Exploration of Mechanisms used for Organizational Learning related to Whistleblowing Claims in Institutions of Higher Education at the State and the Institution

Summary of Doctoral Dissertation
In partial fulfillment of Doctorate of Philosophy

Chris R. Schmidt

Supervisors

Dr. Ferenc Farkas† Dr. Katalin Dobrai

Faculty of Business & Economics
University of Pecs
December 2017

Abstract

Whistleblower claims involve accusations of fraud, theft, or misconduct by employees or leaders, consistently uncover long undetected fraud schemes and misconduct, and are an essential component of effective governance. Each accusation made, valid or not, presents a learning opportunity for management. Current governance practices used to solicit, manage, resolve, and learn from whistleblower claims are explored to understand how colleges and universities are working to prevent wrongdoings. Comparative multi-level studies analyze actual multi-year claims data from select states and institutions leading to an expanded comprehensive categorization of claims. A rubric of key control points is used to compare international practices across prominent institutions in the United States, the United Kingdom, and in Hungary, with a particular focus on increased transparency provided by Internet communication technologies. A survey of individual experience is conducted to estimate the rate of exposure to wrongdoings on campus (high) and the rate of exposure to training (low). Whistleblower claims collected are found to be subject to filtering by the institutional or legislative historical legacy, which varies widely by jurisdiction. Internet communication technologies are found to improve the transparency of governance and administration of claims. Management disciplines, where present, to ensure that institutions are learning from claims varied widely at both the state and institutional levels of governance. A framework for proactive management is presented to ensure that structured systematic learning can occur.

Keywords: Proactive Management, Ethics, Disclosure, Higher Education, Organizational Learning, Governance, Whistleblowing, Wrongdoing

Contents

1 - Introduction	2
1.1 Hypothesis	2
1.2 Research Design and Motivation for the Research Methodology to Be Applied	4
2 - Literature Review	5
2.1 The History of Whistleblowing	5
2.2 Internal Control Trends in Corporate and Public Arenas	6
2.3 Legislation	7
2.4 Internet Communication Technologies	7
2.5 Existing Research	7
3 - Methodology	8
3.1 Mixed Methods Research Overview	8
3.2 Survey Analysis Methodology	9
4 - Findings	10
4.1 Research Findings: State-Level Mechanisms	10
4.2 Research Findings: International Comparison	13
4.3 Research Findings: Survey of Individual Perceptions	15
5 - Analysis, Conclusions, & Recommendations	19
5.1 Summary of Research	19
5.2 Recommendations for Further Research	22
5.3 Conclusions	22
6 - References	23
7 - Author's Conferences and Publications	20

1 - Introduction

Whistleblower claims involve accusations of wrongdoing, fraud, theft, or misconduct. This moral and ethical challenge of revealing wrongdoings is a phenomenon that is as old as human civilization. Going back to Greek Mythology, the story of Sisyphus who was condemned by the gods to a perpetual punishment after revealing that Zeus had abducted and raped Aegina. Did the Greek gods take the time and effort to protect Sisyphus? Did they attempt to design a system to prevent them from making similar mistakes? Rarely does a day go by without another headline of an individual or institution being impacted by the claim of a wrongdoing. In recent years, this has included major scandals such as the global "post-Weinstein" uprising against sexual harassment, Volkswagen's active deceit of regulators over diesel engine emissions, FIFA bribery and misconduct, the Transparency International disclosure of offshore banking habits of elected officials, and even the US Federal government under President Donald Trump and James Comey, Director of the FBI, blowing the whistle on the President himself. Over the centuries, has humanity learned to protect itself from wrongdoings? Are we getting better at protecting people, ourselves? If so, what is the evidence? If someone is effectively learning from wrongdoings, what are some approaches that they are using? Are some of those approaches more effective than others? In which situations or under which circumstances?

A large body of research and legal activities focused on protecting the whistleblower should result in more claims of wrongdoing being brought forth. These claims are brought forth to institutions who are themselves the recipients of the claims of wrongdoing and are primarily responsible for providing an effective mechanism for the solicitation and processing such claims. Each accusation of wrongdoing, whether valid or not, presents a learning opportunity for the institution; an opportunity to make their organization and community stronger and less susceptible to wrongdoings. This research explores the types of claims being received as well as the approaches the institutions are taking to learn from these claims of wrongdoing. Building upon the existing research and governance enhancements, evidence that moderating variables and factors exist that influence the effectiveness of governance approaches at lowering the incidence of wrongdoing are also studied. An exploratory approach is employed in order to understand these facets of wrongdoings and institutional learning at four levels of hierarchical exposure: first the institutional level, secondly comparing approaches across several states, thirdly a comparison at the national level of variations in practices used by administrators and their governing bodies. Finally, a survey of individual stakeholder experiences and perceptions was conducted to explore personal exposure and experiences on and around campus.

1.1 Hypothesis

That different approaches to institutional governance have varying effectiveness in lowering the incidence of wrongdoings in institutions is depicted in figure 1. Moderating Variables (MV) in this relationship of governance approach to successful mitigation of wrongdoings are believed to be Transparency, Training, and Structured Approach to Learning. Transparency as a factor is controversial and no consensus exists on if it is truly better to be more open and communicate more detail, and the inevitable increases on time demands in order to ensure stakeholders are

informed of risks and hazards and what to do when encountering wrongdoings. The impact of formalized training of procedures, processes, and policies that defines the approaches to the handling and treatment of wrongdoings within an institution should clearly affect the organizations administrative and governance effectiveness. This research looks for evidence of these disciplines as well as evidence of a structured, pro-active, preventative organizational approach to learning and growth.

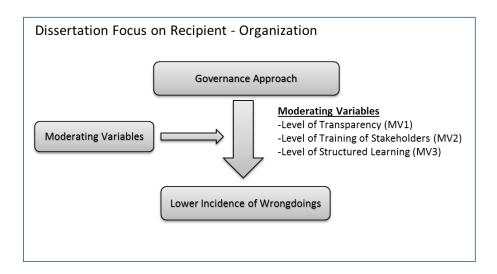


Figure 1: Model of Governance's Efficacy in lowering the Incidence of Wrongdoing (Source: Own Work)

The findings of this research are expected to produce evidence of the scope and extent of variation in institutional, state, and national customs:

- H1. That actual fraud claims affect specific areas and activities within institutions, and a categorization of these claims will help administrators and institutions to improve their processes pre-emptively.
- H2. Institutions that employ the use of Internet Communication Technology (ICT) achieve a comparatively high level of transparency of governance and access to make claims and visibility to review claims, whereas those who do not have a lower level of transparency.
- H3. There is substantial variation in the processes and approaches used at the state-level to monitor and solicit claims against institutions that receive state funding.
- H4. The specific approaches to learning used by administrators and institutions were developed on unique circumstances that vary state by state and institution to institution, resulting in a diverse set of practices that have outcomes that are sometimes focused on addressing one main problem—theft of assets, for example—while others may function in a more broad sense and be more effective in identifying governance issues and embezzlement or misconduct.
- H5. Mechanisms to ensure that learning from whistleblower claims takes place are missing or being developed.
- H6. Best practices are identified through the exploration and comparison of the relative effectiveness of practices.

The analysis of outcomes and their efficacy will be evaluated via a rubric that will be developed during the research. The development of the rubric requires an analysis and survey of the governance structures that can be observed from outside of the institution and are coupled with and related to the level of transparency an institution and its administration establish.

1.2 Research Design and Motivation for the Research Methodology to Be Applied

This doctoral research explores the mechanisms that exist at the state and institutional level to prevent and properly handle claims of fraud, theft, and misconduct in institutions of higher education across a number of different jurisdictions at the state and national levels. Babbie (2013) talks about Epistemology, the science of knowing, and its subfield Methodology. This dissertation focuses on understanding and knowing the reality of actual practices used in organizations to learn from whistleblower claims. Like all realities, this is subject to variation in actual practice, and this dissertation focuses on defining the core and variation from the core expectation that institutions do actually take a structured approach to learning from and improving from reports of suspected wrongdoing. In the course of the fieldwork and exploration, specific case studies are developed which help with the testing and confirmation of the dissertation hypothesis, in line with Gummesson (2000) and McNabb (2017). The approach taken to conduct the qualitative field research and guide this exploration, dissertation, are shown in Figure 2.



