

## University of Arkansas, Fayetteville ScholarWorks@UARK

---

Theses and Dissertations

---

5-2017

# The Disclosure of Organizational Secrets by Employees

Danny Franklin

*University of Arkansas, Fayetteville*

Follow this and additional works at: <http://scholarworks.uark.edu/etd>

 Part of the [Business Administration, Management, and Operations Commons](#), and the [Organizational Behavior and Theory Commons](#)

---

### Recommended Citation

Franklin, Danny, "The Disclosure of Organizational Secrets by Employees" (2017). *Theses and Dissertations*. 1888.  
<http://scholarworks.uark.edu/etd/1888>

This Dissertation is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ScholarWorks@UARK. For more information, please contact [scholar@uark.edu](mailto:scholar@uark.edu), [ccmiddle@uark.edu](mailto:ccmiddle@uark.edu).

The Disclosure of Organizational Secrets by Employees

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy in Business Administration

by

Danny Franklin  
National Institute of Technology Calicut  
Bachelor of Technology in Mechanical Engineering, 2007  
University of Arkansas  
Master of Business Administration, 2010

May 2017  
University of Arkansas

This dissertation is approved for recommendation to the Graduate Council.

---

Dr. Vikas Anand  
Dissertation Chair

---

Dr. Jennifer J. Kish-Gephart  
Committee Member

---

Dr. Jonathan L. Johnson  
Committee Member

## **Abstract**

Organizational secrets enable firms to protect their unique stocks of knowledge, reduce the imitability of their capabilities and achieve sustained competitive advantages (Hannah, 2005). In today's business environments, the loss of valuable proprietary organizational knowledge due to intentional employee disclosure represents a substantial threat to firm competitiveness. Anecdotal evidence suggests that firms in the United States lose more than \$250 billion of intellectual property every year, with intentional employee disclosure accounting for a significant portion of these losses (Dandliker, 2012; Heffernan & Swartwood, 1993). Thus, understanding factors that influence such intentional secret disclosure is a key concern, especially in knowledge-intensive industries. While prior research has primarily focused on the disclosure of personal secrets, family secrets or 'dark' organizational secrets, very few studies have examined the disclosure of value-creating organizational secrets – i.e., strategic secrets that encapsulate knowledge about a firm's plans from competitors and social secrets that create valued identity categorizations within organizations (Goffman, 1959).

This dissertation begins to address this gap in the literature by putting forth a person-situation interaction model of secret disclosure. Specifically, drawing on the resource-based view of the firm and social identity theory, it explores how certain characteristics of value-creating organizational secrets (e.g., market value of knowledge and social value of concealment) may interact with certain individual-level variables (e.g., moral identity and need for status) to influence employees' secret disclosure intent. Using scenario-based surveys of undergraduate and EMBA students and a cross-sectional sample of working adults in the United States, this dissertation finds evidence for the key proposition that employees' perceptions of market value of knowledge and social value of concealment shape their secret disclosure intentions.

Individual-level factors like moral identity and organizational disidentification were also found to play important roles in the disclosure of organizational secrets. This dissertation contributes to the emerging field of organizational secrecy by integrating key informational and social perspectives to address concerns regarding secret protection in organizations.

© 2017 by Danny Franklin  
All Rights Reserved

## **Acknowledgements**

I would like to thank several people who made this dissertation possible and played an important part in molding me into the scholar I am today. First and foremost, I am deeply indebted to my advisor, mentor and teacher, Vikas Anand. He not only inspired me to enter academe, but also played a key role in my development over the years. Under Vikas' tutelage, I learned what it meant to be a good researcher, teacher and role model. Next, I would like to express my deepest gratitude to my committee members, Jennifer Kish-Gephart and Jon Johnson. In addition to helping immensely with my dissertation, Jen and Jon motivated me to become a better scientist, co-author, and departmental citizen.

I would also like to thank the faculty in the Management department for all the guidance they have given me over the years: Alan Ellstrand, Anne O'Leary-Kelly, Chris Rosen, Denise Soignet, Jason Ridge, Joanna Campbell, John Delery, and Nina Gupta. They played an important role in my transition from an inexperienced first-year doctoral student to a committed academic. I would also like to acknowledge some of my current and former colleagues and friends in doctoral programs at the Walton College: Amy Guerber, Hansin Bilgili, and Issam Moussaoui. I could not have made it through the program without their friendship and support.

## Table of Contents

<b>I. Statement of the Problem</b> .....	1
<b>II. Literature Review</b> .....	7
<b>A. Organizational Secrecy</b> .....	7
Definition of Organizational Secrecy .....	8
Schools of Thought in Organizational Secrecy .....	10
Shortcomings of the Literature on Organizational Secrecy .....	17
<b>B. Disclosure of Secrets</b> .....	18
The Social Psychological Perspective .....	19
The Whistleblowing Perspective.....	23
<b>C. Characteristics of Organizational Secrets</b> .....	26
Value of an Organizational Secret.....	26
<b>III. Hypothesis Development</b> .....	31
<b>A. Effects of the Market Value of Knowledge on Secret Disclosure</b> .....	33
<b>B. Moderators of the Market Value – Disclosure Relationship</b> .....	34
Moral Identity .....	35
Risk Aversion .....	36
Ambiguity Tolerance.....	37
<b>C. Effects of the Social Value of Concealment on Secret Disclosure</b> .....	38
<b>D. Moderators of the Social Value – Disclosure Relationship</b> .....	40
Need for Status .....	41
Organizational Identification.....	42
Organizational Disidentification .....	43
<b>IV. Method</b> .....	46
<b>A. Study Design and Participants</b> .....	46
<b>B. Procedure</b> .....	48
<b>C. Manipulation Checks of Independent Variables</b> .....	50
<b>D. Measures</b> .....	50
Perceived Market and Social Value of the Secret .....	50
Moral Identity .....	51
Risk Aversion .....	52
Ambiguity Tolerance.....	53

Need for Status .....	54
Organizational Identification and Disidentification .....	54
Secret Disclosure Intention .....	55
<b>V. Analysis and Results</b> .....	<b>57</b>
<b>A. Manipulation Checks</b> .....	<b>57</b>
<b>B. Study 1 Results</b> .....	<b>59</b>
<b>C. Study 2 Results</b> .....	<b>67</b>
<b>VI. Discussion</b> .....	<b>74</b>
<b>A. Implications</b> .....	<b>80</b>
Implications for Research.....	80
Implications for Practice .....	82
<b>B. Limitations and Future Research Directions</b> .....	<b>83</b>
<b>C. Conclusion</b> .....	<b>88</b>
<b>References</b> .....	<b>89</b>
<b>Appendix A: Research Compliance Documentation</b> .....	<b>103</b>
<b>Appendix B: Experimental Vignettes</b> .....	<b>105</b>
Study 1 Vignettes .....	105
Study 2 Vignettes .....	107



## **I. Statement of the Problem**

Loose lips have the potential to sink entire organizations (Marcus, 2014). According to a recent report by a consulting firm, organizational secrets “comprise two-thirds of the value of firms’ information portfolios [today]” (Forrester, 2010, p. 2). Firms in the United States are estimated to lose more than \$250 billion of intellectual property every year, with most trade secret losses occurring due to employee disclosure (Dandliker, 2012; McJohn, 2012). Despite these staggering statistics, very little research in strategic management has examined the disclosure of valuable organizational secrets. Notable exceptions include Anand and Rosen’s (2008) discussion of the sanctioning and revelation of secrets, Costas and Grey’s (2014) exposition of the social dynamics of secret maintenance and disclosure, and Hannah and Robertson’s (2015) study of confidential information rule violations by organizational members.

Organizations may maintain secrets – i.e., “bits of information that, for one reason or another, are kept hidden or controlled [by organizational members] so as to elude attention, observation, or comprehension” (Wexler, 1987, p. 470) – for several reasons. Goffman (1959) introduced a typology of organizational secrets based on their function: (1) strategic secrets that encapsulate information about a firm’s plans from competitors; (2) dark secrets that limit knowledge regarding ‘dirty’ activities inconsistent with the organization’s identity or image; (3) inside secrets that denote group membership and create a sense of belonging; and (4) entrusted secrets that denote trustworthiness in organizations. Strategic, inside and entrusted secrets create some sort of value for the organization – they enable firms to capture economic rents, attract and retain valuable talent, and achieve competitive advantage. Dark secrets do not create value per se, but prevent the destruction of firm value (i.e., loss of reputation, valuable talent and competitive advantage) by limiting knowledge of unethical firm practices.

Depending on their function, the disclosure of organizational secrets can have certain adverse consequences for the firm and its advantage in the market. Organizational secrets may be disclosed in one of two ways. First, organizations may plan to disclose secrets when the encapsulated knowledge becomes obsolete and no longer creates value (Anand, Rosen, & Franklin, 2017). Planned disclosure often involves a utilitarian analysis, where organizations examine the costs (e.g., legal costs of drawing up and enforcing non-disclosure and non-compete agreements, social and ethical costs of concealing information from stakeholders) and benefits (e.g., product-market performance, competitive advantage, and so on) of maintaining the secret. When the costs of secret maintenance greatly exceed the expected benefits, the organization may plan to disclose the secret.

Apart from planned organizational disclosure, organizational secrets may also be disclosed when insiders (i.e., organizational members privy to the secrets; Anand & Rosen, 2008) intentionally or unintentionally leak information, or when outsiders uncover these secrets accidentally or through deliberate investigation (Anand et al., 2017). In these instances, the organizational secret is disclosed outside the realm of organizational control. Such unplanned disclosure can have severe deleterious effects on organizations. For example, unplanned disclosure of secrets regarding widespread corruption in the organization can damage the firm's reputation beyond repair, as in the case of the Canadian engineering and construction giant SNC-Lavalin (Vieira, 2015). Similarly, unplanned disclosure of secrets that confer and denote group membership (e.g., the secret beliefs of the Church of Scientology) can significantly erode the attractiveness of the firm's identity. Thus, unplanned secret disclosure is an important topic of study that has a host of economic and social consequences for organizations, ranging from loss of competitive advantage to severe negative repercussions from organizational stakeholders.

This dissertation examines the intentional, unplanned disclosure of value-creating organizational secrets – i.e., the intentional or willful revelation of strategic, inside and entrusted organizational secrets, outside the realm of direct organizational control – by employees privy to these secrets<sup>1</sup> (hereafter referred to as *employee disclosure*). Employee disclosure is an interesting topic of study due to two reasons. First, according to anecdotal evidence, current employees represent one of the biggest sources of intellectual property leaks in organizations (Dandliker, 2012). Secrecy is a knowledge protection mechanism similar to patents and trademarks (Dufresne & Offstein, 2008) that enables firms to capture the value in intangible resources and reduce the imitability of their competencies, lending the firm a sustained competitive advantage (Barney, 1991; Conner & Prahalad, 1996). In today’s knowledge economy, loss due to employee disclosure represents a substantial threat to competitiveness and even firm survival (Hannah & Robertson, 2015). Second, although employee disclosure is outside the direct control of organizations, firms may be able to enact policies or create social conditions that discourage intentional employee disclosure, indirectly affecting the focal phenomenon. Secret disclosure due to outsiders’ investigative efforts or accidental discovery, on the other hand, is much less conducive to indirect organizational control.

---

<sup>1</sup> While an employee’s disclosure of value-creating secrets (i.e., strategic, inside and entrusted secrets) is best conceptualized as a deviant organizational behavior (behavior motivated by self-interest that contravenes organizational and societal norms and is oftentimes illegal), the disclosure of dark secrets is a prosocial organizational behavior that benefits society and the organizations themselves in the long run, and is even protected by law (Miceli, Near, & Dworkin, 2008). Due to these fundamental theoretical differences and the fact that whistleblowing has already been extensively researched in the organizational realm, this dissertation focuses on the domain of value-creating secrets and does not examine the disclosure of dark secrets. However, this dissertation does draw on research in whistleblowing to develop an integrative model of secret disclosure by employees.

Anecdotal evidence suggests that employees may leak value-creating organizational secrets for several reasons. Consider the following introductory section of a practitioner's guide to protecting trade secrets:

“It finally dawns on you. Somehow, your competitor has come into possession of some of your firm's business secrets... You wonder who could be responsible for such damaging leaks. Could a current employee be giving the information away? Could an employee be selling it? Could a disgruntled former employee be engaged in efforts aimed at trying to exact revenge on your firm by giving away its valuable secrets that serve as the basis for its competitive advantage in the market?” (Budden, 1996, p. 3)

There appears to be widespread concern among practitioners about disgruntled current and former employees leaking value-creating organizational secrets for personal financial gain, or as retribution for negative organizational experiences. However, research evidence for such secret disclosure is lacking (for an exception, see Hannah, 2007). The whistleblowing literature, as discussed shortly, has traditionally examined individual characteristics like demographic and personality variables (e.g., age, sex, locus of control, cognitive moral development, etc.), job performance, and attachments to organization, in addition to situational variables like severity of wrongdoing and threat of retaliation to predict voice behavior (Mesmer-Magnus & Viswesvaran, 2005); however, these findings are limited to the disclosure of unethical organizational secrets, motivated by one's recognition of moral issues in organizational secret-keeping. Due to the *amoral* nature of strategic, inside and entrusted organizational secrets (and the harm to the organization resulting from their disclosure), the disclosure of valuable organizational secrets is likely to be affected by a widely different set of contextual and individual factors.

