 Dept / Affiliation: _____

Roles / Responsibilities:

Individual: _____ Title: _____ E-mail address _____
 Dept / Affiliation: _____

Roles / Responsibilities:

Individual: _____ Title: _____ E-mail address _____
 Dept / Affiliation: _____

Roles / Responsibilities:

11. **LOCATION OF RESEARCH.** List all locations where data collection will take place. (School systems, organizations, businesses, buildings and room numbers, servers for web surveys, etc.) Be as specific as possible. Attach permission letters in Appendix E.

(See sample letters at <http://www.auburn.edu/research/vpr/ohs/sample.htm>)

Survey will be online through the National Association of College and University Business Officers (NACUBO). NACUBO is a voluntary organization comprised of public and private higher education institution business officers. NACUBO is collaborating with the Association of College & University Auditors (ACUA). Only NACUBO member organizations and ACUA members will be polled. Instrument captures Institutional-level responses. No currently solicited data identifies individual respondents.

12. PARTICIPANTS.

a. Describe the participant population you have chosen for this project.

Check here if there is existing data; describe the population from whom data was collected & include the # of data files.

The unit of analysis is Higher Education Institutions (HEIs). Although the voluntary NACUBO and ACUA respondents will be an Institutionally-designated person, the data will be collected and reported at the Organizational (Institutional) level. No questions identify any person's name. NACUBO already has data from surveys conducted in 2004 and 2007. Population was NACUBO member Institutions. Existing NACUBO Excel files include the following: (1) SOX demographics, (2) SOX 2007 nice tables for website, (3) 2004 SOX survey results, (4) SarbanesOxley Survey Data, (5) NACUBO SOX Results 2004, (6) SOX 2007 nice tables for website pub private, (7) SOX 2007 nice tables for website FTE. PDF files include the following: (1) Sox Follow-up 12-07, and (2) BOM200807_Sox_Table1.

b. Describe why is this participant population is appropriate for inclusion in this research project. (Include criteria for selection.)

As higher education decision makers, NACUBO members' highly valued input can further our understanding of management, governance, and whistleblower best practices implementation status, rationale, effects and barriers. Higher education institutional administrators and leaders are key stakeholders in selecting and successfully implementing best practices in order to gain insider's (whistleblower's) trust and information of alleged retaliation and/or fraud. ACUA members can provide subject matter expert assistance to NACUBO members and/or provide a separate Institutional response at their choosing. Participants must be 19 years old or older in order to participate in this study. Member Institutions can decide who (if anyone) will respond for the Institution.

c. Describe, step-by-step, all procedures you will use to recruit participants. Include in Appendix B a copy of all e-mails, flyers, advertisements, recruiting scripts, invitations, etc., that will be used to invite people to participate.

(See sample documents at <http://www.auburn.edu/research/vpr/ohs/sample.htm>)

1. The survey will be conducted online through NACUBO research systems.
2. NACUBO will electronically send member Institutions a Survey invitation. (Appendix B-1).
3. ACUA will send their members a Survey announcement (Appendix B-2).
4. NACUBO and/or ACUA will send non-responding Institutions follow-up e-mail reminders (projected to be at two-week intervals) if needed.

What is the minimum number of participants you need to validate the study? ¹⁵⁰ _____

Is there a limit on the number of participants you will recruit? No Yes – the number is _____

Is there a limit on the number of participants you will include in the study? No Yes – the number is _____

d. Describe the type, amount and method of compensation and/or incentives for participants.

(If no compensation will be given, check here .)

- Select the type of compensation: Monetary Incentives
- Raffle or Drawing incentive (Include the chances of winning.)
 - Extra Credit (State the value)
 - Other

Description:

13. PROJECT DESIGN & METHODS.

a. Describe, step-by-step, all procedures and methods that will be used to consent participants.

(Check here if this is "not applicable"; you are using existing data.)