Figure 2: Overview of this Dissertation and Research Components (Source: Own Work)

The governance and administration function occurs within several levels inside of the framework of funding of higher education. The institutional level comprises all colleges and universities, grouped by states, which are grouped again at the national level. Each level of administration represents substantial funding and administrative oversight. Each level of administration also provides a basis for comparison, how things are implemented or interpreted or processed differently, or similarly. The exploration of these complex, multi-level, multi-unit processes and their current implementations follows traditional political and social science comparative policy framework as outlined in Landman (2008, pg. 70) and Lor (2017, pg. 130). Comparative analysis

is the foundation of a grounded approach, combining the naturalist approach of simply observing qualitatively and the positivist approach to taking a systematic approach to the observation and analysis, as Grounded Theory approach would require (Babbie, 2013, pg. 328). This is also a key source of the need to obtain multiple viewpoints for the purpose of comparative analysis. It could be argued that this dissertation and the approaches taken to capture both the macro level and micro level experiences and practices include many components of the qualitative research approaches outlined by Babbie.

2 - Literature Review

2.1 The History of Whistleblowing

The term "whistleblowing" has its origins in a 1972 conference paper by the famous American activist Ralph Nader (Nader, Petkas, & Blackwell, 1972). Skivenes and Trygstad (2014) establish a linguistic and semantic for addressing the common denominator they term "wrongdoing," which includes a spectrum of activities that may result in a whistleblower claim, ranging from behaviors and misconduct to illegal, illegitimate, or immoral activities.

Bowie (1982) and Jubb (1999) also attempt to define whistleblowing and elaborate on the expectations and conviction that is symptomatic of a whistleblower as they are preparing for the act of exposing what they believe to be wrongdoing. Whistleblowing is a key control mechanism to solicit both internal and external complaints of fraud or theft or misconduct (Bertot et al., 2010; Piotrowski, 2007) and is an effective mechanism in identifying large, complex, and wellconcealed acts, with approximately 40% of all theft and fraud is identified via whistleblowing claims (Lawson, 2015). Internal controls and their significance in preventing the misuse or misappropriation of assets is a topic that is well ingrained in financial management of publicly listed for-profit corporations (Near & Miceli, 1985, 1992), and via annual audited financial statements, in order to ensure investors are aware of the performance of the organization (Doyle, Ge, & McVay, 2005). Miceli and Near (1992) analyzed studies of whistleblowing behaviors before and after a major legislative change and found that possibility for retaliation was higher the more opportunity the whistleblower had contact with the perpetrators. In 1996 Near and Miceli looked at the current literature on whistleblowing from the perspective of the risks to the individual making the claim, at which time several extreme instances of retaliation had been exposed.

The application of these controls to higher education in the United States is supported by two collaborative organizations: the State Higher Education Executive Officers (SHEEO) group and the National Association of College and University Business Officers (NACUBO), which has published a number of guidelines and studies on the implementation of Sarbanes-Oxley controls over the quality of financial reporting and internal controls. Christopher (2014) looked specifically at higher education in Australia, and in a survey of 37 chief audit executives of universities. All institutions of higher education are knowledge-intensive institutions consisting of large pools of intellectuals and are ever striving for stronger client focus on knowledge processes, as found in Dobrai & Farkas (2008). Ken McMillen (2014), focused on assessing the level of self-adoption of

the NACUBO recommended guidelines for Universities and Colleges to adopt Sarbanes-Oxley whistleblowing best practices.

The Whistleblower Protection Act of 1989 for federal employees was enhanced in 2012 with the purpose of enhancing coverage beyond federal employees and bringing whistleblowing into the jurisdiction of the Securities Exchange Commission. Whistleblower protections are now included in the framework of Corporate Social Responsibility (Vandekerckhove, 2006). Jane Olsen (Olsen, 2014) summarizes 33 separate studies over time and across all industries nations and sectors on the likelihood of people to report wrongdoings. Brown (2004) looks at a large public sector agency rate of reporting. This work conflicts with other research performed by Rothschild and Miethe in 1999, which shows that public sector employees were more likely to report given stronger legislated protections. Penman & O'Mara (2015) summarize statistics observed over five years as the leading services provider of Internet-based anonymous fraud reporting hotlines.

2.2 Internal Control Trends in Corporate and Public Arenas

Richard Moberly (2014) and Marcia Miceli (1992) emphasize the importance of the recipient's behaviors on the likelihood of an individual to report wrongdoing and the works of Hamid and Zainudine (2014) who look at the social aspects of the organizational dynamics and how that affects the likelihood of reporting. Messemer-Magnus & Visvesvaran (2005) look at internal correlates of wrongdoing from a quantitative approach and support the general research that internal climate and culture can influence the likelihood of reporting. Tsahuridu (2014) summarizes the research and legislation that focuses on documenting and preventing the types of retaliation that whistleblowers experience. Vandekerckhove established in 2010 a "three-tiered" model (Vandekerckhove, 2010). Bosua (2014) expands the research by looking at the impact of new media on the likelihood of reporting. Vandekerckhove, Brown, and Tsahuridu (2014) explore the internal mechanisms and what they identify as a propensity for individuals to attempt first to report and escalate internally, as a natural phenomenon.

Neither Vandekerckhove et al. nor Moberly discuss professional codes of ethics, which actually require this kind of behavior, as exemplified by the Code of Ethics from the Institute of Management Accountants (IMA, 2016), where a defined path of internal discussion is required. Further disagreement in research versus practice can be found in Curtis (2006) in her research paper sponsored by the Institute of Internal Auditors, an organization that serves as a global thought and practice leader in the area of Internal Control. Thomas, Schermerhorn, and Dienhart advocate for the urgency of better corporate ethical leadership (Thomas et al., 2004) and cite Archie B. Carroll in his article "In Search of the Moral Manager," which describes the majority of middle managers as well-intentioned persons who simply fail to take ethical considerations into account when taking action and making decisions (O'Neill, 2002). The following standard definition of Organizational Development (OD) provides a comprehensive description of how OD can contribute to creating a healthy organization (Beckhard, 1969). Farkas and Dobrai (2012) state that the role, structure, and task of higher education institutions has become dramatically more complex in the past decades. The decision-making processes of universities are complex, and the lobbyist power is divided among several parties (Kováts, 2009). Studies in cognitive and

social psychology have examined the effect of the personal and interpersonal attributes of management and the type of control-related techniques on organizational development (Sisaye, 1998) and conclude that "control systems achieve congruence between employees' behavior and management goals" Vandekerckhove et al. (2014) look at the "Whistle While They Work, 2007" study from Australia and the frequency of training and reporting incidents that supervisors receive and the work by Vandekerchove, Brown, and Tsahuridu (2014) introduces the concept of the "hearer" and the "protector" roles inside an organization.

2.3 Legislation

Eaton & Akers (2007) credit Abraham Lincoln with creating the first whistleblowing legislation in the US with the 1863 False Claims Act. They also cite the 1989 and 1994 Whistleblower Protection Acts and the 2002 Sarbanes-Oxley Act as the subsequent protections for federal employees and public listed entities, respectively. Thomas et al. (2004) talk about public choice theory and refer to the creation of the Environmental Protection Agency in the 1960s, the passage of the Foreign Corrupt Practices Act in 1977, and finally the Sarbanes-Oxley Act of 2002 and the creation of the Public Accounting Oversight Board. Fasterling (2014) looks globally and comparatively at the legislation of whistleblowing in two key areas: protecting the whistleblower and violations of laws that may affect health and safety of individuals. Dodd-Frank Whistleblower Rules finalized by the Securities and Exchange Commission in 2011 establish a new whistleblower program as required by Section 922 of the Dodd-Frank Act. Richards, Melancon, and Ratley (2009) cite key legislation as influencing the global environment for improved controls.

2.4 Internet Communication Technologies

Aucion (2005), Houston (2010), and Weissman (2014) discuss elements of the impact of the Internet and transition of the population away from traditional media sources the traditional means for uncovering large fraud and theft schemes. The link between transparency and better government is made by Gould and Amaro-Reyes (1983). The impact of e-government projects globally is studied in a number of research papers: Bhatnagar (2003). Bushman (2004), Ciborra (2005), Schmidt (2005), Hermalin and Weisbach (2007) Shim and Eom (2009), Relly and Sabharwal (2009), and Bertot (2010).