The purpose of this dissertation is to begin to explore how certain characteristics of value-creating organizational secrets may interact with certain individual-level characteristics to affect secret disclosure intent. Now, there are two aspects of the research question that merit highlighting. First, I restrict my examination of secret disclosure to that carried out *willfully* by

employees who are privy to the organizational secret. The theoretical framework does not encompass disclosure due to the purposeful or accidental discovery of the secret's content by outsiders, or that due to the accidental revelation of secret information by employees. The restriction in range of the focal phenomenon is essential for theoretical parsimony (cf. Weick, 1979), in addition to being motivated by practical relevance. As mentioned earlier, firms may indirectly affect intentional secret disclosure by enacting policies, building awareness, and creating social conditions that discourage employee disclosure. Firms may not be able to exert such indirect control over accidental leaks or over constituencies external to the organization.

Second, I approach the field of organizational secrecy from both informational and social dynamic perspectives. Several scholars have studied the informational content of organizational secrets, assuming secrets are significant mostly because of the information they conceal (e.g., Anand & Rosen, 2008; Hannah, 2005; 2007). A few others have studied the social dynamics engendered by secrecy (e.g., Costas & Grey, 2014; Goffman, 1959); these researchers mostly focus on the formal and informal social processes of secrecy and the various socio-structural outcomes of concealment. In integrating key aspects of the informational and sociological perspectives of organizational secrecy, this dissertation seeks to address employee disclosure from multiple vistas to improve our understanding of the phenomenon.

This manuscript is organized as follows. In Chapter 2, I review the literature on organizational secrecy, and introduce certain characteristics of secrets that affect disclosure. In Chapter 3, I develop hypotheses regarding the main effects of secret characteristics and interactive effects of individual-level factors on secret disclosure intent. I then describe my research methods (Chapter 4), test these ideas using scenario-based surveys of undergraduate and EMBA students and members of the general working population, present my results (Chapter 5)

and finally discuss findings and implications of the study for research and practice (Chapter 6). Overall, this dissertation contributes to the emerging field of organizational secrecy by highlighting characteristics of secrets and individual-level factors that predict the disclosure of organizational secrets.

## **II. Literature Review**

In general, this dissertation seeks to explore how certain secret characteristics may interact with certain individual-level variables to affect secret disclosure intent. In this section, I discuss research in organizational secrecy, review three major schools of thought in the arena, and discuss past work in social psychology and whistleblowing on the disclosure of personal and unethical organizational secrets, respectively.

### **A. Organizational Secrecy**

Secrecy is said to permeate every aspect of business strategy formulation and implementation, from the development of long-term market penetration strategies to new product development. It is vital to firms' competitiveness today, and, indeed, necessary for firm survival (Hannah, 2005). Firms have increasingly opted to keep valuable information secret rather than rely on patents, trademarks or copyrights in this age of hypercompetition (D'Aveni, 1994). Patents provide legal protection for certain types of intellectual property (e.g., novel products, processes, and design) for a specified period of time (usually 20 years from patent application) in exchange for public disclosure of codified information regarding the patent (Yoffie & Freier, 2004). Similarly, trademarks and copyrights provide legal protection for certain types of rights related to brands and creative works, respectively, for varying lengths of time in exchange for public disclosure (Yoffie & Freier, 2004). Secrets, on the other hand, have several advantages over other traditional methods of intellectual property protection (Anand et al., 2017). First, secrets can theoretically protect proprietary knowledge for an indefinite amount of time. If the firm clearly identifies knowledge as secret and makes significant efforts to limit the information, the knowledge is protected under the Uniform Trade Secrets Act of 1985 and/or the Economic Espionage Act of 1996 (Anand et al., 2017). Second, secrets can protect both explicit and tacit

knowledge. While explicit knowledge can be codified, stored and shared through impersonal media, tacit knowledge is “intuitive and unarticulated” and can only be shared through close interaction with a “knowing subject” (Lam, 2000, p. 490). Tacit knowledge plays a significant role in organizational learning, innovation, and competitiveness, but cannot be protected using patents or copyrights due to its non-codifiable nature (Grant, 1996; Lam, 2000; Nonaka & Takeuchi, 1995). Thus, secrets enable firms to protect intangible resources, reduce the imitability of their capabilities and gain a somewhat sustained competitive advantage (Barney, 1991; Conner & Prahalad, 1996). However, despite its ubiquitous nature, very little research in strategic management has systematically examined organizational secrecy (for exceptions, see Anand & Rosen, 2008; Costas & Grey, 2014; Liebeskind, 1997).

### **Definition of Organizational Secrecy**

Organizational secrecy has been defined in various ways. Bok’s (1982) classic treatise defined secrecy as the “methods used to conceal... and the practices of concealment... [of] knowledge, information and/or behavior from the view of others” (p. 5-6). While this definition spurred initial interest in the field, it addressed a broader concept of secrecy and did not specifically relate to the organizational realm. A more fitting definition of organizational secrecy was put forth by Costas and Grey (2014): “the ongoing formal and informal social processes of intentional concealment of information from actors by actors in organizations” (p. 4). This definition considered the organizational context, but overly focused on the sociological process of concealment, somewhat discounting the informational content of the secret. Building on these definitions, this dissertation takes the middle ground between the informational and social perspectives by defining organizational secrecy as the process of intentional concealment of



valuable organizational knowledge by certain organizational actors from other actors inside or outside the focal organization.

There are two aspects of this definition that call for some elaboration. First, organizational secrecy involves an intentional concealment of information by certain organizational actors (see Bok, 1982; Costas & Grey, 2014; Vangelisti & Caughlin, 1997). These actors may represent the dominant coalition – that is, individuals at higher levels in an organization responsible for strategic decision-making on the firm’s behalf (Child, 1972) – who initiate and maintain organizational secrets in the interest of superior firm performance (Liebeskind, 1997). Alternatively, individuals or groups of individuals within firms may initiate secrets for a variety of reasons including the need to conceal a firm’s dirty activities like “forms of abuse and exploitation [in organizations]” (Bok, 1982, p. 136), the need to develop or strengthen a collective identity, and the need to convey trustworthiness in organizations (Goffman, 1959). As explained shortly, these different intentions of secret initiators result in the formation of fundamentally different types of organizational secrets: strategic secrets, dark secrets, and inside/entrusted secrets (Goffman, 1959).

Second, organizational secrets are in some way valuable to the organization or group(s) within the organization. The value of an organizational secret has been examined in the literature from three distinct points of view. First, organizational secrets may be valuable when they conceal knowledge that is, in itself, valuable to the firm. Tacit or explicit knowledge that is embodied in a firm’s employees, organizational routines, practices, and procedures and concealed from competitors may enable the organization to achieve superior returns and competitive advantage (Nelson & Winter, 1982; Walsh, 1995; Winter, 1987). Second, organizational secrets may be valuable when they create meaningful distinctions between

insiders and outsiders, serve to strengthen the identity of the organization or the group, and/or bestow insiders with organizational status and some form of normative control in organizations (Costas & Grey, 2014; Fine & Holyfield, 1996). Note that the two aspects of secret value discussed above (i.e., the market value of knowledge and the social value of concealment) are somewhat independent of each other, but usually co-occur in organizations. This dual-mode conceptualization of secret value is discussed in more detail shortly. Third, organizational secrets may be valuable when they encapsulate information regarding unethical firm practices from organizational stakeholders. As mentioned earlier, these secrets do not *create* value per se, but are valuable nonetheless because they prevent the destruction of firm value that would result if these unethical firm practices were to become public knowledge; however, in the interest of theoretical parsimony, this dissertation focuses on value-creating secrets alone.

### **Schools of Thought in Organizational Secrecy**

There appear to be three major camps in the study of organizational secrecy (see Costas & Grey, 2014 for a broader classification of the literature into two camps – the informational and social camps). As described above, a large group of scholars hold that secrecy is essential for firm survival in this age of competitive flux. This paradigm bridges research in economic, legal, strategic management and practitioner literatures (e.g., Alvesson, 2004; Bramson, 1981; Cohen, 2013; Friedman, Landes, & Posner, 1991; Greve, Palmer, & Pozner, 2010; Hannah, 2005; 2007; Hannah, Parent, Pitt, & Berthon, 2014; Lounsbury & Goldberg, 2013; Teece, 1998). Here, secrecy is viewed as a knowledge protection mechanism, much like patents, trademarks and copyrights (Anand & Rosen, 2008; Dufresne & Offstein, 2008). The assumption in this stream of research is that secrets are commercially or otherwise valuable in nature: “secrets... protect an informational asset perceived to be of high value” (Dufresne & Offstein, 2008, p. 103). Thus, it appears that

scholars in this paradigm focus exclusively on Goffman's (1959) category of strategic secrets – those that encapsulate information about a firm's strategies from competitors, and, in the process, create value for the firm.

Strategic secrets have been studied in the literature under different labels. Trade secrets have been defined as “any information that can be used in the operation of a business... and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others” (Saunders, 2005, p. 210). Another widely accepted definition is provided by the Uniform Trade Secrets Act of 1985:

“Information, including a formula, pattern, compilation, program, device, method, technique, or process, that (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.” (Cowen et al., 1985)

Regardless of the numerous definitions, strategic secrets are maintained by firms because of their superior actual or potential *market value*. Drawing on the resource-based view of the firm, the market value of an organizational secret derives from the extent to which the content of the secret bestows (or is perceived to bestow) some firm-level advantage (e.g., short-term firm financial performance, long-term competitive advantage, corporate social performance, etc.). It may represent the actual product-market performance achieved from keeping some knowledge constrained to certain individuals within the firm and hidden from certain others (Schmidt & Keil, 2013). Alternatively, a secret's content may be designated as valuable ex-ante when insiders anticipate the information contained in the secret to lead to superior firm returns in the future (Schmidt & Keil, 2013).

Examples of strategic secrets abound in today's business world. Consider the case of Kentucky Fried Chicken. Yum! Brands operates KFC restaurants in over 120 countries today,

including large emerging markets like China, India, the Middle East and Africa. The sheer popularity of the Colonel's recipe in these international markets has enabled Yum! Brands to increase their earnings per share by 13% per year for the last decade (Brady, 2012). The famed recipe of eleven herbs and spices is kept in the KFC headquarters in Louisville, Kentucky, in a "770-pound high-tech safe inside a vault with concrete walls two feet thick" (Brady, 2012, para. 7; see Hannah, 2005). The vault itself is accessible only through an unmarked door inside the legal department in the building (Chan, 2014). To protect the trade secret from leaking, only one person knows the combination for the safe, while two other people know the amounts of different ingredients that go into the recipe (Chan, 2014). Furthermore, KFC uses two different suppliers of herbs and spices so that neither of them can infer the exact ingredients of the secret recipe (Chan, 2014; Hannah, 2005).

Contrasted with the aforementioned literature that focuses on the informational content of the secret, there exists a second group of scholars who focus on the sociological process and social antecedents and consequences of organizational secrecy (e.g., Bok, 1982; Costas & Grey, 2014; Feldman, 1988; Goffman, 1959; Grey, 2014; Simmel, 1906; Weber, Gerth, & Mills, 1946). In this extensive literature, secrecy is viewed as a sociological process that affects organizational relationships and changes social structure, largely divorced from the practical or functional consequences of information concealment such as firm performance (Costas & Grey, 2014).

Scholars in the social secrets paradigm hold that trust and secrecy form the social fabric that holds together voluntary business organizations (Fine & Holyfield, 1996). The sharing of information with trusted individuals and the withholding of information from other social actors generates and strengthens group and organizational identities (Fine & Holyfield, 1996). In return,

these identities form reference points to determine who is a trusted insider and an untrusted outsider (Costas & Grey, 2014). In this sense, trust, secrecy, and identity are intertwined in ways that create social cohesion in organizations (Costas & Grey, 2014; Fine & Holyfield, 1996) – these forces create a sense of belonging (‘us’) and a sense of separation (from ‘them’) that provide organizational members with a coherent sense of self. Thus, scholars in this paradigm appear to focus on Goffman’s (1959) categories of inside and entrusted secrets – these secrets denote group membership and trustworthiness, and create a sense of belonging for individuals.

As an illustration of inside / entrusted secrets, consider the secret account of creation and other beliefs held by the Church of Scientology. Only after a member has advanced to higher ‘levels’ after years of active membership in the church is he or she eligible to receive L. Ron Hubbard’s secrets (Peckham, 1998). Similarly, consider the social dynamics engendered by extreme cultures of secrecy that permeate clandestine organizations like Bletchley Park. Employees of Bletchley Park were prohibited from revealing who they worked for to “anyone in the outside world, including families, friends and spouses” (Grey, 2014, p. 111), or even revealing the most mundane aspects of their work to people in other departments. There were rumors of “new recruits being told, with a pistol on display, that security breaches would result in their being shot” (Grey, 2014, p. 111). People were even thoroughly vetted before being made an offer of employment. These elaborate rituals surrounding the dissemination and maintenance of secrets create social conditions ideal for the emergence of distinct insider group identities (Simmel, 1906). Furthermore, these secrets serve to elevate the social status of insiders, paving the way for self-distinction and self-enhancement (Dutton, Dukerich, & Harquail, 1994). It also bestows insiders with some form of power, normative influence, and control as they limit the

flow of information (Bok, 1982) and come to be seen as gatekeepers to secrets by outsiders (Costas & Grey, 2014).

Finally, in contrast with the above literatures on strategic and social secrets, a third group of scholars in the organization sciences hold that secrecy represents all things nefarious and should be avoided (e.g., Berggren & Bernshteyn, 2007; Halter, de Arruda, & Halter, 2009; Norman, Avolio, & Luthans, 2010; Rawlins, 2008; Williams, 2005). The assumption in this stream of work is that organizational secrets are often unethical or immoral in nature, encapsulating information about a firm's unethical intentions or behaviors: "secrecy comes to be associated with all that is nefarious... [like] corruption, malfeasance, [and] conspiracy" (Birchall, 2011, p. 66). Thus, these scholars appear to focus almost exclusively on Goffman's (1959) category of dark secrets – those that conceal information about an organization's dirty activities.