1. NACUBO will send member Institutions an e-mail invitation for the on-line survey (Appendix B-1).
2. ACUA will send members an e-mail invitation announcing the on-line survey (Appendix B-2).
3. The NACUBO e-mail includes a link to the on-line survey.
4. The survey includes the enclosed Electronic Information Letter for Adult Participants (age 19+).

b. Describe the procedures you will use in order to address your purpose. Provide a step-by-step description of how you will carry out this research project. Include specific information about the participants' time and effort commitment. (NOTE: Use language that would be understandable to someone who is not familiar with your area of study. Without a complete description of all procedures, the Auburn University IRB will not be able to review this protocol. If additional space is needed for this section, save the information as a .PDF file and insert after page 6 of this form.)

I will conduct a descriptive study to determine HEI's management, governance, and level of implementation, expectations and effects from voluntarily implementing NACUBO-recommended whistleblowing best practices provisions. The Research Setting is a Web-based NACUBO survey of equivalent 4-year degree-granting U.S. Universities. The Unit of Analysis is HEIs. Concerning Methodology, this study will help illuminate their level of implementation, expectations and effects from voluntarily implementing NACUBO-recommended whistleblowing best practices provisions; the study will also further the body of knowledge on non-implementer's barriers. By design, this is a study utilizing a web-based survey instrument to determine HEI level of implementation, expectations & effects and barriers.

Case Selection: With regards to the Sampling Frame, University and college administrators answer to a broad constituency, including the general public (i.e., taxpayers, students' parents, and students), alumni, donors, foundations, governmental agencies and grantors. Additionally, a broad spectrum of university employees can be adversely affected when a culture of condoned- and/or punished- fraudulent activity is exhibited. This hostile environment can make recruiting and retaining ethical public servants problematic. Comprehensively answering the research questions involves gathering inputs and perspectives from diverse, informed constituencies. The present researcher will collaboratively collect data from knowledgeable PHEI decision-makers and informed key administrators.

Participants' one-time effort commitment is estimated to be 25-30 minutes with the online survey. NACUBO recently pilot-tested the survey with two experienced HEI Controllers for content, salience and elapsed time; results were positive. Participants can only access the Survey once. I anticipate making the survey available from 02/01/13 to 05/31/13.

NACUBO will send member Institutions an e-mail announcement introducing the Survey and requesting Institutional participation (see Appendix B-1). ACUA will subsequently send members a related e-mail introducing the Survey and requesting members assist in their Institutional response (see Appendix B-2).

13c. List all data collection instruments used in this project, in the order they appear in Appendix C.

(e.g., surveys and questionnaires in the format that will be presented to participants, educational tests, data collection sheets, interview questions, audio/video taping methods etc.)

Data collection instrument will consist of an online survey, consisting of question stems, multiple choice answers (closed-ended), and short fill-in (open-ended) answer options. A pdf version of the Instrument is enclosed (Appendix C).

The web-based, skip-pattern instrument is located at: https://nacubo.qualtrics.com/SE/?SID=SV_ey58J2lxz6HmQQt

Research Sites and Data Sources: NACUBO and ACUA respondents. Previous NACUBO respondents (2003 and 2007) consisted primarily of upper-level management at private and public higher education institutions. Although the 2012 survey will be sent to both types of institutions, the present research will only analyze and report the Public HEI data for purposes of the dissertation.

Previous NACUBO surveys dealt with broad-brush issues. The present researcher's survey instrument has the ability to provide rich, textured "how" and "why" contextual data into best practice implementation and barriers. The professionally-designed survey will include an electronic cover letter briefly explaining the purpose of the research, establishing trust and promising participant's confidentiality, and expressing goodwill motivation to participate in the voluntary study. The survey will contain well-arranged questions. Skip questions and associated electronic flow will enhance survey response. The quantitative survey will provide the researcher nomothetic (general to specific), deductive research results.

I will utilize data from the previous NACUBO surveys if they help explain the 2012 data.

d. Data analysis: Explain how the data will be analyzed.

In-depth data analysis will occur from 06/1/13 to 08/31/13. I will utilize multiple regression techniques with dichotomous independent variables to analyze the data. Some of the data are addressed using logistic regression analysis. SPSS is the software of choice. Using statistical controls, the researcher will be able to hold constant particular values, subsequently ascertaining the independent variable's effect on the dependent variable.