2.5 Existing Research

Grant Thornton (2015) report on higher education, they cite governance and challenges facing governance mechanisms as a leading issue. Menditto and Gordon (2008) summarize activities of a second survey conducted by NACUBO focusing on the implications of Sarbanes-Oxley legislation on higher education governance best practices. Motley (2009), in a NACUBO Business Officer publication, talks about the processes that the institutions can take to improve the likelihood of a complainant to report wrongdoing. Mattie et al. (2005) outline the implementation of internal control regimes in higher education. The Association of Certified Fraud Examiners report (ACFE, 2014), which encompasses 1,431 cases of fraud from all sectors and countries, they state that 22% of the claims they looked at involved theft of over \$1 million USD. Ian Peters, CEO of the IIA

in an interview with *Audit & Risk Magazine* (Peters, 2014), talks about their Head of Internal Audit's (HIAs) survey, which was sponsored in the UK by the Public Concern at Work (PCaW), and which found that lack of appropriate training was prevalent. Curtis (2006) in a study sponsored by the IIA, looked at users (reporters) and respondents (recipients) of whistleblower solicitation mechanisms such as those required by Sarbanes-Oxley. The American Institute for Certified Public Accountants (AICPA) 2015 whistleblowing policy template for nonprofit organizations makes no mention of an internal process to analyze and improve the organization on the basis of the compilation of claims over time as lessons learned, nor does it require or promote any form of reporting or disclosure to stakeholders about the nature, the frequency, and the cumulative, additive significance of claims.

In 2009 in their joint report "Managing the Business Risk of Fraud," co-authored by the IIA and ACFE, the AICPA provides an overview of best practices for governing board members and trustees of an organization on best practices to manage and mitigate the likelihood of fraud damaging their businesses. The Ethics & Compliance Initiative (ECI) 2016 Global Survey of Business Ethics, the eighth such survey since 1994, they cover the spectrum of risks focusing mainly on workplace integrity and drivers of higher and lower levels of ethics. The Government Accountability Project (GAP) issues a number of reports each year, which are specific to issues and topics where government actions may threaten the well-being the populations they are intended to serve. The Project on Government Oversight (POGO) is an example of a non-profit, non-governmental oversight body that performs the public service of monitoring and independent third party investigation of whistleblower claims against the US federal government.

3 - Methodology

3.1 Mixed Methods Research Overview

The mixed methods approach taken in compiling this exploratory research consists of four discrete parts or "levels" of research, each with its own unique approach and scope. As a means of vetting the material and improving the focus of the research, each level of research resulted in one or more journal publications. Landman (2008) provides the methodological foundation for studies of comparative politics between various geographical areas and responsibility levels. The methods Landman summarizes and applied here are applicable to various geographical areas such as the comparison of policies and systems between states and nations. Landman attributes these techniques to the foundational work of Mills in 1843, and developed further by more than a century of policy research. The Most Similar System Design (MSDS) and Most Different System Design (MDSD) approaches are presented and are the basis for the methods of comparisons used in this research. Peter Lor (2012:128) provides an overview of the framework and nomenclature used in comparative studies defining Levels of Analysis (such as university, state, nation, or individual) the Units of Analysis (such as policies, web-presence/ICT, reports, records), and the Units of observation (such as the count of claims, or specific claims of fraud, or key controls, or funding, or population).

3.2 Survey Analysis Methodology

Two of the survey questions were of critical interest and were modelled for analysis and dissection to understand moderating effects and differences between country, institution type, and role inside of an institution. One question, regarding the outcome of "Experienced Wrongdoing" is a Binary (yes/no) two-state outcome requiring a binomial model. The second question, "Getting Smarter" is a scale type outcome (1-5) requiring an ordinal regression. Both models were developed using the following 5 step methodology:

- 1) Key questions selected for model input
- 2) Data cleaning and verification
- 3) Automated Model Selection in R
- 4) Verification of R Model and Diagnostics
- 5) Potential follow-up or iterations and enhanced processes

Each of these steps is documented in the data results and analysis for each question.

Key question selection for model input

The survey dataset consisted of 36 questions. In order to dissect the responses and condense down key factors, eliminating free text responses, resulted in the following list of responses used as the dataset shown below. The data, shown in Table 1, was categorized by breaking up categorical responses into binary yes or no factors. These simplify the analysis of the model.

Table 1: Question Selection and Coding for Statistical Analysis

Question	Simulation Label	Categories
1.1 Type of Institution	University	1=University,0=2year college
1.2 Country	US	1= US, 0= Hungary
1.5 Code of Ethics?	EthicsCode	
2.1 Role at Institution?	Pres SeniorLeader Faculty Student	1 = President; 0= Other 1 = Senior Leader; 0=Other 1 = Faculty; 0=Other 1 = Student;0=Other
2.2 Received Training?	HadTraining	1 = Yes; 0 = No, Don't Know
2.6 Was Incident Reported?	MadeReport	1 = Reported Incident; 0 = Didn't
2.8 Is the process Important?	HowImportantProcess	1-5
2.4 Experienced Wrongdoing	ExperienceWrong	1 = Experienced; 0 = Didn't
2.9 Is the institution getting smarter?	Getting.Smarter	1 - 5

The simulation tool chosen for this analysis was the open source and freely distributed statistical and computational software called R. Calcagno & de Mazancourt (2010) created the "glmulti" R library for automated model selection. This tool allowed for an automated iterative creation of all possible combinations of input independent variables and also the second order combination of effects "mixed effects" within all variables. The library employs a genetic algorithm to optimize the combination search and thereby eliminates the unnecessary calculation of outlier and nonfunctional models. This model and approach has been used widely, with over 300 citations and as Viechtbauer (2010) asserts, has been used in thousands of scientific research projects since 2010. This rigorous and verified approach to model selection facilitates the exploratory discovery of the significance of different computationally derived theoretical models. The corrected Aike Information Criteria (AICc) is used to score models and rank and sort the model results. Importantly the AICc criteria applies for mixed-effects models.

Model verification and Diagnostics

Diagnostics were performed first at the model level and then secondarily for the group of the top models to identify average significance between models, and allow for possible rationalization of models vs. intuitive explanations of outcomes. Standard error, t-value, and P(t) were calculated for each parameter including the estimating of the significance levels, with more stars being most significant. In some cases the model parameters did not contribute and so are returned as NA. The low number of Fisher Scoring iterations (2) indicates that the solution was stable, with the default method used by the glm algorithm being the Newton-Rapson method.

4 - Findings

4.1 Research Findings: State-Level Mechanisms

4.1.1 Ohio

Ohio is one of the top 10 states ranked by GDP which exceeded \$580 billion USD in 2015 (Ohio Development Services Agency, Economic Overview, 2016). A total of 26 public universities and colleges with an enrollment of 937,000 in 2013 received approximately \$1.85 billion in state funding annually, representing approximately 15% of the total college and university annual revenue of \$12.5 billion (US Department of Education, IPEDS Database, 2013).

The Ohio dataset that used for the initial part of this research was composed of fraud ethics claims logged by the Ohio Auditor of State, and the dataset spanned 28 months, starting in May 2012 and ending in September 2014. This data was provided by the Ohio Auditor of State's open government unit, and the data is available online at https://ohioauditor.gov/fraud/. This included claims for all public institutions funded by the state of Ohio including in addition to universities and colleges, prisons, the elementary education school system, and all other state governmental bodies. Additional public records requests were made to the auditor of state, requesting copies of all work papers and any generated work products such as findings

summaries or reports. Of the work papers for these 12 claims made against institutions of higher education, only three of the claims revealed instances of genuine fraud or theft meriting action by the state and institution involved. The findings of this analysis and filtering is presented in figure 3 and includes the categorization of the claims by subject.