Scholars in this paradigm hold that organizational secrecy cannot be dissociated from the ethical issues surrounding information concealment: "Morality and secrecy cannot exist together; without the test of publicity... no one can truly know whether [their behavior meets] ethical standards common to society" (Shorris, 1984, p. 245). These scholars have long argued for the various benefits of transparency, or the intentional disclosure of information to firm's stakeholders (see Schnackenberg & Tomlinson, 2016, for a recent review). Moral justifications for transparency revolve around the right-to-know principle, Rawl's principles of justice, and Aquinas' virtue ethics (e.g., the virtue of truthfulness) (das Neves & Vaccaro, 2013). Additionally, transparency is said to have a host of firm benefits: inter- and intra-organizational trust (Pirson & Malhotra, 2011), ethical and corporate social performance, firm financial performance (Kim, Lee, & Yang, 2013), and effective knowledge transfer and

interorganizational learning in strategic alliances (Larsson, Bengtsson, Henriksson, & Sparks, 1998).

As an illustration of a dark secret, consider the case of the four largest tobacco companies in the United States. Executives of Philip Morris, R. J. Reynolds, Brown & Williamson, and Lorillard kept the ingredients and health and safety information of their tobacco products secret despite uncovering evidence of severe harmful effects (MSA, 1998). In their testimony to the United States Congress in 1994, CEOs of these tobacco firms declared under oath that nicotine was not addictive: “Mr. Congressman, cigarettes and nicotine clearly do not meet the classic definition of addiction. There is no intoxication” (Delafontaine, 2015, p. 178). Two years later, Jeffrey Wigand, a research and development scientist and a high-level executive with Brown & Williamson, blew the whistle that his company’s former chairman had lied to Congress: “There have been numerous statements made by a number of officers, particularly Mr. Sandefur, that we’re in the nicotine delivery business” (Stolberg, 1996, para. 10). The deception and its revelation culminated in the 1998 Tobacco Master Settlement Agreement, where the four largest tobacco manufacturers in the United States committed to compensating forty-six states for healthcare-related expenses to the amount of about \$10 billion annually for 25 years, in addition to making several marketing concessions (MSA, 1998).

Although dark secrets are somewhat pervasive in today’s business world and pose important questions for researchers and practitioners, their disclosure has already been widely studied in the whistleblowing literature. Whistleblowing has primarily been studied in fields like behavioral ethics and law (cf. Miceli, Near, & Dworkin, 2008). One of the most cited definitions of the construct was provided by Near and Miceli (1985): “the disclosure by organizational members (former or current) of illegal, immoral, or illegitimate practices under the control of

their employers, to persons or organizations that may be able to effect action” (p. 4). Research in the domain has traditionally focused on identifying the antecedents of whistleblowing (e.g., Dozier & Miceli, 1985; Rothschild & Miethe, 1999), organizational and societal retaliation against whistleblowers (e.g., Rehg, Miceli, Near & Van Scotter, 2008), and the effectiveness of whistleblowers in eliminating organizational wrongdoing (e.g., Miceli & Near, 2002; Near & Miceli, 1995; Near, Rehg, Van Scotter, & Miceli, 2004).

As apparent in the definition of the construct, whistleblowing involves the intentional disclosure of organizational practices that are illegal, immoral or otherwise illegitimate from the perspective of the whistleblower. This disclosure is likely motivated by employees’ recognition of moral issues in organizational secret-keeping, the violation of their moral identities (i.e., their self-conceptions as fundamentally moral people; Aquino & Reed, 2002), and other factors relating to the unethical nature of the organizational secret. For example, certain characteristics of organizational wrongdoing (e.g., severity, and materiality of harm), characteristics of the target of wrong-doing (e.g., closeness or social proximity), and certain contextual variables (e.g., whistleblowing climate, supervisor support, threat of retaliation) have all been hypothesized to affect whistleblowing intention and action (Mesmer-Magnus & Viswesvaran, 2005). In addition, certain characteristics of one’s moral schema (e.g., moral identity and dispositional moral disengagement; Aquino & Reed, 2002; Bandura, 1999) have been theorized to affect whistleblowing behavior as well (Braebeck, 1984; Miceli, Dozier, & Near, 1991; Near & Miceli, 1996).

On the other hand, the disclosure of strategic, inside, and entrusted organizational secrets by employees is likely to be driven by a completely different set of considerations. For instance, employees may disclose organizational secrets characterized by high market value (secret



characteristics are discussed shortly) for personal financial gain or to financially harm their organization. They may disclose socially valuable secrets (i.e., secrets that confer valuable social categorizations in organizations; discussed shortly) for self-verification, cementing their identity as largely separate from that of the organization, or to intentionally harm the identity, image and/or reputation of the organization. Such disclosure contravenes organizational and societal norms, and is oftentimes even illegal. Thus, while whistleblowing is often seen as a prosocial organizational behavior (Miceli et al., 2008), employee disclosure of strategic, inside and entrusted organizational secrets is a deviant organizational behavior motivated by self-interest. The literature on secret disclosure is reviewed in more detail shortly; however, in view of the extensive body of work on whistleblowing and in the interest of theoretical parsimony, this dissertation does not address the disclosure of dark secrets.

### **Shortcomings of the Literature on Organizational Secrecy**

Research on organizational secrecy has provided some useful insights, especially from a practitioner's perspective. For instance, a recent article in the *Journal of Financial Planning* provided anecdotal advice to practitioners about establishing a trade secret protection program in their organizations (see Loury & Goldberg, 2013). Another article in the *Harvard Business Review* advised practitioners regarding the important differences between secrets and patents, and when it is more appropriate to protect valuable knowledge using trade secrets (see Lobel, 2013). Even the business news today is strewn with articles about organizational secrets: "The New York Federal Reserve's lead supervisor of Goldman Sachs Group Inc. has quit for a job advising other financial firms, triggering concerns within the Wall Street bank that some of its business secrets might not stay so secret" (Schmidt & Katz, 2015, para. 1). However, despite the

abundance of practitioner and legislator interest in the arena, research on organizational secrets remains in its infancy, fragmented across different fields of study.

First, no unifying paradigm exists in the study of organizational secrecy. Scholars have examined secrecy from strategic, sociological, legal, and ethical perspectives, without integrating key insights across disciplinary boundaries. This has led to a somewhat stale body of work, with each discipline focusing on fundamentally different types of organizational secrets (cf. Goffman, 1959). Second, even the fragmented literatures above (except for the legal literature) have almost completely ignored practitioners' biggest concerns about organizational secrecy: "The devastating reality is that theft of trade secrets costs the American economy billions of dollars per year" (Jeffries et al., 2014, para. 1), with most of this loss occurring through employee disclosure (McJohn, 2012). What characteristics of organizational secrets make them more susceptible to employee disclosure? Are there individual-level factors that enhance or curb secret disclosure intent and behavior? Can organizations take steps to reduce intentional disclosure? This dissertation attempts to address these questions by putting forth an integrative model of secret disclosure by insiders.

## **B. Disclosure of Secrets**

Except for Hannah and Robertson's (2015) study of confidential information rule violations by organizational members, the disclosure of value-creating organizational secrets by employees has not been examined in the literature. However, scholars of social psychology and organizational whistleblowing have extensively examined individuals' propensities to disclose personal and unethical organizational secrets, respectively. These literatures provide several useful insights into the disclosure of value-creating organizational secrets. For example, the social psychological literature makes the case that people may engage in conscious assessments

of the risks and benefits of disclosing personal secrets. The whistleblowing literature, on the other hand, adopts a person-situation interaction model in explaining whistleblowing intention and behavior. Overlooking their respective emphases on personal and unethical organizational secrets, these literatures have the potential to significantly contribute to our understanding of employee disclosure of value-creating organizational secrets. These literatures are briefly reviewed below.

### **The Social Psychological Perspective**

According to research in social psychology, people keep secrets for various reasons. For example, people may keep information regarding their concealable stigmatized identities (e.g., sexual orientation or HIV serostatus) secret for fear of negative evaluations from significant others and/or to protect their self-image (Caughlin, Scott, Miller, & Hefner, 2009; Goldsmith, Miller, & Caughlin, 2007). In addition to self-protection motives, people may keep secrets to protect significant others from carrying the burden of knowledge (Afifi & Steuber, 2009; Schrimshaw & Siegel, 2002), or to protect their relationships with significant others from harm (Vangelisti, 1994; Vangelisti & Caughlin, 1997). Despite these several reasons to keep personal secrets, individuals are sometimes compelled to disclose these secrets to outsiders for cathartic, social, and instrumental reasons (Caughlin et al., 2009).

There are three major models of secret disclosure in the social psychological literature (see Afifi & Caughlin, 2006; Afifi & Steuber, 2009; Kelly, 2002; Lane & Wegner, 1995; Stiles, 1987; Wegner & Lane, 1995). First, the fever model of disclosure (see Stiles, 1987) posits that concealing information from others causes people to become increasingly distressed, and that after reaching a tipping point, people disclose secrets for its various cathartic benefits (e.g., expression of positive and negative emotions, reduction of stress, and relief from physiological

symptoms of stress; Kelly, 2002). While this model has been credited with initiating a stream of work in secret disclosure, it has been criticized for oversimplifying the phenomenon. Most notably, the fever model has not been able to adequately explain why people kept secrets despite all the purported benefits of revelation (Afifi & Steuber, 2009; Kelly, 2002). However, the idea of catharsis was a significant contribution to the secret disclosure literature, and continues to stimulate research in social psychology to this day (see Kelly, 2002).

Second, the preoccupation model of disclosure states that the very act of concealing information from other individuals causes one to ruminate about the secret and become preoccupied with it (Afifi & Caughlin, 2006; Lane & Wegner, 1995). This rumination is cognitively taxing to individuals, as they begin to actively monitor their social interactions lest they “unwittingly reveal related information” (Afifi & Caughlin, 2006, p. 468) and unintentionally disclose the secret. To reduce this rumination, individuals try to suppress their thoughts regarding the secret, which ironically results in higher levels of preoccupation with the secret (Lane & Wegner, 1995; Major & Gramzow, 1999; Wegner & Lane, 1995). This so-called ‘rebound effect’ of thought suppression and rumination results in cognitive discomfort and even distress that can be resolved by disclosing the secret (Afifi & Caughlin, 2006; Stiles, 1995).

The preoccupation model points to several factors that may affect secret disclosure. For instance, secrets that are highly central to one’s self-identity are said to be much more likely to cause rumination and result in persistent cognitive discomfort (Afifi & Caughlin, 2006; Pachankis, 2007). Similarly, negative or ‘dirty’ secrets that are inconsistent with one’s image among external constituents are also seen as more likely to cause rumination and resist thought suppression, causing cognitive dissonance and subsequent efforts to reduce this dissonance (Afifi & Caughlin, 2006; Festinger, 1962; Pachankis, 2007). Even individual-level variables that are

correlated with one's propensity to ruminate (e.g., state and trait negative affect, and self-esteem) have been theorized to affect the disclosure of secrets (Afifi & Caughlin, 2006; Stiles, Shuster, & Harrington, 1992).

Despite the rather intuitive nature of some of these ideas, the preoccupation model of secrecy has, at best, received mixed support in the literature (see Kelly, 2002 for a review). For instance, while Wegner, Schneider, Carter, and White (1987) found support for the idea that thought suppression led to increased preoccupation with that thought, Kelly and Kahn (1994) found the opposite effect. It may be that the content of the thought itself (a white bear in the Wegner et al. (1987) study, and personal, unwanted thoughts in the Kelly & Kahn (1994) study) may play an important role in the preoccupation model, but these boundary conditions have neither been theorized nor tested. Other theoretical issues have been raised about the preoccupation model as well: "... it may well be that people suppress thoughts that are intrusive, rather than the thoughts that they suppress become intrusive" (Kelly, 2002, p. 53). Is it thought suppression that results in cognitive discomfort and the consequent need to resolve discomfort through secret revelation, or cognitive discomfort with the secret itself that results in thought suppression?

In response to these theoretical and empirical issues with the preoccupation model, Afifi and Steuber (2009) introduced a third model – the RRM or Risk Revelation Model – to explain secret disclosure. The RRM postulates that people actively assess the various risks and benefits involved in secret disclosure. Risk of disclosure is broadly (and somewhat vaguely) defined as the various potential negative consequences of information revelation to oneself, others, and one's social relationships with others (Afifi & Steuber, 2009; Vangelisti, 1994; Vangelisti & Caughlin, 1997). For instance, people may perceive significant risks in disclosure when it

exposes them to ridicule or embarrassment (Afifi & Guerrero, 2000), exposes other individuals to harm, or compromises their relationships with significant others (Afifi & Schrodt, 2003; Vangelisti, 1994). On the other side of the equation, people may perceive several benefits associated with revealing secrets. For instance, people may reveal secrets for catharsis, or when they feel that others have a right to know (Afifi & Steuber, 2009). When the benefits of disclosure outweigh the risks, people are thought to disclose secrets.

Apart from its contribution to the disclosure of personal secrets, the RRM provides a few interesting insights into the disclosure of organizational secrets as well. For example, people may engage in a conscious assessment of the risks and benefits of disclosing a value-creating organizational secret. Insiders may be less inclined to reveal an organizational secret if they feel that it could damage their self-concept, lower their self-esteem, harm their coworkers, or hurt their relationships with other organizational members (i.e., self-related, other-related, and relationship-related risks of disclosure; Afifi & Steuber, 2009). On the other hand, insiders may be more inclined to reveal their organization's secret when they perceive personal or social benefits to doing so. For instance, insiders may partially reveal the secret recipe of a popular product to gain admiration in their social circles or for illicit financial gain.