14. RISKS & DISCOMFORTS: List and describe all of the risks that participants might encounter in this research. If you are using deception in this study, please justify the use of deception and be sure to attach a copy of the debriefing form you plan to use in Appendix D. (Examples of possible risks are in section #6D on page 1.)

The only known risk is breach of confidentiality. Participant's identity is not solicited in the instrument. NACUBO's survey mechanism will be able to identify member Institution's identity, not the identity of people. This Institutional identification will enable NACUBO to tie basic demographics (public versus private institution, size of student population, size of faculty, Institutional revenues and expenses, etc.) to responses. Only NACUBO, Ken McMillan (PI), and Dr. Bowling (Dissertation Chair) will have access to Institutionally-identifiable data. Other than losing the limited time to complete the survey, there are no anticipated or known reasonable discomforts associated with the survey.

15. **PRECAUTIONS.** Identify and describe all precautions you have taken to eliminate or reduce risks as listed in #14. If the participants can be classified as a "vulnerable" population, please describe additional safeguards that you will use to assure the ethical treatment of these individuals. Provide a copy of any emergency plans/procedures and medical referral lists in Appendix D.
Data is being collected at the Institutional level. No individual's name is solicited.

If using the Internet to collect data, what confidentiality or security precautions are in place to protect (or not collect) identifiable data? Include protections used during both the collection and transfer of data.

(These are likely listed on the server's website.)

The NACUBO data collection system is secure. Only Institutional-based data is solicited. No human subjects data is involved. NACUBO will e-mail the data to the PI. Initially, the data will include each respondent's Organizational name. The PI will use this name to ensure Organizations are not double-counted (data integrity). The PI will then assign codes to each participating Organization. The PI will store this code on a thumb drive, stored in the Alabama Cooperative Extension System (ACES) Business Office in Room 105 Duncan Hall, Auburn University, AL 36849. Only the following have access to Room 105: PI, ACES Director (Dr. Gary Lemme), ACES Director of Finance (Stacey Walker, CPA), ACES Deputy Director of Finance (Ken Jordan), and City of Auburn Department of Public Safety.

16. **BENEFITS.**

- a. **List all realistic direct benefits participants can expect by participating in this specific study.**

(Do not include "compensation" listed in #12d.) Check here if there are no direct benefits to participants.

Participants can know that they provided key input(s) helping to explain their expectations and tangible/intangible benefits from selectively implementing locally appropriate whistleblowing provisions while mitigating the adverse effects from full-scale best practices implementation. Implementers can know their explanation of what justifies implementation (such as the benefits outweigh the costs) could encourage non-implementers to consider pursuing implementation. Non-implementing respondents can be satisfied that they helped explain their rationale for so choosing.

- b. **List all realistic benefits for the general population that may be generated from this study.**

Fraud wastes scarce public resources. Institutions need insider's (whistleblowers') knowledge of alleged wrongdoings. Without effective whistleblowing policies, institutions needlessly lose financial resources. The present research can (1) assess the level of implementation, (2) explain implementers' expectations, (3) quantify implementers' tangible/intangible effects, and (4) document non-implementers' barriers and rationale. With heightened awareness (through publication of findings and recommendations), the present research can encourage increased implementation, help mitigate fraud, and decrease the adverse effects of retaliation.

17. PROTECTION OF DATA.

- a. Will data be collected as anonymous? Yes No *If "YES", skip to part "g".*

("Anonymous" means that you will not collect any identifiable data.)

- b. Will data be collected as confidential? Yes No

("Confidential" means that you will collect and protect identifiable data.)

- c. If data are collected as confidential, will the participants' data be coded or linked to identifying information?

Yes (If so, describe how linked.) No

Responding Institutions will be identifiable only to NACUBO and the PI. Since NACUBO is a voluntary national organization of higher education institutions, NACUBO already has demographic data on member institutions (student population, gender composition, etc.). No human subject data is solicited. If respondents provide unsolicited data identifying any individual, NACUBO will redact that individual data. The NACUBO survey mechanism is access-restricted. NACUBO will electronically send the data to the PI (Excel spreadsheets). The PI will compare Institutional responses to ensure Institutions are not double-counted (which would affect weights and statistical analysis). After ensuring the Institutions are appropriately represented, the PI will assign codes to each discrete Institution. The PI will then redact each Institution's identifying name from the PI's data set. NACUBO will indefinitely retain their data set as-is.