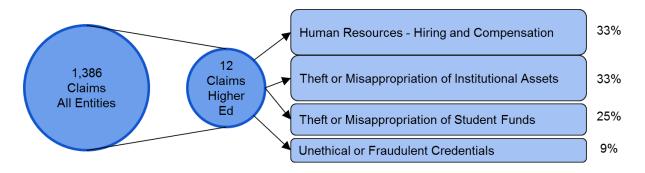


Figure 3: Summary of Claims Affecting Higher Education - Ohio 2012-2014 (Source: Own Work)

4.1.2 Massachusetts

Massachusetts is one of the geographically smallest states in the U.S., and with a population of only 6.7 million, it has a disproportionately high number of prestigious institutions of higher education—122, according to the state's Department of Higher Education (Galvin, 2015). This includes Harvard, MIT, Boston College, Brandeis University, Boston University, Williams College, Amherst College, and the University of Massachusetts. The state had an enrollment of 665,000 students in 2013. In the same year, according to the US Department of Education IPEDS database, the State of Massachusetts funded \$1.2 billion of the \$4.8 billion in total revenue of these institutions (US Department of Education, IPEDS database, 2013). Responding to the request for public records, the Massachusetts auditor provided 69 pages containing 380 individual complaints or whistleblower reports, received between January 1, 2010, and March 25, 2015. While the majority of these items tracked involved theft reports of physical assets with estimated loss dollar values below \$1,000, a total of 24 fund thefts or acts of embezzlement were reported that totaled over \$4 million, of which one fraud scheme totaled \$3.8 million. Figure 4 summarizes these findings and uses the categorizations provided by the auditor to provide some insight into the nature of the claims that were tracked by the state.

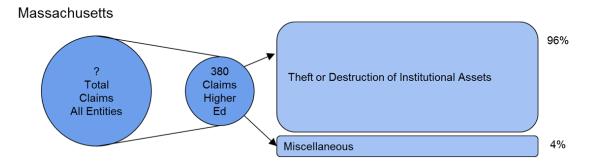


Figure 4: Visualization of Massachusetts Findings (Source: Own Work)

The factor that is unique about Massachusetts and dramatically increases the number of claims is the legal requirement of institutions to report losses to the state. The inclusion of campus-related thefts and vandalism obfuscates the analysis and visibility of more difficult topics, such as employee theft of funds or other types of fraud or misconduct.

4.1.3 Michigan

The state of Michigan has a population of 9.9 million and 93 institutions of higher education, of which 15 are public four-year and 29 are public two-year colleges, and total enrollment was 683,000 students (Michigan Department of Energy, Labor and Economic Growth, *Directory of Michigan Institutions of Higher Education*, 2011). The US Dept. of Education's IPEDS database shows that for 2013, the State of Michigan provided \$1.6 billion of the \$14.8 billion in total revenue of its colleges and universities (US Department of Education, IPEDS database, 2013).

The Michigan Auditor General was sent the same request for information as California, Ohio, and Massachusetts, and the response received was that, at the state level, no solicitation or reporting was performed, and that this was the responsibility of each institution. Michigan exemplifies the decentralized approach to control management and somewhat the other end of the spectrum when compared to Ohio and Massachusetts. The Auditor General stated that the boards of each of the respective colleges and universities were responsible for administering their own internal controls.

4.1.4 California

The State of California has a population of 38 million, with 789 institutions of higher education serving 1.8 million students. According to the US Department of Education's IPEDS database, in 2013 California's universities and colleges had enrollments of 3.7 million, and the state funded \$8.9 billion of \$45 billion in total revenue for that year (US Department of Education, IPEDS database, 2013). This represents over half of all of the value covered by this study and over 14% of the total US spend on higher education.

The California Auditor of State was sent the request for information and responded with copies of the annual report of accusations of fraud and theft by employees entitled "Investigations of Improper Activities by State Agencies and Employees," which is produced annually as a report to the governor and state legislature and is available online for all citizens to review. The State Auditor received approximately 5,000 allegations of improper governmental activities for each of those years, which required it to determine whether the allegations involved improprieties by state agencies or employees. In response to the allegations, the bureau opened approximately 1,000 new cases annually, and it reviewed or continued to work on 100-200 unsolved cases it opened previously. For these approximately 1,200 cases, the bureau completed a preliminary review process and determined the cases that lacked sufficient information for an investigation. These claims and findings are summarized in Figure 5.

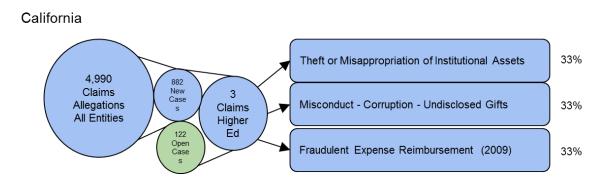


Figure 5: Visualization of California Findings (Source: Own Work)

Notable was the fact that issues, once identified, were carried forward into the next year's report until resolution of the investigation was completed. California's processes for tracking and reporting issues are best practice, being the only state that monitored issues through resolution in their reporting. Additionally, the fully online availability of the reports was also unique and best practice.

4.2 Research Findings: International Comparison

The findings of the comparative research sought evidence for the following key items: the existence of and the availability of the strategic plan: whistleblowing as a defined process for the solicitation of concerns, internal controls as a strategic objective, the existence and availability of codes of ethics or equivalent regulation, public solicitation of actual complaints received, public reporting of findings, whether organizational learning from complaints was a defined goal, and public reporting of achievements by the units towards the strategic plan. The findings of this phase are discussed below, first by country and institution, and then summarized in aggregate to facilitate the comparison between countries. A point scoring approach was used to aggregate fulfillment of characteristics and estimate and compare the average fulfillment of criteria across the observed dimensions. This point scoring methodology is frequently used in criminology and social sciences (Copas, 1993), and is applied where sample sizes are insufficient to perform

probabilistic analyses such as Linear Discriminant Analysis, Logistic Regressions, or Density Function Estimations.

Findings from each of the institutions under consideration were reviewed and contacted to obtain an understanding as to their objectives and goals with regards to open governance and use of ICT to facilitate transparency and learning. The summary of findings shows a low overall level of fulfillment of the criteria established, and in one case, the case of the public report of findings, no institutions were found to have reported publicly a record or analysis of complaints received and outcomes from such complaints. Not all institutions had presented their strategic plans, if they existed, to the public via their website. Whistleblowing as a process was only defined slightly more than half (64%) of the institutions reviewed. Internal controls were rarely identified inside of institutional or departmental strategic plans, which was only slightly less frequent than the public disclosure of the assessments of progress towards achieving the goals encompassed in the strategic plan. The public solicitation of fraud complaints—popular, but not employed universally—had not yet been adopted by the Hungarian institutions reviewed. Controls used by institutions in the U.S., Hungary, and the UK are outlined in Table 2.

Table 2: Controls used by institutions to control moral hazards (Source: Own Work, based on Kiraly & Schmidt 2015)

				Overall
Key Control Point	US	HU	England	Score
Public Facing Strategic Plan (web)	100%	92%	83%	92%
Organizational Learning defined in Strategic Plan	75%	100%	83%	86%
Public Facing Code of Ethics	83%	92%	75%	83%
Whistleblowing as a defined process	67%	42%	83%	64%
Internal Controls as a strategic objective	17%	83%	33%	44%
Public Solicitation of Fraud Complains (web)	83%	0%	50%	44%
Public facing assessment of Achievements (web)	25%	83%	33%	47%
Public Report of Findings (annual)	0%	0%	0%	0%
	56%	61%	55%	58%

Based on these findings, no institution addressed all points at all levels of the institution, and some institutions met only a few of the criteria. The scope and size of these institutions led to several institutions where college or component entities had created their own strategic plans but institutional-level plans were not available. In several cases, topics such as whistleblowing were identified in policy statements at the institutional level, and ethics was often embedded in institutional mission statements but transparency and an emphasis on ongoing improvements were rarely identified as a strategic priority. These findings demonstrate that mechanisms to learn from and prevent repetitive fraud, theft, and misconduct does in higher education are not always implemented fully.

4.3 Research Findings: Survey of Individual Perceptions

19 individuals responded and none of the governing bodies or large organizations mentioned in the literature review sponsored or supported the distribution of the survey to their membership. The survey results' aggregate data findings are discussed first, and followed by the development of a statistical analysis to describe the variation and aid in the interpretation of the survey results

4.3.1 Presentation of Findings

Responses (N=19) were received from a diverse population of individuals, institutions, and countries. 37% of the responses were from Hungarian respondents, and 63% were from the United States. The respondent participation rate was approximately 0.13% of all invitations sent. The type of institutions attended by the respondents, the respondents' role in the institution, and the component or part of the institution for which the respondents were replying are presented and show a diverse characteristic of the respondents, as shown in Figure 6.