In addition to studying individuals' motivations to disclose personal secrets, the social psychological literature has also examined various communicative strategies that individuals may employ to disclose secrets (Afifi & Steuber, 2009). It has been proposed that direct revelation strategies – wherein individuals rely on rich communication media like face-to-face communication to voluntarily initiate information revelation, or respond to inquiries from others with secret revelation (Afifi & Steuber, 2009; Derlega, Winstead, & Folk-Barron, 2000) – are usually employed when the risks of secret disclosure are low. On the other hand, indirect

revelation strategies that are more passive in nature (e.g., disclosure through third-parties, hinting at a secret, incremental secret disclosure, and leaving evidence or a paper trail for outsiders to discover the secret; Afifi & Steuber, 2009; Newell & Stutman, 1991) are used when the personal, social and relational risks of secret disclosure are high (Afifi & Steuber, 2009). These ideas were largely supported in Afifi and Steuber's (2009) study of neutral and negatively-valenced personal secrets among undergraduate students.

### **The Whistleblowing Perspective**

According to research in whistleblowing, insiders may disclose unethical or dark organizational secrets – those that encapsulate information about organizational wrongdoing or “illegal, immoral, or illegitimate [organizational] practices” (Near & Miceli, 1985, p. 4) – for a variety of reasons. Specifically, the prosocial organizational behavior model of whistleblowing (see Miceli et al., 2008) holds that individuals often disclose organizational wrongdoing for altruistic (Staub, 1978), moral (Miceli, Near, & Schwenk, 1991), financial (Callahan & Dworkin, 1992) and/or social (Glazer & Glazer, 1989) reasons. That is, if individuals perceive that blowing the whistle may result in (1) positive changes to the focal organizational practices, (2) reduction of harm to affected stakeholders, (3) financial awards from the legal system, and/or (4) social recognition for their actions, they are likely to disclose the organizational wrongdoing to internal and/or external constituents capable of producing organizational change (Miceli et al., 2008).

Scholars have examined three sets of variables that affect the whistleblowing decision. First, dispositional factors like positive and negative affectivity (Miceli, Scotter, Near, & Rehg, 2001), moral relativism and idealism, self-esteem (Starkey, 1998), cognitive moral development (Miceli & Near, 1992), and locus of control (Chiu, 2003) have all been theorized to affect whistleblowing intention and action (see Miceli et al., 2008). Basically, this stream of work

draws on research in behavioral ethics to theorize that ‘good apples’ expose ‘bad barrels.’ A vigilant person with a highly-developed moral schema and a strong internal locus of control is thought to be much more likely to blow the whistle on organizational wrongdoing. However, despite the appeal of the dispositional model, empirical findings have been mixed at best (see Mesmer-Magnus & Viswesvaran, 2005; Miceli et al., 2008). For instance, Mesmer-Magnus and Viswesvaran (2005) found one’s ethical judgment to be meta-analytically correlated with whistleblowing intention ( $r = 0.45$ ; CV [0.35, 0.56]) but not whistleblowing action ( $r = -0.08$ ; CV [-0.38, 0.22]), suggesting the need for a more complex theoretical explanation.

Second, whistleblowing researchers have examined the effects of characteristics of the organizational wrongdoing on one’s propensity to disclose the wrongdoing. For instance, the severity and frequency of wrongdoing, existence of evidence of wrongdoing, and one’s social proximity to the wrongdoer and the victim of wrongdoing have all been theorized to affect whistleblowing intention and action (Mesmer-Magnus & Viswesvaran, 2005). Upon closer examination, most of these contextual factors map on to the different dimensions of Jones’ (1991) construct of moral intensity. For example, the frequency of wrongdoing, the severity or seriousness of wrongdoing, and the materiality of resulting harm (see Mesmer-Magnus & Viswesvaran, 2005) all seem to directly map on to Jones’ (1991) dimension of magnitude of consequences. When the consequences of an unethical organizational secret are perceived to be serious, people may engage in moral reasoning and even experience emotions like moral outrage, prompting them to take moral action (Jones, 1991). However, like before, empirical results regarding these contextual factors have been mixed. While the seriousness of organizational wrongdoing was found to be weakly correlated with whistleblowing action ( $r = 0.13$ ; CV [0.10,



0.17]), it was not significantly correlated with whistleblowing intention ( $r = 0.16$ ; CV [-0.35, 0.67]) (Mesmer-Magnus & Viswesvaran, 2005).

The third set of variables explored in the whistleblowing literature is contextual in nature. The extent to which the organizational climate tolerates or even permits wrongdoing (or conversely, tolerates or permits whistleblowing) may affect a member's propensity to take moral action (Bergman, Langhout, Palmieri, Cortina, & Fitzgerald, 2002; Mesmer-Magnus & Viswesvaran, 2005). Similarly, the threat of retaliation – where “members of the organization attempt to control the employee by threatening to take, or actually taking, an action that is detrimental to the well-being of the employee, in response to the employee's reporting, through internal or external channels, a perceived wrongful action” (Rehg, 1998, p. 17) – may have substantial effects on whistleblowing intention and action. Even aspects of national culture (e.g., Hofstede's (1980) dimensions of individualism vs. collectivism and power distance) have been theorized to affect whistleblowing (Sims & Keenan, 1999).

In sum, research in whistleblowing has examined the secret disclosure decision from a behavioral ethics perspective. Various personal (e.g., age, gender, education, negative affectivity), situational (e.g., type, severity, and frequency of wrongdoing) and contextual (e.g., organizational climate, organizational culture, and threat of retaliation) factors and interactions between these factors (e.g., gender X threat of retaliation; Rehg et al., 2008) have been hypothesized to affect whistleblowing. Overlooking the exclusive focus on organizational wrongdoing, the whistleblowing literature provides a few interesting insights into the disclosure of valuable organizational secrets as well. For instance, similar to how whistleblowing is conceptualized as a form of prosocial organizational behavior (see Miceli et al., 2008), the disclosure of value-creating organizational secrets may be conceptualized as a type of

organizational deviant behavior (or organizational counterproductive work behavior; Robinson & Bennett, 1995); such disclosure violates organizational and societal norms, and may even be illegal under certain circumstances. One's propensity to disclose a value-creating organizational secret may be affected by (1) situational factors like certain characteristics of the secret itself (discussed below), (2) individual-level factors like organizational identification and moral identity, and, (3) interactions between these personal and situational factors. These ideas are further elaborated in Chapter 3 of this dissertation.

### **C. Characteristics of Organizational Secrets**

As mentioned earlier, the social psychological and whistleblowing perspectives examine very specific types of secrets; the former focuses mostly on personal and/or stigmatizing secrets, while the latter focuses on unethical organizational practices. In this section, I discuss certain characteristics of strategic, inside, and entrusted organizational secrets (Goffman, 1959) that affect individuals' evaluations of risks and benefits of disclosure. First, I discuss the value of an organizational secret in terms of its constituent parts: the market value of knowledge contained in the secret and the social value of concealing this information from salient outsiders. These characteristics map on to two major schools of thought in organizational secrecy; the market value of knowledge is central to the strategic or trade secrets perspective, while the social value of concealment is central to the sociological perspective.

#### **Value of an Organizational Secret**

The value of an organizational secret is an important characteristic that imparts economic rents and bestows long-term competitive advantage. The overall value of an organizational secret can be broken down into two distinct components: (1) the actual or potential product- or service-market value of the information or knowledge itself (hereafter, the *market value of knowledge*;

described shortly), and, (2) the social value perceived by insiders of keeping this information or knowledge hidden from other constituents (henceforth, the *social value of concealment*; described shortly). Such a fine-grained conceptualization of secret value serves to distinguish the information or knowledge contained in the secret from the act of keeping this knowledge confined to certain actors. In making this distinction, this dissertation speaks to two major camps in the study of organizational secrets: the strategic secrets perspective that focuses on the value of the knowledge or information contained in a secret (e.g., Anand & Rosen, 2008), and the sociological perspective that focuses on the social antecedents and consequences of information concealment (e.g., Costas & Grey, 2014).

First, the market value of knowledge as a productive resource has been extensively studied in the resource-based (Barney, 1991; Wernerfelt, 1984) and knowledge-based (Conner & Prahalad, 1996) views of the firm. In these literatures, knowledge is deemed valuable when it enables a firm to formulate and implement strategies that improve its performance in the marketplace (e.g., Miller & Shamsie, 1996). Despite the intuitive appeal of this definition, the idea that *ex-post* market performance determines knowledge value poses some challenges for theory and practice alike (Kraaijenbrink, Spender, & Groen, 2010). For example, how do managers determine that certain knowledge is valuable and should be encapsulated in a secret before deploying this knowledge to create market value? Furthermore, the resource-based view of the firm has long been criticized for its broad, tautological definition of value (Kraaijenbrink et al., 2010; Priem & Butler, 2001). To clarify the notion of value, this dissertation takes the stance that it is both the actual (i.e., *ex-post*) and potential (*ex-ante*) market value of knowledge that managers consider in secret-keeping (cf. Schmidt & Keil, 2013).

Firms develop, acquire, and protect knowledge in the anticipation of gaining a competitive advantage (Schmidt & Keil, 2013). They may differentially value knowledge *ex-ante* based on their current knowledge stocks, their market position, and potential competitive improvement from possessing the knowledge, among other factors (Cohen & Levinthal, 1990; Schmidt & Keil, 2013). For instance, tacit knowledge related to the synthesis of biotech drugs may be far more valuable to an under-performing pharmaceutical company than, say, to a large firm in the retail sector. When managers recognize that the focal knowledge contained in an organizational secret is potentially valuable to the firm (i.e., the knowledge is related to the core business of the firm, and its possession can potentially lead to superior market performance and future competitive advantage), they are likely to view the secret itself as valuable and indispensable to marketplace success.

Second, in addition to the market value of knowledge, secrets may be valuable when they conceal knowledge (even somewhat trivial knowledge) from certain other actors to achieve certain social ends. These social psychological antecedents of secrecy and the ensuing social dynamics in organizations have been studied by social psychologists like Donald Campbell, and sociologists like Georg Simmel (1906), Erving Goffman (1959), Max Weber (1946) and Sissela Bok (1982). Drawing on these literatures, the social value of concealment is theorized to be directly related to the (1) scope and the (2) social identity value (see Sherman, Hamilton, & Lewis, 1999) of the secret.

The scope of a secret has been studied under different rubrics in the literature. Anand and colleagues (2017) defined the scope of a secret as the number of insiders associated with the secret. Building on Faia's (2000) work, they made the case that as the number of people privy to a secret increase, the greater is the likelihood of the secret being disclosed. Costas and Grey

(2014) similarly defined the ‘scale’ of secrecy as the number of people aware of the secret. According to them, as the scale of secrecy grows beyond a certain point, trust may become an ineffective mechanism to contain the secret. Other researchers have conceptualized the scope of a secret as some sort of an interaction between the number of insiders and the quality of relationships between them. To them, it is not just the number of insiders that is important, but the extent to which the insiders in question form a cohesive, well-knit community that enables secret-keeping (Fine & Holyfield, 1996). In either case, the fewer the number of people privy to the secret, the greater the “exclusivity... [and the] accompanying sense of self-enhancement” (Costas & Grey, 2014, p. 15) that insiders are likely to experience in maintaining the secret.

The social identity value of a secret, on the other hand, stems from the degree of importance placed in belonging to the insider group (Sherman et al., 1999). Maintaining a secret often confers upon insiders a valuable group membership (Sherman et al., 1999) – it creates valued social categorizations and elevates the social status of insiders as they come to be seen as keepers of the secret. For instance, Griffiths (1995) found that the sharing of secrets (even trivial ones) among adolescent secondary school girls led to the formation of valued cliques and served to fulfill their need for belonging and distinction. Thus, the social identity value of a secret stems from a secret’s social identity functions such as the demarcation of insiders and outsiders and the elevation of status of insiders (Ashforth & Mael, 1989), fundamentally removed from the market value of the secret.

The aforementioned secret characteristics – the market value of knowledge and the social value of concealment – have the potential to systematically affect one’s evaluations of risks and benefits of secret disclosure, disclosure intent and eventual voice behavior. In the following

section, I draw on Afifi and Steuber's (2009) risk-revelation model and social identity theory to outline a person-situation interaction model of secret disclosure.