- d. Justify your need to code participants' data or link the data with identifying information.

Primarily, knowing the Institution's identity is related only to verifying their public versus private and/or 2-year versus 4-year degree granting characterization. Correctly characterizing each Institution is important in order to interpret and report the data. Results will only be reported in the aggregate. No individuals or Institutions will be identified.

- e. Where will code lists be stored? (Building, room number?)

The PI's Code List will be stored in the ACES Safe, apart from the data set. The ACES Safe is located in the Alabama Cooperative Extension System (ACES) Business Office, 116B Duncan Hall, Auburn University, AL 36849.

- f. Will data collected as "confidential" be recorded and analyzed as "anonymous"? Yes No

(If you will maintain identifiable data, protections should have been described in #15.)

- g. Describe how and where the data will be stored (e.g., hard copy, audio cassette, electronic data, etc.), and how the location where data is stored will be secured in your absence. For electronic data, describe security. If applicable, state specifically where any IRB-approved and participant-signed consent documents will be kept on campus for 3 years after the study ends.

I will maintain the coded, Institutional-level data in my locked office, Alabama Cooperative Extension System (ACES) Business Office, 105 Duncan Hall, Auburn University, AL 36849. The ACES Director, ACES Director of Finance, and myself have keys to this room. Data will be stored on restricted-access disk and/or thumb drive. The thumb drive will be kept in Duncan Hall Room 105, apart from the Code List. Only the following have access to the restricted-access disk; PI, ACES Business Office personnel, ACES OIT. Only the following have access to the thumb drive: PI and Dissertation Chair.

- h. Who will have access to participants' data?

(The faculty advisor should have full access and be able to produce the data in the case of a federal or institutional audit.)

Kenneth N. McMillan (PI), Dr. Cynthia J. Bowling (Faculty Advisor), Sue Menditto (NACUBO Director of Accounting Policy), and Stephanie Newman (ACUA Executive Director) will have access to the anonymous data. Sue Menditto (NACUBO Director of Accounting Policy), the NACUBO Research & Policy Analysis Director (Natalie Pullaro Davis), the PI and Faculty Advisor will have access to the Institution's identification.

- i. When is the latest date that confidential data will be retained? (Check here if only anonymous data will be retained.)

NACUBO will retain the confidential Institutional data up to indefinitely. The PI will retain the Code List up to three (3) years following Dissertation completion. The PI will retain the anonymous data indefinitely.

- j. How will the confidential data be destroyed? (NOTE: Data recorded and analyzed as "anonymous" may be retained indefinitely.)

The PI will delete each Institution's identifying name from the PI's data set. The PI will shred printed Code List(s) in the ACES shredder. The PI will delete electronic Code List(s) and reformat the thumb drive. The PI will not destroy the anonymous Institutional data; I will retain the anonymous Institutional data indefinitely. NACUBO will follow their data retention policies and procedures.



Administrative Services
117 Duncan Hall
Auburn University, AL 36849-5613
Phone: 334-844-5324
Fax: 334-844-5345

18 January 2013

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

INFORMATION LETTER for a Research Study entitled
"Management, Governance, and Fraud"

You are invited to participate in a research study to determine higher education institutions' Management, Governance, and Fraud-prevention practices. The study is being conducted by the National Association of College and University Business Officers (NACUBO), the Association of College and University Auditors (ACUA), and Ken McMillan, Ph.D. Candidate, CPA, under the direction of Cynthia J. Bowling, Associate Professor in the Auburn University Department of Political Science and Public Administration. You were selected as a possible participant because you are a key higher education institution administrator and leader.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to complete an on-line survey.