The most frequent type of institution was the public or state university, which made up 53% of all responses, together with 32% of responses from public colleges, making 84% of responses specific to publicly funded institutions, while 16% were private institutions. The most frequent role was faculty, followed by senior administrator, while 11% of the respondents were academic leadership and the remaining 21% were students. Academic areas (students & faculty) were the most prevalent components of the institution covered by the respondents.

The respondents' exposure to fraud and fraud prevention training is presented in the next set of charts. A total of 53% of the respondents had experienced some type of wrongdoing in their workplace, and 42% had made some kind of formal report or complaint about such wrongdoing. A similar proportion of respondents, about 42%, had received any kind of ethics or preventative training, and only 25% of those fractional respondents actually were aware of practical, local-based examples, as illustrated in Figure 6. The next set of responses in the survey was specific to the institution, and in four parts, it explored how claims were received by the institution, by which function, and form, and the respondent's perception of claims being tracked to completion or summarized in an annual report. The most frequent response for who in the institution received such claims was "responsibility not assigned" at 37%, with "Don't Know" at 16% and "legal" at 11% the next most frequent. With regards to reporting about claims to the public, 58% of the responses stated that the status of a claim was not reported to the public, and over 79% said their institution did not produce a summary of claims, nor did they track the claims to completion.

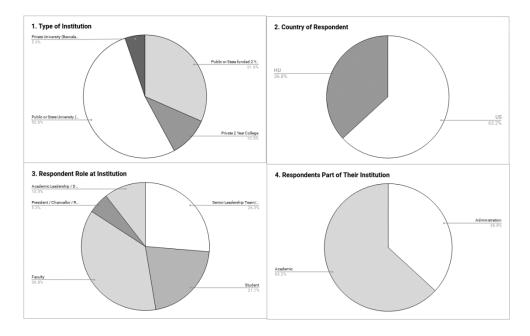


Figure 6: Overview of respondent characteristics (Source: Own Work)

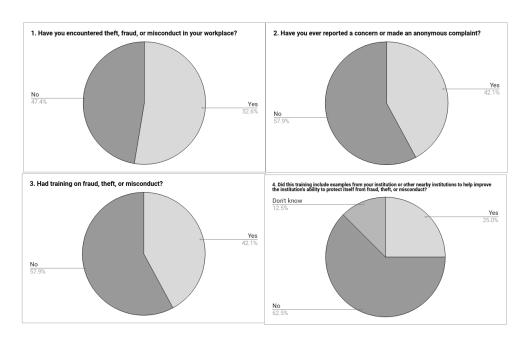


Figure 7: Respondents' experiences with fraud and fraud prevention training (Source: Own Work)

Presented together in Figure 8, are the responses to the two Likert scale questions received regarding perceptions of the importance of whistleblowing to their institution (strong tendency towards important) and their impression of the trend of improving or not improving progress at their institution (slightly skewed towards improving).

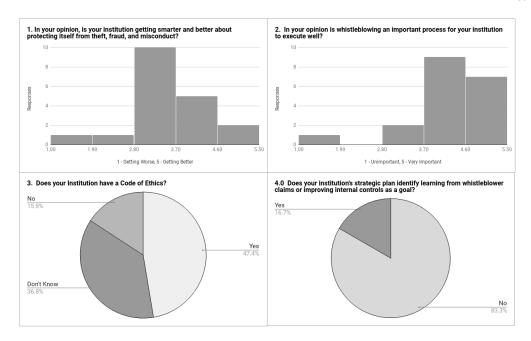


Figure 8: Perceptions of importance and progress towards learning (Source: Own Work)

Respondents were asked the question of whether a code of ethics was available, with less than half of the respondents able to confirm the existence of a code of ethics, and 83% of respondents stating that learning from whistleblowing was not an element or component of their institution's strategic plan.

4.3.2 Statistical Analysis of Survey Findings

The statistical approach to modelling the two outcomes described in the methodology section: "Experienced Wrongdoing" and "Getting Smarter" was performed and is summarized below. The best statistical formula and regression model was identified for each model is listed below and the simulation results are presented and clarified.

First, the simulation model for the likelihood of an individual experiencing a wrongdoing on campus is modeled and optimized the value of the AICc selection criteria. Reviewing the relative importance of all factors explored in the permutations of simulations, allowed additional variables to be removed from the best-fit model, leaving us with the final model presented in Table 3.

The interpretation of these factors and weights follows, that the likelihood of experiencing a wrongdoing is 0.64 (Intercept/Constant Term) which is offset/lowered for faculty members, regardless of origin, and also reduced for Universities which have a Code of Ethics (EthicsCode:University) but increases significantly by the mixed effect of Faculty which have an Code of Ethics (Faculty:EthicsCode)

Table 3: Best Fit Model Formula for Experienced Wrongdoing

ExperienceWrong ~ 1 + Faculty + EthicsCode:University + Faculty:EthicsCode						
	Constant	Faculty	EthicsCode:University	Faculty:EthicsCode		
Estimate	0.641	-0.641	-0.6154	0.010769		
Std. Error	0.1542	0.2117	0.1972	0.2577		
t value	4.158	-3.028	-3.121	4.178		
Pr(> t)	0.000966	0.009041	0.007516	0.000929		
Dispersion parameter for gaussian family taken to be 0.08424908						
Null Deviance: 4.7368 on 18 degrees of freedom						

Residual Deviance: 1.195 on 14 degrees of freedom

AIC: 13.112

Number of Fisher Scoring Iterations: 2

In an identical process to the simulation and model for perception that the institution is getting smarter about handling whistleblower claims and wrongdoing is modeled and optimized for the value of the AICc selection criteria. Again, evaluating the p-value for the factors identified where the p-value is much less than 0.05 provided a further simplification, leaving us with the final model shown in Table 4:

Table 4: Best Fit Model Formula for Getting Smarter

Getting.Smarter ~ 1 + SeniorLeader:University + SeniorLeader:EthicsCode + ExperienceWrong:US + ExperienceWrong:HadTraining + ExperienceWrong:Student						
	Constant	Senior Leader: University	Senior Leader: EthicsCode	r: Experience Wrong:		Experience Wrong: Student
Estimate	3	2.64706	-0.64706	1.82353	-0.76471	-1.5
Std. Error	0.09644	0.37716	0.2219	0.25193	0.24308	0.22618
t value	31.107	7.018	-2.916	7.238	-3.146	-6.632
Pr(> t)	1.36E-13	9.09E-06	1.20E-02	6.57E-06	7.73E-03	1.63E-05

Null Deviance: 16.1053 on 18 degrees of freedom

Residual Deviance: 1.0882 on 13 degrees of freedom

Residual Deviance: 1.0882 on 13 degrees of freedom

AIC: 13.582

Number of Fisher Scoring Iterations: 2

The interpretation of these factors and weights as the best model of Getting Smarter score consists of the mean score of 3 (Intercept/Constant Term) and five mixed effects combinations. The first, an improvement factor, increased the score for senior leaders at universities (SeniorLeader:University). The second mixed effects term was an additional improvement for individuals who experienced wrongdoings in the US (ExperienceWrong:US). The third mixed effects term substantially lowered the score for any of the combined factors of SeniorLeader with a Code of Ethics. The fourth factor was the combination of if someone had training and experienced wrongdoing. The fifth term was the combination of students who had experienced

wrongdoing, which had a negative impact on the overall score. The absence of the significance of any direct non-mixed effect variables in this model could be interpreted as a sign that institutions are not communicating enough to drive this awareness and perception.

5 - Analysis, Conclusions, & Recommendations

5.1 Summary of Research

Beginning with the literature review, the design of the research followed guidance from predecessors that clearly indicated that research into the **recipients** of whistleblower claims was an area to be expanded upon. The emphasis of this research focusing on the recipients, the institutions and governing bodies that receive the claims and should be addressing, responding, and guiding the structured learning to prevent such claims and the damage they can cause to individuals and the institutions. Figure 9 shows both the mainstream perspective and the new perspective of this research in the domain of the study of whistleblower claims. The majority of research previously done focuses on the moderating variables that would affect the likelihood of disclosure of the wrongdoing, as shown in the left panel. In the right panel, the relationship between the governance approach and the reduced rate of incidence of wrongdoings is presented as the focus of this dissertation research and as a contrast from the majority of research into whistleblowing.