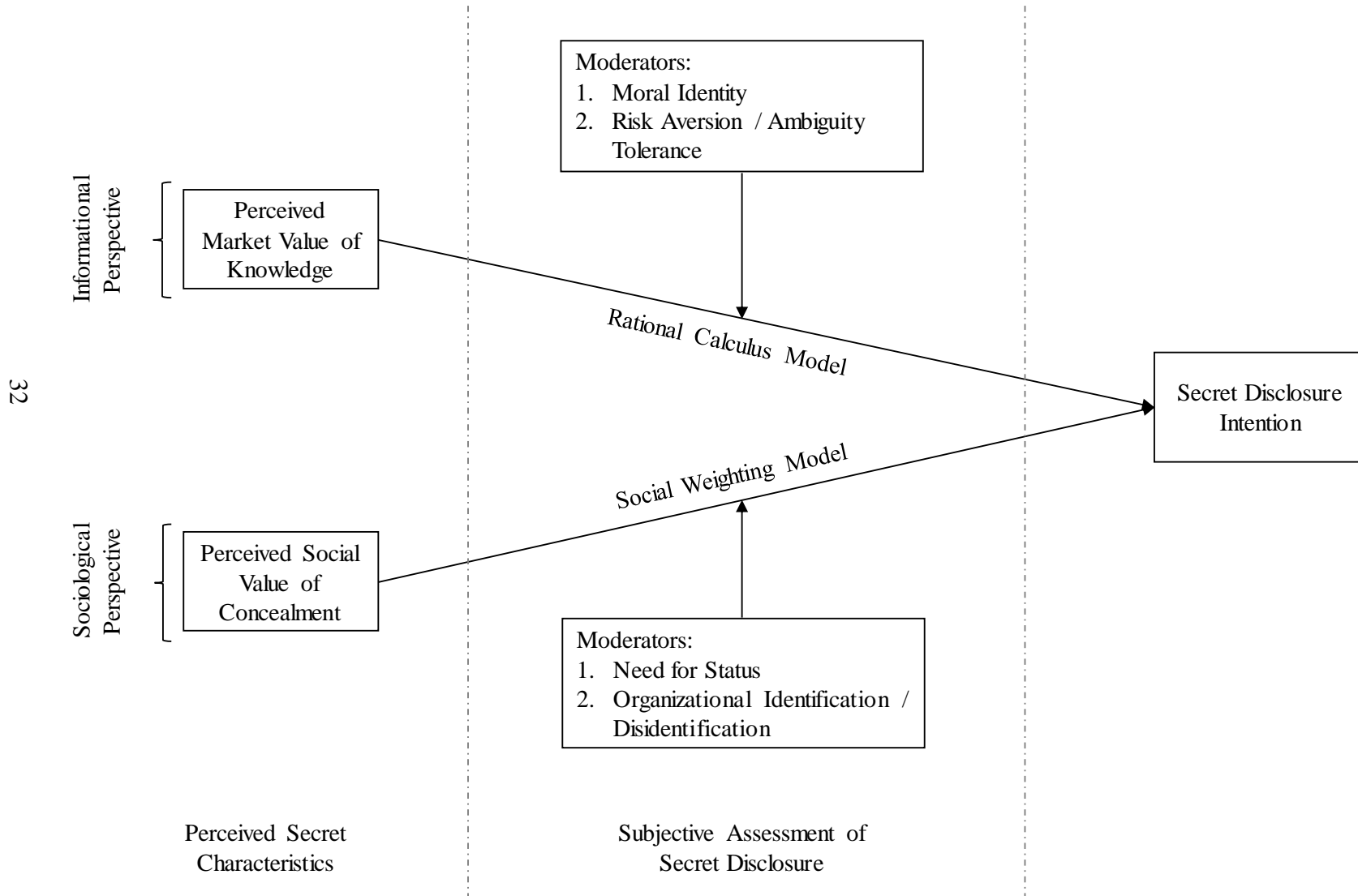
### **III. Hypothesis Development**

Intentional secret disclosure is best conceptualized as a form of organizational deviance, or “intentional behaviors engaged in by organizational members that are contrary to the norms of the organization, and which carry the potential to harm the organization” (Ferris, Brown, & Heller, 2009, p. 280). People are thought to engage in organizational deviant behaviors due to their dispositional tendencies or owing to negative workplace experiences like injustice (Bennett & Robinson, 2003). Continuing with this tradition, in this chapter, I advance a person-situation interaction model of employee secret disclosure. More specifically, I develop hypotheses regarding the main effects of certain secret characteristics and moderating effects of certain individual-level variables on employees’ secret disclosure intent.

I first draw on work in personal secret disclosure – specifically, Afifi and Steuber’s (2009) Risk Revelation Model – to advance a rational calculus model of employee secret disclosure. The market value of the knowledge contained in an organizational secret is central to the rational calculus model. I propose that as the market value of knowledge increases, the secret becomes less likely to be intentionally disclosed by insiders due to the perceived economic-legal risks of disclosure. However, certain individual-level variables may systematically affect the perceived risks and benefits of secret disclosure, moderating the above-mentioned relationship. I then draw on work in social identity theory (Ashforth & Mael, 1989) and organizational status to discuss the effects of the social value of concealment – a characteristic that is central to the sociological perspective of organizational secrecy – on secret disclosure intent and behavior. I also address the moderating influences of certain dispositional factors and psychological attachments to the organization on the aforementioned relationships. The proposed integrative model of employee secret disclosure is presented in Figure 1.

**Figure 1**

Integrative Model of Employee Secret Disclosure





## **A. Effects of the Market Value of Knowledge on Secret Disclosure**

As mentioned earlier, the market value of the knowledge encapsulated in an organizational secret is central to the strategic or trade secrets literature (Dufresne & Offstein, 2008; Goffman, 1959). The higher the market value of the organizational secret, the lower is the likelihood that employees may intentionally disclose the secret. The reason for this overall hypothesis is twofold. First, drawing on research in social psychology, people may consciously assess the risks and benefits of disclosing an organizational secret (Afifi & Steuber, 2009). While the perceived potential financial benefits of divulging valuable organizational secrets are high, so are the perceived potential negative economic, legal, and social consequences of such disclosure (Cohen, 2013). Employees are routinely required to sign legally-binding confidentiality or non-disclosure agreements before strategic secrets are revealed to them (Bast, 1999); these legal agreements usually specify some of the potential negative consequences of unauthorized disclosure. Under these conditions, insiders are much more sensitive to the severity of potential losses (as opposed to the extent of potential gains) of disclosure, reducing secret disclosure intention and behavior (Kahneman & Tversky, 1979; Tom, Fox, Trepel, & Poldrack, 2007).

Second, independent of insiders' subjective perceptions of potential losses in the disclosure decision, the likelihood and severity of organizational retaliation may also vary according to the market value of knowledge disclosed. Drawing on research in whistleblowing, when the market value of an organizational secret is high (and consequently, when disclosure can significantly harm the organization and its competitiveness), the likelihood and severity of organizational retaliation against the discloser may be high as well. In the case of strategic secrets, depending upon the market value of knowledge disclosed, organizational retaliation can take increasingly severe forms from organizational exclusion, reduction of privileges (Mesmer-

Magnus & Viswesvaran, 2005), termination of employment, all the way to the aggressive pursuit of legal options for lost intellectual property (Cohen, 2013). Thus, a direct negative effect of market value on secret disclosure intent and behavior occurs when such disclosure likely has (or is perceived to have) severe economic, legal, and social consequences for the disclosing party.

Consider, for example, the story of Dongfan Chung, an engineer with Boeing who systematically accumulated top-secret documents relating to space shuttles and the F-15 Fighter (Cohen, 2013; Flaccus, 2010). He stored these documents in an unfurnished storage area under his house, along with a \$16 million component of the Delta IV booster rocket, with the intent of passing these trade secrets over to the Chinese government (Flaccus, 2010). He was aggressively pursued and convicted under the Economic Espionage Act of 1996, a law designed to protect trade secrets from foreign competitors and other parties (U.S.C. Sections 1831 and 1832). According to trade secret law, in cases where the organizational secret is extremely valuable, depending on the type of organization benefiting from the disclosure, disclosing parties may be fined up to \$250,000 (in addition to being held liable for compensating the organization for the intellectual property loss) and imprisoned for up to 10 years, or fined up to \$5 million (plus restitution) and imprisoned for up to 15 years (Yeh, 2014). These economic and legal penalties dramatically reduce one's secret disclosure intention and behavior.

*Hypothesis 1:* The market value of knowledge is negatively related to secret disclosure intention.

## **B. Moderators of the Market Value – Disclosure Relationship**

Now, since the decision to reveal a strategically valuable secret is likely governed by a conscious risk–benefit analysis or expected utility analysis (as per Afifi and Steuber's (2009) Risk Revelation Model), individual-level factors that affect one's decision risk assessment can

curb or enhance the negative effect of the market value of knowledge on secret disclosure. In this section, I discuss three factors that systematically one's decision to disclose strategically valuable organizational secrets, a fundamentally deviant organizational behavior: *moral identity* (or one's self-conception as a moral person; Aquino & Reed, 2002), *risk aversion* (or one's tendency to avoid high-risk situations in general; Cable & Judge, 1994), and *ambiguity tolerance* (i.e., one's dispositional aversion or attraction towards decisions that are "complex, unfamiliar and insoluble"; McLain, 2009, p. 976). Each of these factors interact with the market value of knowledge contained in the secret to curb or enhance one's secret-revealing intent.

### **Moral Identity**

Moral identity has been defined in several ways in the literature, from the extent to which moral belief and attitudes (i.e., beliefs and attitudes "that promote or protect the welfare of others"; Hart, Atkins, & Ford, 1998, p. 515) are central to one's self-schema, to "a self-conception organized around a set of moral traits" (Aquino & Reed, 2002, p. 1424) like honesty, fairness and generosity, among others. Complicating these belief/attitude-based and trait-based definitions is the idea that people may present different selves to different audiences (Goffman, 1959): a publicly presented self that communicates one's sense of morality to others (symbolized moral identity; Aquino & Reed, 2002), and a private self that inherently values morality (internalized moral identity; Aquino & Reed, 2002). In this dissertation, I consider the effects of internalized moral identity on one's decision to disclose strategic secrets. While symbolized moral identity is central to image-management concerns, internalized moral identity is more strongly related to moral reasoning and moral behavior (Aquino & Reed, 2002).

In the context of highly valuable strategic secrets, individuals who have a strong sense of moral identity are likely to perceive significant ethical risks in secret disclosure. These risks may

represent harm to oneself, others, and/or one's relationships with others in the organization (Afifi & Steuber, 2009). Note that individuals' recognition of these multifaceted moral issues is brought about by the market value of knowledge contained in the secret: the higher the market value of knowledge, the greater the potential harm resulting from disclosure. Thus, the market value of knowledge contained in the secret (and the recognition of potential harm from secret disclosure) may activate one's moral schemata, leading to the formation of rational or intuitive judgments about the morality of secret revelation (Rest, 1986; Sonenshein, 2007). They may experience painful and powerful moral emotions like shame, guilt, or sympathy due to the ethical consequences of secret revelation (Tangney, Stuewig, & Mashek, 2007). Disclosing the strategic secret under these circumstances may lead to cognitive dissonance and emotional discomfort, threatening insiders' self-conceptions as fundamentally moral people (Aquino & Reed, 2002; Festinger, 1962). On the other end of the spectrum, individuals who do not have a strong sense of internalized moral identity may not perceive or be motivated to act on ethical issues inherent in the secret disclosure decision. Thus, their risk-benefit calculus is likely to be systematically skewed, dramatically increasing their secret disclosure intention.

*Hypothesis 2:* Internalized moral identity moderates the negative relationship between the market value of knowledge and secret disclosure intention. Specifically, the negative relationship becomes stronger with increase in strength of moral identity.

### **Risk Aversion**

In addition to one's moral self-concept, an individual's risk aversion (or one's tendency to avoid risky situations; Cable & Judge, 1994) can significantly affect the intentional disclosure of strategically valuable secrets. Risk aversion has been studied as both a situational and dispositional construct in the literature (e.g., Judge, Thoresen, Pucik, & Welbourne, 1999;

Kahneman & Tversky, 1979). As a situational construct, under conditions of uncertainty, the framing of decision outcomes in terms of potential gains or losses affects risk aversion among individuals and their eventual choices (Kahneman & Tversky, 1979; 1981). On the other hand, as a dispositional construct, risk aversion is conceptualized as a generalized tendency of individuals to seek or avoid risk across decision-making situations (Judge et al., 1999). Risk averse individuals are thought to “view novel or risk-oriented situations negatively and seek to withdraw from such situations” (Judge et al., 1999, p. 110).

Both dispositional and situational risk aversion may reduce the disclosure of strategically valuable secrets. First, when the market value of knowledge contained in an organizational secret is high, people who are risk averse in general may come to view the risky secret disclosure decision with trepidation; they may increase their attention to stimuli in the risky decision, experience negative affect, and eventually withdraw from taking the risky choice (Colquitt, Scott, Judge, & Shaw, 2006). Second, even when the employee in question is not dispositionally risk averse, the uncertainty about the likelihood and severity of potential losses in the secret disclosure decision is often met with fear and anxiety, strengthening one’s loss aversion in the situation at hand (cf. Camerer, 2005). This situational risk aversion (or loss aversion) also serves to reduce intentional secret disclosure when the market value of concealed knowledge is high.

*Hypothesis 3:* Risk aversion moderates the negative relationship between the market value of knowledge and secret disclosure intention. Specifically, the negative relationship becomes stronger with increase in risk aversion.

### **Ambiguity Tolerance**

In addition to risk aversion, an individual’s tolerance for ambiguity in general – or one’s dispositional orientation “ranging from aversion to attraction, toward stimuli that are complex,

unfamiliar and insoluble” (McLain, 2009, p. 976) – is likely to affect secret disclosure in systematic ways (see Ghosh and Ray (1997) for a synthesis of research in risk attitudes and ambiguity tolerance). When the market value of knowledge is high, given the sheer amount of ambiguity in the secret disclosure decision, individuals are likely to experience some measure of psychological discomfort in decision-making (Lipshitz & Strauss, 1997; Schere, 1982). Their willingness to tolerate high levels of ambiguity may help them engage in a rational risk–benefit analysis and choose whether or not to disclose the secret. On the other hand, individuals who are unwilling or unable to cope with ambiguous situations in general are likely to disengage from active decision-making and take the default or conservative option; in the context of disclosure of strategically valuable secrets, these individuals will most likely adhere to organizational norms and maintain the organizational secret.