Are there any risks or discomforts? The risks associated with participating in this study are minimal. The only known risk is breach of confidentiality. Participant's identity is not solicited in the survey. NACUBO's survey mechanism will be able to identify member Institution's identity, not the identity of people. This Institutional identification will enable NACUBO to tie basic demographics (public versus private institution, size of student population, size of faculty, Institutional revenues and expenses, etc.) to responses. Only NACUBO, Ken McMillan and Dr. Bowling will have access to Institutionally-identifiable data. Results will not identify Institutions (i.e., we will report aggregate results). Other than losing the limited time to complete the survey, there are no anticipated or known reasonable discomforts associated with the survey.

Are there any benefits to yourself or others? If you participate in this study, you can expect to contribute to our collective understanding of benchmark Management, Governance, and Fraud practices in higher education. We cannot promise you that you will receive any or all of the benefits described. Benefits to others may include re-evaluating their Management, Governance, and Fraud policies.

Will you receive compensation for participating? No compensation is available.

The Alabama Cooperative Extension System (Alabama A&M University and Auburn University) is an equal opportunity educator and employer.
Research of Institutional Data
1/23/13 to 1/23/16
Project # 13-033EX 1301



Alabama A&M and Auburn Universities

Administrative Services
117 Duncan Hall
Auburn University, AL 36849-5613
Phone: 334-844-5324
Fax: 334-844-5345

18 January 2013

If you change your mind about participating, you can withdraw at any time by closing your browser window. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with NACUBO, ACUA, Auburn University, or the Alabama Cooperative Extension System.

Any data obtained in connection with this study will remain confidential to the researcher. We will protect your privacy and the data you provide by asking for and retaining only Institutional-level data. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional meeting, etc.

If you have questions about this study, please contact Ken McMillan at (334) 844-5528 (or memilke@auburn.edu) or Dr. Cynthia Bowling at (334) 844-6152 (or bowlicj@auburn.edu).

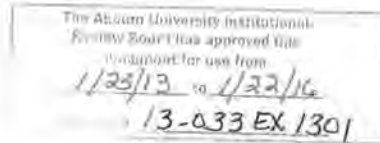
If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Investigator Kenneth N. McMillan Date 1/18/13
Co-Investigator Cynthia J. Bowling Date

The Auburn University Institutional Review Board has approved this document for use from to . Protocol #

The Survey link has been provided in an e-mail to member Institution Controllers from Sue Menditto, NACUBO Director of Accounting Policy.



Appendix 4

Auburn University IRB Protocol 13-033 EX 1301 Modification

**AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS
REQUEST for PROTOCOL MODIFICATION**

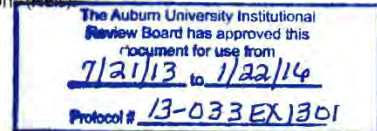
For Information or help contact THE OFFICE OF HUMAN SUBJECTS RESEARCH, 115 Ramsay Hall, Auburn University
Phone: 334-844-5966 e-mail: hsubject@auburn.edu Web Address: http://www.auburn.edu/research/vpr/ohs/index.htm

Complete this form using Adobe Acrobat Writer (versions 5.0 and greater). Hand written copies are not accepted.

1. Protocol Number: 13-033EX 1301 2. IRB Approval Dates: From: 01/23/13 To: 01/22/16
3. Project Title: Management, Governance, and Fraud in Higher Education Institutions (HEIs)
4. Kenneth Neil McMillan Accountant III ACES Business Office (334) 844-5528 mcmilke@auburn.edu

Principal Investigator	Title	Department	Phone	AU E-Mail
Ken McMillan	105 Duncan Hall, Auburn University, AL 36849			mcmilke@aces.edu
PI Signature	Mailing Address			Alternate E-Mail
Cynthia J. Bowling		Political Science	(334) 844-6152	bowlicj@auburn.edu
Faculty Advisor	FA Signature	Department	Phone	AU E-Mail
	Gerry Gryski			nnyanks@auburn.edu
5. Current External Funding Agency: N/A
6. List any contractors, sub-contractors, other entities or IRBs associated with this project: Collaborator: Sue Menditto, National Association of College and University Business Officers (NACUBO) Director of Accounting Policy
7. Briefly list (numbered or bulleted) the activities that occurred up to this point, particularly those that involved participants.