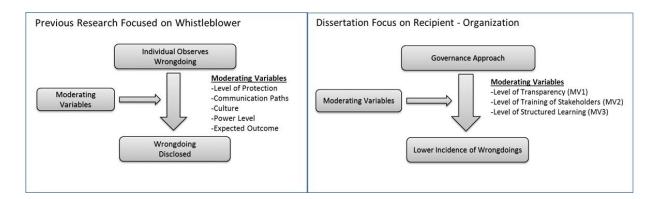


Figure 9: Whistleblowing research focus and aims (Source: Own Work)

The field test confirmed the inconsistencies and absence of disciplined organizational learning. The multi-state phase of the research expanded upon the field test and found further inconsistencies and gaps. The comparative international study further confirmed inconsistencies on a wider scale. Finally, the individual perceptions and experiences survey explored and documented the absence of awareness, training, and communication internal to organizations. These findings and the support for the research hypotheses are summarized for each of the components of this research in Figure 10.

		Accept / Reject by Level of Research			
Hypothesis		Ohio	CA, MI, MA	US, UK, HU	Individuals
H1	Categorization of actual fraud claims that affect specific areas and activities within institutions	Accept	Accept	Accept	not tested
H2	Internet Communication Technology (ICT) gives a comparatively high level of transparency to claims	Accept	Accept	Accept	not tested
НЗ	There is substantial variation in the processes and approaches used at the state-level to monitor and solicit claims against institutions that receive state funding.	Accept	Accept	Accept	not tested
H4	Legal and historical frameworks drive variation between jursidictions	Accept	Accept	Accept	not tested
Н5	Mechanisms to ensure that learning from whistleblower claims takes place are missing or being developed.	Accept	Accept	Accept	Accept
Н6	Best practices can be identified through the exploration and comparison of the relative effectiveness of practices.	Accept	Accept	Accept	not tested

Figure 10: Summary of Outcomes and Findings (Source: Own Work)

5.1.1 New Findings

This dissertation has revealed and developed the following contributions to the area of Management of Universities and Colleges and Higher Education on the state and national levels, which can also be found to be applicable universally inside of Management Science in all industries and sectors. These contributions are, at a high level:

- The categorization model of wrongdoings based on collected cases and data;
- The high-level summary of process variations found at all four levels of the investigation findings;
- Identification of Best Practices and "Unexpected Outcomes" as a side-effect of data surveys;
- The framework to "improve organizational learning" using the Soliciting Managing Resolving Learning process.
- Introduced the 3 factor model for the effectiveness of governance approaches on wrongdoing prevention
- Increase awareness of governance inconsistencies at the federal level and within accrediting bodies inside the United States, and resulting policy changes.
- The comparatively low rate of training and awareness compared with the higher rate of the actual experience of wrongdoing, easily remediated through training programs.

These contributions and their consequences for researchers and practitioners are discussed below in detail.

5.1.4 Proactive Learning Framework

The research and conference presentations led to the creation of the policy framework template. The framework shown in Figure 11 summarizes the key facets of infrastructure, processes, and outcomes that would make up a comprehensive institutional approach to learning from whistleblowing. The application of this framework to the institution will be discussed in some

detail, followed by a brief interpretation of how the same framework can be applied at the state and national levels of governance and administration.

The components of the framework are shown in three shades to distinguish between processes that were always present, sometimes or inconsistently found and completely absent or missing. Each process step in the figure also contains a label that allows for cross-referencing and identification, with the first letter of the label identifying the part of the core process "Soliciting, Managing, Resolving, and Learning" and a unique number.

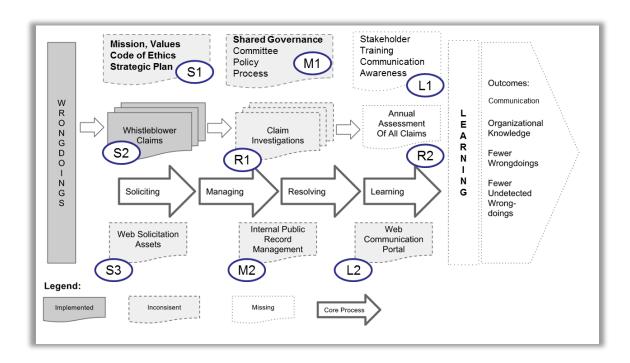


Figure 11: Overview of framework to improve institutional learning from whistleblower claims (Source: Own Work)

The oversight of the implementation and maintenance of the framework will lie with the Board of Trustees, Chancellor, President, and the Shared Governance Committee. The framework provides the set of monitoring tools in the form of the Rubric presented above and the Survey of Individual Experiences.

Although the fruit of research that focused solely on publicly funded institutions of higher education, this framework is equally as applicable to other branches of government and could be incorporated into an open government framework. Additionally, private institutions and forprofit corporations can benefit and enhance their immunity to wrongdoings by employing this approach to improved governance.

5.2 Recommendations for Further Research

Areas for further research should explore the internal learning mechanisms and processes used internal to the institutions via a policy survey or other mechanisms for ensuring that issues that are identified are communicated and shared among its stakeholders, to increase awareness and understanding, and to empower individuals and institutions to avoid and overcome, where necessary, the moral hazards of administration. Additional surveys of state-level processes, canvassing all 50 US states and additional details about the member states of the European Union, would provide the strong contrast and potentially identify additional best practices.

Expansion of the survey of perceptions and experiences would require an expensive and lengthy person-to-person interview approach, as the return rate of online surveys was very low, and may have been driven by fears of reprisal or backlash and false anonymity. This researcher envisions small teams present on campus using a firm pursuit tactic to ensure a higher level of participation.

A study of Internet Communication Technology and its ability to improve the transparency and effectiveness of governance through incorporation in open government initiatives and the alignment of strategies at both the state and institutional levels may determine best practices and support the theory that increased transparency through the use of ICT improves governance and learning and lowers the rate of wrongdoing.

5.3 Conclusions

Expanding the research into whistleblowing practices as a critical component of institutional governance, moving the focus beyond the whistleblower to the institution, has yielded a number of valuable insights and laid the groundwork for improved governance. This research started out as a field study with the exploration of actual whistleblower claims against institutions of higher education, establishing a process and a categorization of claims, and some basic criteria for comparative analysis of administrative processes. The second phase of the research expanded to the comparison of multiple states and identified large variation in state-level approaches and confirmed the expected outcome. The third phase of the research, a comparison and evaluation of practices in three countries, obtained more evidence of inconsistencies, the absence of key controls, and additional examples of best practices. Taking the research then to the individual and their experiences on campus provided the unexpected findings of the relatively high rate of experiencing wrongdoings and the comparatively low rate of exposure to any training on how to deal with such wrongdoings. These findings provide valuable information about the effectiveness of governance processes and identified clear improvement opportunities that can be readily implemented.

It is recommended that future practice and research efforts focus on a path of incorporating the rubrics, frameworks, and best practices outlined in this research into standards for socially responsible governance in order to improve the likelihood of structured learning from whistleblower claims in order to proactively protect individuals and the institution from employee fraud, theft, and misconduct.

6 - References

- Babbie, E. R. (2013), The Practice of Social Research. 14th Ed. Boston, MA. Cengage Learning.
- Beckhard, R. (1969), Organization development: Strategies and Models, Reading, MA: Addison-Wesley.
- Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010), "Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies." *Government Information Quarterly*, 27(3), 264-271.
- Bhatnagar, S. (2003), *E-government and access to information*. Global Corruption Report 2003. Washington, DC: Transparency International.
- Bosua, R., Milton, S., Dreyfus, S., & Lederman, R. (2014) Going Public: Researching external whistleblowing in a new media age. In Brown et al. (Eds.) International Handbook on Whistleblowing Research (pp. 381-404). Northampton, MA: Edward Elgar.
- Brown, A. J., Lewis, D., Moberly, R., & Vandekerckhove, W. (Eds.). (2014). *International Handbook on Whistleblowing Research*. Northampton, MA: Edward Elgar.
- Bushman, R. M., Piotrowski, J. D., and Smith, A. J. (2004). "What determines corporate transparency?" *Journal of Accounting Research 42*(2), 207-252.
- Calcagno, V., & de Mazancourt, C. (2010). glmulti: an R package for easy automated model selection with (generalized) linear models. Journal of statistical software, 34(12), 1-29.
- Ciborra, C. (2005). "Interpreting e-government and development: Efficiency, transparency or governance at a distance?" *Information Technology and People*, *18*(3), 260-279.
- Christopher, J. (2014). Internal audit: Does it enhance governance in the Australian public university sector? Educational Management Administration & Leadership, October 2014, 1-18.
- Copas, J.B. (1993) The Shrinkage of Point Scoring Methods. *Journal of the Royal Statistical Society*. *42*(2). 315-331. Wiley.
- Curtis, M. B. (2006). Whistleblower mechanisms: A study of the perceptions of users and responders. The Institute of Internal Auditors. Dallas, TX: The IIA Research Foundation.
- Dobrai, K., & Farkas, F. (2008). Knowledge-based services: Examining knowledge processes in public-serving nonprofit organizations. *International Journal of Knowledge, Culture, and Change Management*, 8(2), 9-21.
- Doyle, J. T., Ge, W., & McVay, S. (2005) "Determinants of weaknesses in internal control over financial reporting and the implications for earnings quality." *Journal of Accounting and Economics, 44*(1), 193-223.
- Eaton, T. V., & Akers, M. D. (2007). Whistleblowing and good governance. The CPA Journal, 77(6), 66.
- Ethics & Compliance Initiative. (2016). Global business ethics survey: Measuring risk and promoting workplace integrity. Retrieved from http://www.ethics.org.