*Hypothesis 4:* Ambiguity tolerance moderates the negative relationship between the market value of knowledge and secret disclosure intention. Specifically, the negative relationship becomes weaker with increase in ambiguity tolerance.

### **C. Effects of the Social Value of Concealment on Secret Disclosure**

Drawing on work in sociology, secrecy plays an important part in the development of group identities (e.g., Bok, 1989). As mentioned earlier, in an ethnographic study of adolescent secondary school girls in England, Griffiths (1995, p. 5) found that cliques tended to form based on “trust, loyalty and confiding secrets.” Similarly, in an ethnographic study of high school girls in Chicago, Merten (1999) found that “not only were secrets important in constituting friendships, but they were also important in locating girls in the larger social system of junior high school” (p. 125); here, one’s access to secret information was found to be associated with status and centrality in the social system. These social dynamics associated with secrecy are not

limited to adolescents alone. In a study of amateur mushroom collector societies, Fine and Holyfield (1996) described the central roles played by secrecy and trust in generating feelings of solidarity and social cohesion among members of voluntary leisure organizations. Thus, in general, secrets play a tremendous role in society *not* due to their content alone, but also due to the social dynamics engendered by secrecy (Simmel, 1906).

Now, in the case of organizational secrets in particular, the regulation of access to valuable information about the firm and its core business, for example, may come to shape identity constructions or “how individuals, groups and organizations define ‘who they are’” (Costas & Grey, 2014, p. 14). From an employee’s perspective, the very act of keeping secret a firm’s long-term plans, for instance, may help differentiate between ‘us’ (insiders, or those in the know) and ‘them’ (outsiders), reinforcing one’s beliefs about the identity of the insider group (Albert & Whetten, 1985; Costas & Grey, 2014). In this sense, secrecy and identity are inextricably intertwined – secrecy creates conditions favorable for the emergence of distinct group and organizational identities (Behr, 2006; Costas & Grey, 2014), while these identities help differentiate between trusted insiders and untrusted outsiders (Dutton et al., 1994).

Socially valuable secrets, by definition, confer valuable social categorizations and elevate the social status of insiders. According to work in social identity theory (Ashforth & Mael, 1989), social categorizations help individuals locate themselves in an ordered social environment, and serve to fulfil their need for belonging (Baumeister & Leary, 1995; Hogg & Terry, 2000). Social status, on the other hand, stems from one’s possession and expression of certain socially desirable characteristics (like membership in an insider group) and confers an enhanced sense of self-worth (Berger, Ridgeway, & Zelditch, 2002). Since socially valuable secrets create social categories and elevate the status of insiders, it is hypothesized that the social

value of concealment has a negative main effect on intentional secret disclosure. First, insiders are thought to be intrinsically motivated to maintain socially valuable secrets. They are driven to satisfy their innate psychological needs like those of belonging, self-distinction and self-enhancement (Baumeister & Leary, 1995; Dutton et al., 1994; Hogg & Terry, 2000). Second, they may be highly motivated to maintain the positive social identity and the social status bestowed upon them by their inclusion in elite social circles within the organization (Hogg & Terry, 2000). Any non-compliant or deviant behaviors on their part (i.e., secret disclosure) may cause them to be rejected from these visible social circles, negatively affecting their status, image, and self-esteem (Hogg & Terry, 2000). These social psychological risks form formidable impediments to secret disclosure.

*Hypothesis 5:* The social value of concealment is negatively related to secret disclosure intention.

#### **D. Moderators of the Social Value – Disclosure Relationship**

As mentioned earlier, one's decision to reveal a socially valuable secret is most likely driven by a weighting of social psychological risks and benefits of disclosure. Individual-level variables that systematically affect these perceived social psychological risks and benefits of contravening organizational or group norms and engaging in organizational deviant behavior are likely to moderate the social value – disclosure relationship. Drawing on work in organizational status and social identity theory, three potential individual-level moderators are discussed below: one's *need for status* (or an employee's dispositional need to attain respect from others and gain prominence in the organization; Argyle, 1994), *organizational identification* (i.e., the "degree to which [an employee] defines him or herself as having the same attributes that he or she believes defines the organization"; Dutton et al., 1994, p. 239) and *disidentification* (or the degree to



which employees define themselves as *not* having the same attributes that are perceived to define the organization; Elsbach & Bhattacharya, 2001).

### **Need for Status**

Socially-valuable secrets serve to enhance the organizational status of insiders, bestowing them with a heightened sense of self-worth (Berger et al., 2002). To the extent that maintaining an organizational secret confers an insider with organizational status (i.e., respect or admiration from other organizational members and prominence in the organization; Anderson, Srivastava, Beer, Spataro, & Chatman, 2006; Berger, Cohen, & Zelditch, 1972; Dubois, Rucker, & Galinsky, 2015; Gray & Kish-Gephart, 2013; Magee & Galinsky, 2008), one's dispositional need for status may systematically affect the secret disclosure decision. Individuals vary in their need to attain and express status in social situations and their attention to status-related information across situations (Argyle, 1994; Josephs, Sellers, Newman, & Mehta, 2006). This need for status is more or less a stable trait – it has been linked with physiological causes like positive deviations from baseline testosterone levels in male human beings (Josephs et al., 2006) and other species (e.g., Ruiz-de-la-Torre & Manteca, 1999), and wide-ranging consequences like one's choice of occupations (e.g., Holland, 1959) and general consumption behavior (e.g., Han, Nunes, & Dreze, 2010).

In the context of secret disclosure, insiders with high need for status are likely to perceive significant social psychological risks in revealing secrets characterized by high social value. These people are highly motivated to maintain their organizational status, and are thought to be very sensitive to situations that may affect their social standing (Josephs et al., 2006). Secret disclosure under these circumstances may result in severe negative relational and organizational consequences, and diminish their status in the eyes of other organizational members. Thus,

individuals with high need for status are less likely to disclose these socially-valued secrets for fear of negative evaluations from others in the organization. On the other end of the spectrum, individuals with low need for status are likely to underestimate the social psychological risks of disclosure owing to their reduced attention to status-related information. Furthermore, these people are not motivated by the desire to achieve or maintain status in the eyes of others – they may be less likely to maintain a socially-valuable secret than individuals with high need for status.

*Hypothesis 6:* Need for status moderates the direct negative relationship between the social value of concealment and secret disclosure intention. Specifically, the negative relationship becomes stronger with increase in need for status.

### **Organizational Identification**

In addition to the effects of one's dispositional need for status, one's identification with the firm (i.e., the "degree to which a person defines him or herself as having the same attributes that he or she believes defines the organization"; Dutton et al., 1994, p. 239) may systematically affect the social value – disclosure relationship. Organizational identification gets to the core of the "underlying link or bond... between the employee and the organization" (Edwards, 2005, p. 207). When there is a high level of overlap between one's self-concept and the perceived identity of the organization, the individual begins to feel "psychologically intertwined with the fate of the [organization]" (Mael & Ashforth, 1992, p. 104), making way for "characteristically groupy" cognition, affect and behavior (Hogg & Terry, 2000). Organizational identification has been associated with a host of consequences like loyalty to the organization, intra-organizational cooperation, out-group competition, and organizational citizenship behaviors (Adler & Adler, 1988; Ashforth & Mael, 1989; Elsbach, 1999; O'Reilly & Chatman, 1986).

In the context of secret disclosure, people who are highly identified with the organization (i.e., people who draw a tremendous amount of self-worth from being part of the organization, and define themselves largely by the same attributes that define the organization; Ashforth & Mael, 1989; Dutton et al., 1994) are much less likely to disclose an organizational secret characterized by high social value. When an organizational secret is thought to create valued social categorizations, insiders who are highly attached to their organization are compelled to act in the organization's best interests by maintaining the secret. Maintaining the secret on the organization's behalf is likely to lead to self-distinction and self-enhancement (Dutton et al., 1994). Disclosing the secret, on the other hand, may compromise the distinctiveness of the organizational identity, threaten one's self-esteem, and put at risk the realization of basic human needs of affiliation and belonging (Ashforth, Harrison, & Corley, 2008). At the other end of the spectrum, when the focal organizational secret is characterized by low social value, the potential harm to the organization upon disclosure is low. Here, one's extent of identification with the firm may not have much bearing on the secret disclosure decision.

*Hypothesis 7: Organizational identification moderates the direct negative relationship between the social value of concealment and secret disclosure intention. Specifically, the negative relationship becomes stronger with increase in organizational identification.*

### **Organizational Disidentification**

The above discussion assumed that people primarily maintain positive evaluations of and relationships with their organizations. Low levels of organizational identification, for instance, still implies some level of overlap between a member's self-identity and the organization's identity (see Mael & Ashforth, 1992; Shamir & Kark, 2004). While the traditional framework of organizational identification has been proven useful in a variety of contexts, it has recently been

criticized for portraying a rather simplistic view of organizational attachments (see Elsbach, 1999). Individuals may indeed hold values that conflict with those of their organizations, and/or maintain an active cognitive separation between their self-conceptions and organizational identities (Elsbach, 1999). Contrasted with the largely positive organizational consequences of member identification, negative organizational relationships can sometimes materialize in intentional counter-organizational behaviors (see Pratt, 2000).

Insiders whose identities fundamentally conflict with those of their organizations behave in profoundly different ways. Organizational disidentification, or the degree to which insiders define themselves as not having the same attributes that are perceived to define the organization, has been associated with two broad sets of negative behaviors targeted against the focal organization: counter-organizational action and organizational criticism (Elsbach & Bhattacharya, 2001). The former encompasses negative behaviors like counterproductive work behavior – or “behavior by employees that harms an organization or its members... [including but not limited to] theft, sabotage, verbal abuse, withholding of effort, lying, refusing to cooperate, and physical assault” (Penney & Spector, 2005, p. 777; Spector & Fox, 2002) – and supportive behaviors towards competitors or other opposing organizations, while the latter covers public criticism of the organization (Elsbach & Bhattacharya, 2001).

In the context of secret disclosure, insiders who actively disidentify with the organization perceive fewer social-psychological risks (and greater benefits) of secret revelation. Their self-concept is not tied to the organization that they are part of; they draw little sense of self-worth from being a member of the organization. Additionally, insiders who are disidentified with the organization are more likely to engage in self-affirming behaviors, actively distinguishing their self-concept from the identity of the organization (Elsbach & Bhattacharya, 2001). Thus, *ceteris*

*paribus*, insiders who actively disidentify with their organizations are much more likely to disclose secrets characterized by high social value to harm the organization's identity. However, when secrets are characterized by low social value, insiders who actively disidentify with their organizations are not as motivated to engage in deviant behaviors. Such secret disclosure does not harm the identity of the organization or the insider group, and consequently, does not fulfill the self-verification needs of the disidentifier.

*Hypothesis 8:* Organizational disidentification moderates the direct negative relationship between the social value of concealment and secret disclosure intention. Specifically, the negative relationship becomes weaker with increase in organizational disidentification.

#### **IV. Method**

The proposed model of employee secret disclosure was tested using two experimental vignette studies (for a review, see Aguinis & Bradley, 2014). Experimental vignette methodology (EVM) enables researchers to study sensitive topics and achieve high levels of internal and external validity at the same time, making it ideally suited to examine secret revelation in organizations (Aguinis & Bradley, 2014). The first study examined the proposed model of secret disclosure using a sample of undergraduate business students at the University of Arkansas. The second study tested the model using a sample of executive MBA students at the University of Arkansas and a sample of working adults in the United States. Both studies employed vignettes where certain secret characteristics were systematically manipulated and secret-revelation intentions of organizational members were measured.

##### **A. Study Design and Participants**

Both studies used a paper-people experimental-vignette design (see Aguinis & Bradley, 2014) to test the integrative model of employee secret disclosure. Paper-people vignettes present participants with hypothetical situations and ask them to express intentions and behavioral preferences (Aguinis & Bradley, 2014). This type of quasi-experimental design has been used extensively in fields like behavioral ethics, where true experiments are unethical or otherwise impossible to conduct (Cavanaugh & Fritzsche, 1985). For the first study, a total of 150 undergraduate students enrolled in three senior-level strategic management classes at the University of Arkansas were approached to participate in exchange for entry tickets into a drawing for ten \$20 retail gift cards. After initial contact in the classroom, students were sent an email containing a link to a web-based survey. The email also detailed students' rights as participants, and included information about the survey incentive. Two reminder emails were

sent in 2-day intervals to those students who had not completed the survey. Among those approached, 130 students completed the survey, resulting in an overall response rate of 86.7%.

For the second study, a total of 90 executive MBA students at the University of Arkansas were initially approached to participate in exchange for entry tickets into a drawing for two Apple Watches. Executive MBA students were chosen due to their work experience in knowledge-intensive industries. The Director of the MBA program at the University forwarded an email from the author inviting EMBA students to participate in the survey. As before, the invitation email contained a link to a web-based survey, and informed EMBA students about their rights as research participants. Two reminder emails were sent in 7-day intervals to all enrolled executive MBA students, regardless of whether they had completed the survey. Among those approached, 22 participants completed the survey, resulting in a rather low response rate of 24.4%.

To bolster the sample for Study 2, a panel consisting of 165 members of the general working population was recruited through Qualtrics Data Services. To establish equivalence with the initial EMBA sample, participation was constrained to people between the ages of 25 and 55 with at least 4 years of full-time work experience or 6 years of part-time work experience. Furthermore, no less than half the sample was required to possess at least a four-year college degree. These criteria were determined in consultation with the Director of MBA programs at the University of Arkansas. Among the 165 working adults approached through Qualtrics Data Services, 142 people completed the survey, increasing the overall response rate of the second study to 64.3%.