NACUBO has collected 224 valid responses from Private and Public Higher Education Institutions (HEIs).



8. Describe the requested changes to your research protocol, with an explanation and/or rationale for each. (Additional pages may be attached if needed to provide a complete response.)

No new consent.

IRB Protocol Section 13c (Page 7 of 11): Change sentence:

"Although the 2012 survey will be sent to both types of institutions, the present researcher will only analyze and report the Public HEI data for purposes of this dissertation"

to read as follows:

"The 2013 survey will be sent to both types of institutions; the present researcher will analyze and report the Public and Private HEI data for purposes of this dissertation."

Rationale for change: The Survey response rate for Public HEIs fell below the desired rate, despite robust NACUBO and PI researcher efforts. Including the already-obtained Private HEI data will enhance the dissertation study by providing Public and Private HEI results (versus only Public HEI results). The dissertation Chair fully supports this modification.



9. Are there any changes in the "key research personnel" that have access to participants or data? NO YES
(If "YES", identify each individual and explain the reason(s) for each change.) Attach CITI proof of completion for all new key personnel.

10. Identify any changes in the anticipated risks and / or benefits to the participants.

There is no change in the anticipated risks to the participants. The data has already been collected for both Public and Private HEIs.

Anticipated benefits to the participants: Including Private HEI data and analysis in the dissertation will enhance the benefits already listed in Research Protocol Section 16 -- namely, Private HEI participants can know that they provided key inputs helping explain their expectations and tangible/intangible benefits from selectively implementing locally appropriate whistleblowing provisions while mitigating the adverse effects from full-scale best practices implementation. Private HEI implementers can know their explanation of what justifies implementation (such as the benefits outweigh the costs) could encourage non-implementers to consider pursuing implementation. Non-implementing Private HEI respondents can be satisfied that they helped explain their rationale for so choosing.

11. Identify any changes in the safeguards or precautions that will be used to address anticipated risks.

None.

Note: For Item 15 (below), a new Information Letter is not applicable, as (1) the data has already been collected by NACUBO, and (2) the approved Information Letter was written to already accommodate both Private HEI and Public HEI respondents.

12. Attach any additional supporting documentation to assist the IRB in evaluating your request for protocol modifications, including other agency or IRB approvals or renewals.
13. If research is being conducted at sites other than Auburn University or in cooperation with other entities, a letter from the site or program director must be included acknowledging their acceptance of the proposed changes.
(See OHSR website for guidance: <http://www.auburn.edu/research/vpr/ohs/sample.htm> .)
14. Attach a copy of any and all "stamped" IRB-approved forms you are currently using (*information letters, consents, etc.*)
15. Attach a new copy of your consent document(s), including updated information regarding the requested changes.
(Be sure to review the OHSR website for current consent document guidelines and updated contact information.)

When complete, submit hard copy with signatures to the Office of Human Subjects Research,
115 Ramsay Hall, Auburn University, AL 36849

2 of 2

NACUBO agreement

From: [Menditto, Susan](#)
To: [Kenneth Mcmillan](#)
Cc: [Cynthia Bowling](#)
Subject: RE: FTE Summary of Management and Governance Survey data
Date: Friday, July 12, 2013 7:49:15 AM

Hi Ken,

Yes, I accept this proposed change for Mr. McMillan to analyze and report the Public and Private HEI data for purposes of this dissertation.

Let's catch up soon.

Best - Sue

From: Kenneth Mcmillan [mailto:mcmilke@aces.edu]
Sent: Friday, July 12, 2013 8:46 AM
To: Menditto, Susan
Cc: Kenneth Mcmillan; Cynthia Bowling
Subject: RE: FTE Summary of Management and Governance Survey data

Sue,

The sample size is sufficient for now – I was looking for 150 & we had 224. Perhaps we can do a follow-up down the road and solicit responses from a different angle & group – such as only ACUA members. If they were willing to participate, they could shed further light on fraud insights from a unique perspective. As for now, what we have appears to be sufficient.