- Farkas, F., and Dobrai, K. (2012). "Knowledge profile of higher education institutions: An international overview of mainstream research." *International Journal of Management in Education, 6*(1-2), 120-136.
- Fasterling, B. (2014) Whistleblower protection: A comparative law perspective in Brown et al. (Eds.)

 International Handbook on Whistleblowing Research (pp. 331-349). Northampton, MA: Edward Elgar.
- Fisher, M. (2007). Central State University: What happened?—Financial crisis in Central State University, Ohio. *Diverse: Issues in Higher Education*. Retrieved from http://diverseeducation.com
- Gould, D. J., & Amaro-Reyes, J. A. (1983). The effects of corruption on administrative performance. *World Bank Staff Working Paper*, 580, 2514.
- Grant Thornton. (2015). *The State of Higher Education in 2015* (4th ed.). Grant Thornton LLP. Retrieved from www.grantthornton.com/highered2015 on June 5th, 2016.
- Gummesson, E. (2000). *Quantitative Methods in Management Research.* Thousand Oaks, CA. Sage Publications.
- Hermalin, B. E., and Weisbach, M. S. (2007), *Transparency and corporate governance* (No. w12875). National Bureau of Economic Research Working Paper
- Higher Learning Commission. (2012). *Policy Book*. Retrieved from http://policy.hlcommission.org/Policies/appendix-a.html on Aug. 20, 2015.
- Higher Learning Commission. (2017). "Fraud and Abuse FDCR.A20.010". Retrieved from http://download.hlcommission.org/policy/updates/AdoptedPolicyFraudAbuse_2017-02_POL.pdf
- Hillman, N. W., Tandberg, D. A., & Fryar, A. H. (2015). Evaluating the impacts of "new" performance funding in higher education. *Educational Evaluation and Policy Analysis*. doi: 0162373714560224
- Houston, B. (2010). The future of investigative journalism. *Daedalus*, 139(2), 45-56.
- Kováts, G. (2009). Az egyetem mint szervezet. Drótos, Gy.- Kováts, G. (szerk): *Felsőoktatás-menedzsment*, Budapest, Aula Kiadó, 63-86.
- Landman, T. (2008) *Issues and Methods in Comparative Studies: An Introduction*. 3rd Ed. Oxon, UK. Routledge.
- Lawson, R. (2015). Solving the whistleblower's dilemma. *IMA Pulse* 29 Institute of Management Accountants. Montvale, NJ.
- Lor, P. (2012) *International and Comparative Librarianship*. K. G. Saur Verlag GmbH, Munich, Germany. 125-146.
- Mattie, J. A. Hanley, P. F., Cassidy, D. L., Broad, M.C.. (2005). *Internal controls: The key to accountability*. London, U.K.: Price Waterhouse Coopers.
- McMillen, K. N. (2014). 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 (Unpublished doctoral dissertation). Auburn University, Auburn, AL.
- McNabb, D.E. (2017) Research Methods in Public Administration and Nonprofit Management. 4th Ed. Oxford, UK. Routledge Taylor & Francis.
- Menditto, S., & Gordon, T. (2008). Finances in the clear: Six years out from Sarbanes-Oxley, see how NACUBO member institutions have adapted audit-related practices to meet the goal of fiscal transparency. *Business Officer*, *42* (1/2), 38.
- Mezey, B. (2014). "A tudományetikai felelősség kérdései a magyar felsőoktatásban. Az egyetemi és a tudományos élet etikai szabályozása az egyetemi kódexek." *Magyar Tudomány, 14*(6). Retrieved from http://www.matud.iif.hu/2014/06/04.htm
- Miceli, M. P., & Near, J. P. (1994). Relationships among value congruence, perceived victimization, and retaliation against whistle-blowers. *Journal of Management*, 20(4), 773-794.
- Miceli, M. P., & Near, J. P. (2013). An international comparison of the incidence of public sector whistle-blowing and the prediction of retaliation: Australia, Norway, and the US *Australian Journal of Public Administration*, 72(4), 433-446.
- Miceli, M.P., Dreyfus, S., Near, J.P.. (2014) "Outsider 'whistleblowers': conceptualizing and distinguishing 'bell-ringing' behavior in Brown et al. (Eds.) *International Handbook on Whistleblowing Research* (pp. 71-94). Northampton, MA: Edward Elgar.
- Moberly, R., (2014). "To persons or organizations that may be able to effect action": Whistleblowing recipients in Brown et al. (Eds.) *International Handbook on Whistleblowing Research* (pp. 273-299). Northampton, MA: Edward Elgar.
- Nader, R., Petkas, P. J., and Blackwell, K. (1972), *Whistle blowing: The report of the conference on professional responsibility*. New York: Grossman.
- O'Neill, Paul. Values into action. (2002, November 4). Retrieved from http://hbswk.hbs.edu/archive/3159.html
- Penman, C. & O'Mara, E. (2016). 2016 Ethics & Compliance Hotline Benchmark Report. Lake Oswego, OR: Navex Global.
- Peters, I. (2014). "Whistleblowing: why internal audit is key". *Audit & Risk*. Chartered Institute of Internal Auditors. Retrieved from http://auditandrisk.org.uk/blog/whistleblowing-why-internal-audit-is-key_4153
- Near, J. P., & Miceli, M. P. (1985). Organizational dissidence: The case of whistle-blowing. *Journal of Business Ethics*, *4*(1), 1-16.
- Near, J. P., & Miceli, M. P. (1986). Retaliation against whistle blowers: Predictors and effects. *Journal of Applied Psychology*, 71(1), 137.
- Near, J. P., & Miceli, M. P. (1992) Blowing the whistle: The organizational and legal implications for companies and employees. New York, NY: Lexington Books.
- Near, J. P., & Miceli, M. P. (1996). Whistle-blowing: Myth and reality. Journal of Management, 22(3), 507-526.