The equivalence of the two subsamples for Study 2 was further tested using demographic and dispositional variables. The 142-member Qualtrics subsample mostly consisted of men

(56.3%) who were currently employed by US organizations (84.5%), aged 39.75 years on average, with 15.85 years of full-time work experience and 4.95 years of part-time experience. In comparison, the 22-member EMBA subsample was also mostly male (72.7%) who were currently employed (91%), aged 35.18 years on average, with 12.32 years of full-time work experience and 5.68 years of part-time experience. Thus, from a qualitative examination of demographic parameters, the two subsamples seem to have a similar make-up. Besides, independent samples t-tests revealed that the two subsamples did not differ significantly on dispositional variables like need for status ( $t(162) = -1.16$ ;  $p = 0.25$ ), moral identity ( $t(162) = -1.18$ ;  $p = 0.24$ ), organizational identification ( $t(162) = 1.42$ ;  $p = 0.16$ ), and organizational disidentification ( $t(162) = 1.55$ ;  $p = 0.12$ ). But the subsamples differed from each other in ambiguity tolerance ( $t(162) = -4.43$ ;  $p < 0.01$ ) and risk aversion ( $t(162) = 2.55$ ;  $p = 0.01$ ), with the EMBA subsample being more tolerant of ambiguity and less risk averse than the Qualtrics subsample. Due to these observed differences, Study 2 hypotheses were tested separately in Qualtrics subsample and the combined sample. The pattern of results remained unchanged across the two datasets. For reporting purposes, the results from the combined sample are presented.

## **B. Procedure**

Participants first completed a survey measuring the hypothesized individual-level moderating variables (i.e., moral identity, risk aversion, ambiguity tolerance, need for status, and organizational identification and disidentification; measures discussed shortly). Participants were then asked to read a baseline vignette where they were exposed to a hypothetical organizational secret characterized by low levels of market value of knowledge and social value of concealment. In the first study, undergraduate students were exposed to a baseline vignette describing a process innovation for the mass production of an industrial chemical (see Appendix



B: Study 1 Vignettes). In the second study, EMBA students and members of the general working population were exposed to a baseline vignette describing a proposed acquisition by a fictitious organization (see Appendix B: Study 2 Vignettes). Following their exposure to the baseline vignette and measurement of baseline secret revelation intention, participants in each study were randomly assigned to read one of three experimental vignettes (see Appendix B). These experimental vignettes involved systematic manipulations of two secret characteristics – the market value of knowledge and the social value of concealment. These experimental conditions are graphically presented in Figure 2. Participants’ perceptions of secret characteristics (i.e., perceptions of market and social value of the secret) and secret revelation intentions were then measured.

**Figure 2**

Mixed Research Design

Social Value of Concealment	High	<p>Exp. Condition 2 (Random Assignment) Study 1: N = 43 Study 2: N = 57</p>	<p>Exp. Condition 1 (Random Assignment) Study 1: N = 43 Study 2: N = 55</p>
	Low	<p>Baseline Condition Study 1: N = 130 Study 2: N = 164</p>	<p>Exp. Condition 3 (Random Assignment) Study 1: N = 44 Study 2: N = 52</p>
		Low	High
		Market Value of Knowledge	

### **C. Manipulation Checks of Independent Variables**

Since vignettes involved systematic manipulations of market value of knowledge and social value of concealment, a pretest was conducted to gauge the strength of manipulations of each factor. Twenty undergraduate students enrolled in a senior-level strategic management class in the spring semester of 2016 were approached to participate in the pretest in exchange for \$10 Starbucks gift cards. Each rater was presented with the entire population of eight vignettes created for this dissertation. After reading each vignette, raters were presented with fourteen items measuring the perceived market value and social value of the organizational secret (described below). Vignettes were modified based on the pretest. In addition to the pretest itself, the ten-item perceptual manipulation check was employed in the main study where participants were asked to rate the extent to which the organizational secret they were exposed to was strategically and socially valuable. The results of these manipulation checks are discussed shortly.

### **D. Measures**

#### **Perceived Market and Social Value of the Secret**

The perceived market value of knowledge was initially measured using nine items developed for purposes of this dissertation. Sample items are “Keeping this information secret enables the organization to improve its short-term financial performance,” “Keeping this information secret enables the organization to gain a long-term competitive advantage,” “The proprietary information about [] is financially valuable to the company,” and “The proprietary information about [] is important for the company’s competitive advantage,” all rated on 7-point Likert scales anchored from 1 = “Strongly Disagree” to 7 = “Strongly Agree.” The coefficient alpha for the perceived market value of knowledge was 0.89 in Study 1 data.

The perceived social value of concealment was measured using five items developed for this dissertation. Sample items are “Keeping this information secret bestows [] with status in the organization,” “Keeping this information secret positively differentiates [] from others in the organization,” and “Keeping this information secret bestows [] with a valuable group membership,” rated on 7-point Likert scales anchored from 1 = “Strongly Disagree” to 7 = “Strongly Agree.” The coefficient alpha for the perceived social value of concealment was 0.86 in Study 1 data.

To refine these measures, an exploratory factor analysis was conducted on the fourteen items above using the Study 1 data. Specifically, a principal axis factor extraction with a Direct Oblimin rotation revealed three underlying factors (Conway & Huffcutt, 2003). An examination of the pattern matrix revealed that the five items measuring the social value of concealment loaded onto a single factor. However, the nine items measuring the perceived market value of knowledge loaded on two different factors. Based on these observations, four items that weakly loaded onto the primary factor and strongly cross-loaded onto the second factor were dropped. The five retained items were “Keeping this information secret enables the organization to gain a long-term competitive advantage;” “The proprietary information about [] is financially valuable to the company;” “The proprietary information about [] is important for the company’s competitive advantage;” “The proprietary information about [] has financial implications for the company;” and, “The proprietary information about [] is important for the company’s financial performance.”

### **Moral Identity**

Internalized moral identity was measured using the moral trait-based scale developed and comprehensively validated by Aquino and Reed (2002). First, respondents were presented with

nine stimulus moral traits: Caring, Compassionate, Fair, Friendly, Generous, Hardworking, Helpful, Honest, and Kind. Following the presentation of these traits, seven items were used to measure the extent to which these traits were central to the respondents' self-concepts. Sample items are "It would make me feel good to be a person who has these characteristics" and "Having these characteristics is an important part of my sense of self," rated on 7-point Likert scales anchored from 1 = "Strongly Disagree" to 7 = "Strongly Agree" (Aquino & Reed, 2002). The reliability coefficient for this measure of moral identity varied from  $\alpha = 0.82$  for Study 1 to  $\alpha = 0.79$  for Study 2.

### **Risk Aversion**

Dispositional risk aversion was measured using an eight-item scale developed by Cable and Judge (1994), in addition to using one item from the SOEP (see Dohmen, Falk, Huffman, Sunde, Schupp, & Wagner, 2011). Sample items from the Cable and Judge (1994) scale are "I always play it safe, even if it means occasionally losing out on a good opportunity" and "I am not willing to take risks when choosing a job or a company to work for," rated on 7-point Likert scales anchored from 1 = "Strongly Disagree" to 7 = "Strongly Agree" (Cable & Judge, 1994; Judge et al., 1999). The SOEP item, translated from the original German version, taps into a general risk attitude: "How do you see yourself: Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?" Participants were asked to rate this item on a 7-point Likert scale from 1 = "not at all willing to take risks" to 7 = "very willing to take risks" (reverse coded). The reliability coefficient of this measure was estimated to be  $\alpha = 0.72$  for Study 1 and 0.74 for Study 2.

Situational risk aversion was measured using a four-item scale developed for this study, borrowing from Cable and Judge's (1994) original measure. Sample items are "I am unwilling to

take risks in the situation at hand” and “I feel I must be cautious and avoid risk in the situation at hand,” rated on 7-point Likert scales anchored from 1 = “Strongly Disagree” to 7 = “Strongly Agree.” The alpha coefficient for this measure was estimated to be 0.73 for Study 1 and 0.81 for Study 2. An item-level exploratory factor analysis on Study 1 data using a principal axis factor extraction model with a Varimax rotation revealed that all four items strongly loaded onto one factor.

### **Ambiguity Tolerance**

Following Judge and colleagues’ (1999) lead, participants’ tolerance for ambiguity in general was measured using fifteen items from three scales developed by Lorsch and Morse (1974), Norton (1975) and McLain (1993). Sample items are “When planning a vacation, a person should have a schedule to follow if he or she is really going to enjoy it” (reverse coded) and “I function poorly whenever there is a serious lack of communication in a job situation,” (reverse coded) rated on 7-point Likert scales from 1 = “Strongly Disagree” to 7 = “Strongly Agree” (see Judge et al., 1999: 112).

Since the overall reliability of the composite scale was found by Judge et al. (1999) to be somewhat low ( $\alpha = 0.73$ ), a factor analysis was conducted on Study 1 data to examine the psychometric properties of the scale. An item-level exploratory factor analysis using a principal axis factor extraction model with a Varimax rotation revealed five underlying factors (Conway & Huffcutt, 2003). An examination of the rotated factor matrix revealed that seven items loaded on to one primary factor, while the remaining eight items strongly loaded on to four other orthogonal factors. The original fifteen-item scale had an alpha of 0.79 in Study 1, while the reduced seven-item scale had an alpha of 0.78. For purposes of this dissertation, the original

fifteen-item measure was retained. The alpha coefficient of this fifteen-item measure was 0.81 in Study 2.

### **Need for Status**

Participants' dispositional need for status was measured using four modified items from Eastman, Goldsmith and Flynn's (1999) status consumption scale, four items from Dubois, Rucker and Galinsky's (2012) need for status scale, and four additional items developed for purposes of this study. Sample items inspired by Eastman et al. (1999) are "I would purchase a product just because it conveys status" and "In general, I would pay more money for products that convey status." Sample items from the Dubois et al. (2012) scale are "I have a desire to increase my position in the social hierarchy" and "I want to raise my relative position to others." Items developed for this study include "I want to attain admiration and respect from other members of my organization" and "In general, I am motivated to increase my status in the eyes of my coworkers," among others. All items are rated on 7-point Likert scales anchored from 1 = "Strongly Disagree" to 7 = "Strongly Agree."

An item-level exploratory factor analysis on Study 1 data using a principal axis factor extraction model with a Varimax rotation revealed two orthogonal factors. The four items from Eastman, Goldsmith and Flynn's (1999) status consumption scale strongly loaded onto one factor, while the remaining eight items strongly loaded onto the second factor. The combined 12-item measure had alpha coefficients of 0.89 in Study 1 and 0.94 in Study 2.

### **Organizational Identification and Disidentification**

Organizational identification was measured using five items developed by Smidts, Pruyn and Van Riel (2001), and six items developed by Mael and Ashforth (1992). Sample items adapted from the Smidts et al. (2001) scale include "I feel strong ties with my organization" and

“I experience a strong sense of belonging to my organization.” Two sample items adapted from the Mael and Ashforth (1992) scale are “When someone criticizes my organization, it feels like a personal insult” and “My organization’s successes are my successes.” All items were rated on 7-point Likert scales anchored from 1 = “Strongly Disagree” to 7 = “Strongly Agree.” The reliability coefficient of the organizational identification scale ranged from  $\alpha = 0.92$  in Study 1 to  $\alpha = 0.94$  in Study 2. Organizational disidentification was measured using five items, inspired by work in the expanded model of organizational identification (Bhattacharya & Elsbach, 2002; Elsbach, 1999). Sample items are “I feel the need to publically display my disconnection from my organization”, and “My organization’s failures are my successes.” These items were rated on 7-point Likert scales anchored from 1 = “Strongly Disagree” to 7 = “Strongly Agree.” The overall alpha of this scale was 0.90 for Study 1 and 0.92 for Study 2.

### **Secret Disclosure Intention**

Secret disclosure intention was measured using responses to scale items. Five items adapted from Afifi and Steuber’s (2009) willingness to reveal scale and Vangelisti, Caughlin and Timmerman’s (2001) secret revelation scale were used to indirectly measure one’s intention to disclose the organizational secret. Sample items are “If there was a pressing need for [the specific audience] to know about [the secret], [person] should tell;” “[Person] should reveal information about [the secret] if he/she thought there was a good reason for [the specific audience] to know this information;” “[Person] should disclose information about [the secret] to [the specific audience];” “There is no reason for [person] to reveal information about [the secret] to [the specific audience]” (reverse coded); and “No matter what, [person] should keep information about [the secret] hidden from [the specific audience]” (reverse coded), all rated on 7-point Likert scales from 1 = “Strongly Disagree” to 7 = “Strongly Agree.” The alpha

coefficient of this scale was estimated to be 0.86 for Study 1 and 0.88 for Study 2. Furthermore, an item-level exploratory factor analysis on Study 1 data using a principal axis factor extraction model with a Varimax rotation revealed that all items strongly loaded onto one factor.



## **V. Analysis and Results**

### **A. Manipulation Checks**

The scenarios used to manipulate market and social value of the secret were pretested on a group of twenty undergraduate students from the University of Arkansas. Based on this pretest, scenarios were modified before being used in Study 1. The strength of the manipulations was assessed in Study 1 using paired samples t-tests. As shown in Figure 3, the perceptions of market and social value of the secret varied systematically from the baseline condition, more or less according to the intended manipulation. For example, participants who were exposed to scenario 1 (the high market value – high social value condition) reported, on average, significantly higher perceptions of market value (mean difference = 0.51,  $t(42) = 4.59$ ,  $p < 0.01$ ) and social value (mean difference = 0.42;  $t(42) = 3.81$ ;  $p < 0.01$ ) of the secret. The experimental manipulations for scenarios 2 and 3 were not as clean as expected from the pretest – perhaps perceptions of market value and social value covary at a more fundamental level. These limitations are addressed in the discussion section.