On a side note, I submitted an IRB Modification Wednesday to Auburn University so that I could analyze both Public and Private Institution data in my Dissertation (my original IRB was written towards only Public Institutions in order to limit the scope). With the Public sample size being less than desired, my Chair wholeheartedly agreed to have me include Private Institutions. From previous discussions I know you wanted me to include Public & Private Institutions. Just in case the IRB needs documentation that NACUBO accepts this proposed change, can you just respond with either:

- “Yes, I accept this proposed change for Mr. McMillan to analyze and report the Public and Private HEI data for purposes of this dissertation”, OR
- “No, I do not accept this proposed change for Mr. McMillan to analyze and report the Public and Private HEI data for purposes of this dissertation.”

I am a compliance-oriented person, so I'm just trying to satisfy the IRB requirements. I have attached the IRB Mod so you can see what is involved (Item 13, Page 2 of 2, has the collaboration acceptance requirement).

I think a quick Yes/No e-mail response to me that includes your signature block will suffice.

Thanks,

Ken

From: Menditto, Susan [<mailto:SMenditto@nacubo.org>]
Sent: Thursday, July 11, 2013 4:11 PM
To: Kenneth Mcmillan
Subject: RE: FTE Summary of Management and Governance Survey data

Thanks so much Ken.

Is the sample size adequate? I hope we can catch up in Indy.

Sue

From: Kenneth Mcmillan [<mailto:mcmlke@aces.edu>]
Sent: Thursday, July 11, 2013 4:49 PM
To: Menditto, Susan
Cc: Menditto, Susan; Davis, Natalie Pullaro; Kenneth Mcmillan; Cynthia Bowling
Subject: FTE Summary of Management and Governance Survey data

Hi Sue,

Attached please find the FTE Summary, consistent with the 2007 FTE format. I will start working on the Public/Private Institution Summary now. I hope to see you in Indianapolis next week at the Annual Meeting.

Take care,

Ken

From: Kenneth Mcmillan
Sent: Friday, July 05, 2013 4:13 PM
To: Menditto, Susan (SMenditto@nacubo.org)
Cc: Davis, Natalie Pullaro (Natalie.Pullaro.Davis@nacubo.org); Kenneth Mcmillan; Cynthia Bowling; Menditto, Sue
Subject: Initial Summary of Management and Governance Survey data

Hi Sue,

I hope you are well. Attached please find the initial Management & Governance Survey results (pdf). I have yet to code and analyze the Fraud sections. A few highlights are in order:

1. The pdf and Excel files are identical with respect to the 2013 summaries. I re-numbered each Question IAW the Survey you sent me on 4/2/13.
2. I kept the same format you used in 2007 and updated the responses to reflect the 2013 Survey. That will help you if you want to compare & contrast 2007 versus 2013.
3. The Excel file tabs for the 2013 results are labeled and color-coded for each Survey Section. These 2013 worksheets are at the front. Your original 2007 tabs (labeled 2007-1 through 9) are near the back of the workbook.
4. I added a "Sum" cell for questions (where appropriate) to verify the SPSS printout

versus these summaries.

5. Questions in which respondents could "Select all that apply" do not have sums – I divided these results by 224 (the total number of respondents).
6. Given time, I will run & report frequency distributions for FTE and Public/Private.

Please let me know if further details would help. I hope you have a great weekend!

Take care,

Ken

Ken McMillan, CPA
Accountant III, ACES Business Office
105 Duncan Hall, Alabama Cooperative Extension System
Auburn University, AL 36849
(V) 334-844-5528
(F) 334-844-5345
mcmilke@aces.edu



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Auburn University, AL 36849-5613
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18 January 2013

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

INFORMATION LETTER for a Research Study entitled "Management, Governance, and Fraud"

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1/23/13 to 1/23/16
13-033EX 1301



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18 January 2013

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Investigator Kenneth N. McMillan Date 1/18/13
Co-Investigator Cynthia J. Bowling Date 18 January 2013

The Auburn University Institutional Review Board has approved this document for use from _____ to _____, Protocol # _____

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The Auburn University Institutional Review Board has approved this document for use from 1/23/13 to 1/22/16 13-033 EX 1301