- Olsen, J., (2014) Reporting versus inaction: How much is there, what explains the differences and what to measure in Brown et al. (Eds.) *International Handbook on Whistleblowing Research* (pp. 177-206). Northampton, MA: Edward Elgar.
- Piotrowski, S. J. (2007), *Governmental transparency in the path of administrative reform*. New York: SUNY Press.
- Price, A. R. (1998), "Anonymity and pseudonymity in whistleblowing to the US Office of Research Integrity." *Academic Medicine*, 73(5), 467-72.
- R Development Core Team (2009). R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0, URL http://www.R-project.org/.Christopher, J. (2014), "Internal audit: Does it enhance governance in the Australian public university sector?" *Educational Management Administration and Leadership*, 43(6), 1-18.
- Ratley, J. D.. (2014) *Report to Nations on Occupational Fraud and Abuse*. Association of Certified Fraud Examiners.
- Relly, J. E., and Sabharwal, M. (2009). Perceptions of transparency of government policymaking: A cross-national study. *Government Information Quarterly*, 26(1), 148-157.
- Richards, D., Melancon, B., & Ratley, J. (2009). *Managing the business risk of fraud: A practical guide*. The Institute of Internal Auditors (IIA), The American Institute of Certified Public Accountants (AICPA), Association of Certified Fraud Examiners (ACFE).
- Rothschild, J., and Miethe, T. D. (1994), Whistleblowing as resistance in modern work organizations: The politics of revealing organizational deception and abuse. *Resistance and power in organizations* (pp. 252-273), Jermier, J., Nord, W., & Knights, D. (Eds.). London, U.K.: Routledge.
- Schmidt, C. R. (2005). The driver's view. Internal Auditor, 2005(6), 29-32.
- Schmidt, C. R. (2015). Learning points from whistleblower claims against institutions of higher education: The case of Ohio. *Problems of Management in the 21st Century*, 10(2), 110-120.
- Schmidt, C. R. (2016). State-level mechanisms for learning from whistleblowing cases involving institutions of higher education in the United States. *Problems of Management in the 21st Century, 11*(1) 43-56.
- Schmidt, C. R., & Farkas, F. (2015) Anonymous reporting "whistleblowing" as a mechanism to improve institutions of higher education: The case of Ohio. *Almaty Conference Proceedings*. Paper presented at International Conference on Multidisciplinary Innovation in Academic Research (MIAR), Hotel Kazakhstan, Almaty, 29-30 July (7-12).
- Schmidt, C. R., & Kiraly, A. (2015) Commonalities between US and Hungarian universities with regards to organizational development and controls against the moral hazards of administration. *Hungarian Journal of Marketing and Management 2015*(4), 79-89.
- Shim, D. C., & Eom, T. H. (2009). Anticorruption effects of information communication and technology (ICT) and social capital. *International Review of Administrative Sciences*, 75(1), 99-116.
- Sisaye, S. (1998). An overview of the social and behavioral sciences approaches in management control research. *Behavioral Research in Accounting*, *10*(1), 11-26.

- Skivenes, M., & Trygdstad, S., (2014) Wrongdoing: Definitions, identification and categorizations in Brown et al. (Eds.) *International Handbook on Whistleblowing Research* (pp. 95-114). Northampton, MA: Edward Elgar.
- Smith, R. (2014) Whistleblowers and Suffering. In Brown et al. (Eds.) *International Handbook on Whistleblowing Research*. (pp. 230-249) Northampton, MA: Edward Elgar.
- Spencer, M. & Spencer, J. (2014) When it all goes bad: Criminal remedies Skivenes, M., & Trygdstad, S., (2014) Wrongdoing: Definitions, identification and categorizations in Brown et al. (Eds.) *International Handbook on Whistleblowing Research* (pp. 405-429). Northampton, MA: Edward Elgar.
- Tandberg, D. A., & Hillman, N. W. (2014). State higher education performance funding: Data, outcomes, and policy implications. *Journal of Education Finance*, *39*(3), 222-243.
- Thomas, T., Schermerhorn, J. R., & Dienhart, J. W. (2004). Strategic leadership of ethical behavior in business. The Academy of Management Executive, 18(2), 56-66.
- Vandekerckhove, W. (2006). Whistleblowing and organizational social responsibility: A global assessment. Hampshire, U.K.: Ashgate Publishing Ltd.
- Vandekerckhove, W., Brown, A. J., and Tsahuridu, E. (2014) Managerial responsiveness to whistleblowing: Expanding the research horizon in Brown et al. (Eds.) *International Handbook on Whistleblowing Research* (pp. 298-328). Northampton, MA: Edward Elgar.
- Vandekerckhove, W., Uys, T., Rehg, M., and Brown, A.J. (2014) Understandings of whistleblowing: Dilemmas of societal culture in Brown et al. (Eds.) *International Handbook on Whistleblowing Research* (pp. 37-70). Northampton, MA: Edward Elgar.
- Viechtbauer, W. (2010). Conducting meta-analyses in R with the metafor package. Journal of Statistical Software, *36*(3), 1–48.
- Weissman, J. (2014) *The decline of newspapers hits a stunning milestone*. Slate.com/Moneybox. Retrieved from http://www.slate.com/blogs/moneybox/2014/04/28/decline_of_newspapers_hits_a_milestone_print revenue is lowest since 1950.html

7 – Author's Conferences and Publications

PUBLICATIONS

Bonau, S., Schmidt, C. (submitted) Cognitive Biases' influence on Consumers' Heuristic Purchasing Decisions. *International Journal of Strategic Management and Decision Support Systems in Strategic Management*. University of Novi Sad. Subotica, Serbia.

Schmidt, C.R. (2017) Exploration of Mechanisms used for Organizational Learning related to Whistleblowing Claims in Institutions of Higher Education at the State and the Institution. In Ramazanov, A (Ed) *The market of intellectual products of Kazakhstan: theory and practice*. Almaty, Kazakhstan. 7-36. ISBN 978-601-323-091-7. UDC 330-063.

Schmidt, C.R. (2017) Technology's Impact on Marketing. *International Journal of Strategic Management and Decision Support Systems in Strategic Management*. University of Novi Sad. Subotica, Serbia. Vol. 22, No.3. 19-28. ISSN 1821-348, UDC 005.21.

Schmidt, C.R. Farkas, F. (2016). The Profitability Puzzle. *International Journal of Strategic Management and Decision Support Systems in Strategic Management*. University of Novi Sad. Subotica, Serbia. Vol. 21, No.4. 3-11. ISSN 1821-348, UDC 005.21.

Schmidt, C.R. (2016). State-level Mechanisms for Learning from Whistleblowing Cases involving Institutions of Higher Education in the United States. *Problems of Management in the 21st Century.* Siauliai, Lithuania. Vol. 11, No. 1. 43-56. ISSN 2029-6932.

Schmidt, C., Kiraly, A. (2015) Commonalities between US and Hungarian Universities with regards to Organizational Development and Controls against the Moral Hazards of Administration. *The Hungarian Journal Marketing & Management*. Pecs, Hungary. Vol. 2015. No. 4. 79-89.

Schmidt, C.R. (2015). Learning points from Whistleblower Claims against Institutions of Higher Education: the Case of Ohio. *Problems of Management in the 21st Century.* Siauliai, Lithuania. Vol. 10. No.2, 110-120. ISSN 2029-6932. (*This paper received a national award for Top Conference Paper of 2015 from the Kazakhstan Academy of Sciences – ranked #3*)

Schmidt, C. R., Farkas, F. (2015) Anonymous Reporting "Whistleblowing" as a Mechanisms to improve Institutions of Higher Education: the Case of Ohio. *Almaty Conference Proceedings*. Almaty, Kazakhstan. ISBN 978-601-228-708-0

Schmidt, C. (2005). A Sarbanes-Oxley Dilemma. *Internal Auditor*. The Institute of Internal Auditors. Lake Mary, Florida. Vol.62. No. 3. 29-32.

Schmidt, C. (2005). The driver's view. *Internal Auditor*. The Institute of Internal Auditors. Lake Mary, Florida. Vol.62. No. 1. 89-92.

Schmidt, C. (2004). Sensitive Areas of Concern. *Internal Auditor*. The Institute of Internal Auditors. Lake Mary, Florida. Vol.61. No. 3. 93-96.

CONFERENCES

Schmidt, C. (submitted) Models of Factors affecting Individuals Experiences with Wrongdoing within Institutions of Higher Education. 1st Ference Farkas International Scientific Conference. University of Pecs, Hungary.

Schmidt, C.R. (2017) Exploration of Mechanisms used for Organizational Learning related to Whistleblowing Claims in Institutions of Higher Education at the State and the Institution. *Almaty Conference Proceedings*. Almaty, Kazakhstan.

Schmidt, C.R. (2017) Technology's Impact on Marketing. 22nd International Scientific Conference on Strategic Management and Decision Support Systems. University of Novi Sad. Subotica, Serbia.

Schmidt, C.R. (2016). Proactive Learning from Whistleblower Claims in Higher Education. American Association of University Professors (AAUP) Shared Governance Conference. Washington, D.C.

Schmidt, C.R. Farkas, F. (2016). The Profitability Puzzle. 21st International Scientific Conference on Strategic Management and Decision Support Systems. University of Novi Sad. Subotica, Serbia.

Schmidt, C. R., Farkas, F. (2015) Anonymous Reporting "Whistleblowing" as a Mechanisms to improve Institutions of Higher Education: the Case of Ohio. *Almaty Conference Proceedings.* Almaty, Kazakhstan.