In Study 2, the manipulation checks for scenarios 2 and 3 were as expected. However, the manipulation check for scenario 1 yielded unsatisfactory results. As shown in Figure 4, there were no significant differences in perceptions of market and social value from the baseline condition among participants exposed to scenario 1. To account for the weak manipulation, hypothesis tests were performed on two datasets – the complete dataset including all three experimental scenarios, and a reduced dataset where scenario 1 data was dropped. The pattern of results remained unchanged across the two datasets. For purposes of this dissertation, hypothesis tests on the complete dataset are reported.

**Figure 3**

Study 1: Manipulation Checks

Social Value of Concealment	High	Scenario 2 N = 43 $PMV_{change} = 0.25^*$ $PSV_{change} = 0.37^*$	Scenario 1 N = 43 $PMV_{change} = 0.51^{**}$ $PSV_{change} = 0.42^{**}$
	Low	Baseline Scenario N = 130	Scenario 3 N = 44 $PMV_{change} = 0.56^{**}$ $PSV_{change} = 0.20^\dagger$
		Low	High
Market Value of Knowledge			

Note: Differences in means from the baseline condition were tested using paired samples t-tests.  $PMV_{change}$  = Change in perceived market value of knowledge.  $PSV_{change}$  = Change in perceived social value of concealment.  
 $^\dagger p < 0.1$ ,  $* p < 0.05$ ,  $** p < 0.01$

**Figure 4**

Study 2: Manipulation Checks

Social Value of Concealment	High	Scenario 2 N = 57 $PMV_{change} = 0.16$ $PSV_{change} = 0.28^{**}$	Scenario 1 N = 55 $PMV_{change} = 0.08$ $PSV_{change} = 0.01$
	Low	Baseline Scenario N = 164	Scenario 3 N = 52 $PMV_{change} = 0.21^*$ $PSV_{change} = 0.08$
		Low	High
Market Value of Knowledge			

Note: Differences in means from the baseline condition were tested using paired samples t-tests.  $PMV_{change}$  = Change in perceived market value of knowledge.  $PSV_{change}$  = Change in perceived social value of concealment.

†  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$

## **B. Study 1 Results**

Descriptive statistics and correlations between variables in Study 1 are presented in Table 1. As expected, there are significant negative correlations between secret disclosure intention and the perceived market value of knowledge ( $r = -0.50$ ,  $P < 0.01$ ). Secret disclosure intention is also negatively correlated with situational risk aversion ( $r = -0.43$ ,  $p < 0.01$ ) and moral identity ( $r = -0.26$ ,  $p < 0.01$ ), lending some initial support to the rational calculus model of secret disclosure. In addition, secret disclosure intention is negatively correlated with the perceived social value of concealment ( $r = -0.36$ ,  $p < 0.01$ ), and positively correlated with organizational disidentification ( $r = 0.28$ ,  $p < 0.01$ ), lending some credence to the main tenets of the social weighting model of secret disclosure. Individuals' perceptions of market value of knowledge and the social value of concealment also appear to be highly correlated ( $r = 0.66$ ,  $p < 0.01$ ). This correlation might be driven by the study design itself – approximately one-third of the sample was subject to an experimental condition characterized by high levels of market value of knowledge and social value of concealment (see Figure 2).

### **Hypothesis Testing**

Hierarchical multiple regression analysis was used to test hypotheses. Hypothesis 1 predicted that the perceived market value of the secret would be negatively related to secret disclosure intent. Hypotheses 2, 3 and 4 predicted that moral identity, situational and dispositional risk aversion, and ambiguity tolerance would moderate the above relationship, respectively. More specifically, moral identity and situational and dispositional risk aversion

**Table 1**

Study 1: Descriptive Statistics and Correlations Between Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Ambiguity Tolerance	4.11	0.67									
2. Dispositional Risk Aversion	3.96	0.80	-0.51**								
3. Situational Risk Aversion	4.78	1.01	-0.21**	0.16							
4. Org. Identification	5.12	1.01	0.01	0.08	0.10						
5. Org. Disidentification	2.25	1.17	-0.14	0.04	-0.18*	-0.37**					
6. Moral Identity	6.27	0.81	-0.02	0.06	0.25**	0.21**	-0.44**				
7. Need for Status	4.53	0.93	0.02	-0.01	0.05	0.08	0.04	0.10			
8. PMV	5.54	0.88	-0.05	0.21**	0.55**	0.09	-0.16	0.35**	0.03		
9. PSV	5.25	0.99	0.05	0.03	0.35**	0.11	-0.01	0.19*	0.02	0.66**	
10. Secret Disclosure Intention	2.81	1.22	-0.11	0.02	-0.43**	-0.08	0.28**	-0.26**	0.10	-0.50**	-0.36**

Note: M = Mean. SD = Standard Deviation. Org. = Organizational. PMV = Perceived Market Value of Knowledge. PSV = Perceived Social Value of Concealment.

† p < 0.1, \* p < 0.05, \*\* p < 0.01

were expected to strengthen the negative relationship, while ambiguity tolerance was expected to weaken the negative relationship.

Hypothesis 1 was tested by hierarchically regressing secret disclosure intent on age and perceived market value of knowledge. Age was included as a control variable due to concerns that it may systematically affect secret disclosure intent. While the control variable did not explain any variance in disclosure intent ( $F(1,128) = 0.01, \beta = -0.01, p > 0.10$ ), individuals' perceptions of market value had a significant negative main effect on secret disclosure intention ( $F_{\text{change}}(1,127) = 41.63, \beta = -0.50, p < 0.01$ ), supporting hypothesis 1. Results from this analysis are presented in Table 2.

Hypothesis 2 was tested by hierarchically regressing secret disclosure intention on the control variable, main effects of perceived market value and moral identity, and an interaction term representing the focal moderating effect. Whenever interaction terms were hypothesized, variables were mean centered prior to regression analysis to reduce nonessential multicollinearity (Aiken & West, 1991). While the main effect model significantly explained variance in disclosure intent ( $F_{\text{change}}(2,126) = 21.51, p < 0.01$ ), moral identity in particular did not have a significant effect on secret disclosure intent ( $\beta = -0.09, p > 0.10$ ). Furthermore, the interaction model did not explain additional variance in the dependent variable ( $F_{\text{change}}(1,125) = 0.49, p > 0.10$ ), lending little empirical support for hypothesis 2.

Similarly, hypothesis 3 was tested by regressing disclosure intent on the control variable, perceived market value of knowledge, situational and dispositional risk aversion, and interactions between perceived market value and situational and dispositional risk aversion.

**Table 2**

## Study 1: Hierarchical Regression Tests of the Rational Calculus Model

Variables	Hypothesis 1		Hypothesis 2		Hypothesis 3		Hypothesis 4	
	Control	Main	Main	Int.	Main	Int.	Main	Int.
Age	-0.01	0.01	0.00	0.00	-0.02	-0.03	-0.02	-0.01
PMV		-0.50**	-0.46**	-0.46**	-0.40**	-0.41**	-0.50**	-0.50**
Moral Identity			-0.10	-0.10				
Dispositional Risk Aversion					0.14 <sup>†</sup>	0.16 <sup>†</sup>		
Situational Risk Aversion					-0.22*	-0.25*		
Ambiguity Tolerance								-0.14 <sup>†</sup>
PMV X MI				-0.05				
PMV X DRA						-0.05		
PMV X SRA						0.06		
PMV X AT								-0.06
R <sup>2</sup>	0.00	0.25**	0.26**	0.26**	0.30**	0.30**	0.27**	0.27**
ΔR <sup>2</sup>	0.00	0.25**	0.26**	0.00	0.30**	0.00	0.27**	0.00
F <sub>change</sub>	0.01	41.63**	21.51**	0.00	17.69	0.23	22.85**	0.40

Note: Standardized Beta coefficients are reported. Int = Interaction. PMV = Perceived Market Value of Knowledge. MI = Moral Identity. DRA = Dispositional Risk Aversion. SRA = Situational Risk Aversion. AT = Ambiguity Tolerance.

<sup>†</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01

The main effect model significantly explained variance in secret disclosure intent ( $F_{\text{change}}(3,125) = 17.69, p < 0.01$ ). Market value ( $\beta = -0.40, p < 0.01$ ) and situational risk aversion ( $\beta = -0.22, p = 0.01$ ) had significant main effects on secret disclosure intent. Dispositional risk aversion ( $\beta = 0.14, p = 0.07$ ) had a marginally significant effect on the dependent variable. This main effect of dispositional risk aversion on secret disclosure intent was not hypothesized, but the direction of the effect appears to be counter-intuitive; this unexpected finding is examined in the discussion section. The interaction model did not explain additional variance in disclosure intent ( $F_{\text{change}}(2,123) = 0.23, p > 0.10$ ), lending no support to hypothesis 3 here.

Hypothesis 4 was tested by hierarchically regressing the dependent variable on work experience, market value of knowledge and ambiguity tolerance, and an interaction between perceived market value and ambiguity tolerance. As with prior analyses, the main effect model was significant ( $F_{\text{change}}(2,126) = 22.85, p < 0.01$ ). The main effect of perceived market value ( $\beta = -0.50, p < 0.01$ ) was significant, while that of ambiguity tolerance ( $\beta = -0.14, p = 0.07$ ) was marginally significant. The direction of the effect of ambiguity tolerance on disclosure intent appears counter-intuitive; as with the unexpected finding regarding hypothesis 3, this is also addressed in the discussion section. The interaction model did not explain additional variance in the dependent variable ( $F_{\text{change}}(1,125) = 0.40, p > 0.10$ ), revealing little support for hypothesis 4 in Study 1.

While the first four hypotheses examined the rational calculus model of secret disclosure where people were thought to consciously examine the risks and benefits of disclosing a financially-valuable organizational secret, the latter four hypotheses relate to the employee disclosure of socially-valuable secrets. Hypothesis 5 predicted that the perceived social value of the secret would be negatively related to secret disclosure intent. Hypotheses 6, 7 and 8

examined moderators of the main effect. Specifically, the three hypotheses predicted that the above relationship would be moderated by need for status, organizational identification, and organizational disidentification. Results from this analysis are presented in Table 3.

Hypothesis 5 was tested by hierarchically regressing secret disclosure intent on age and perceived social value of concealment. The control model did not explain significant variance in secret disclosure intent ( $F(1,128) = 0.01, \beta = -0.01, p > 0.10$ ). However, the main effect model was significant ( $F_{\text{change}}(1,127) = 18.90, p < 0.01$ ), with the perceived social value of concealment ( $\beta = -0.36, p < 0.01$ ) significantly reducing secret disclosure intent, supporting hypothesis 5.

Since hypotheses 6 involved interactions, all dependent variables were mean centered prior to analysis (Aiken & West, 1991). Secret disclosure intent was regressed on the control variable, main effects of perceived social value of concealment and need for status and an interaction term between the two variables. The main effect model significantly explained variance in secret disclosure intent ( $F_{\text{change}}(2,126) = 10.39, p < 0.01$ ), driven by the effect of the perceived social value of concealment ( $\beta = -0.36, p < 0.01$ ). The interaction model was also significant ( $F_{\text{change}}(1,125) = 5.12, p < 0.05$ ). The interaction between perceived social value and need for status had a positive effect on secret disclosure intent ( $\beta = 0.19, p < 0.05$ ). The direction of this effect was counter to that hypothesized, indicating no support for hypothesis 6.

Similarly, hypothesis 7 was tested by regressing secret disclosure intent on age, perceived social value of the secret, organizational identification, and an interaction between the latter two variables. While the main effect model was significant ( $F_{\text{change}}(2,126) = 9.47, p < 0.01$ ), the interaction model was not ( $F_{\text{change}}(1,125) = 0.16, p > 0.10$ ), lending no support to hypothesis 7. Upon closer analysis, the significance of the main effect was driven by the perceived social value of concealment ( $\beta = -0.36, p < 0.01$ ). Neither organizational identification ( $\beta = -0.04, p > 0.10$ )



**Table 3**

Study 1: Hierarchical Regression Tests of the Social Weighting Model

Variables	Hypothesis 5		Hypothesis 6		Hypothesis 7		Hypothesis 8	
	Control	Main	Main	Int.	Main	Int.	Main	Int.
Age	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.02	0.01
PSV		-0.36**	-0.36**	-0.36**	-0.36**	-0.36**	-0.36**	-0.35**
Need for Status			0.11	0.09				
Organizational Identification					-0.04	-0.04		
Org. Disidentification							0.27**	0.24**
PSV X NFS				0.19*				
PSV X OI						0.04		
PSV X OD								0.12
R <sup>2</sup>	0.00	0.13**	0.14**	0.18**	0.13**	0.13**	0.20**	0.22**
ΔR <sup>2</sup>	0.00	0.13**	0.14**	0.03*	0.13**	0.00	0.20**	0.01
F <sub>change</sub>	0.01	18.90**	10.39**	5.12*	9.48**	0.16	16.01**	2.03

Note: Standardized Beta coefficients are reported. Int = Interaction. PSV = Perceived Social Value of Concealment. NFS = Need for Status. OI = Organizational Identification. OD = Organizational Disidentification.

† p < 0.1, \* p < 0.05, \*\* p < 0.01

nor the interaction between perceived social value and organizational identification ( $\beta = 0.04$ ,  $p > 0.10$ ) had significant effects on secret disclosure intent.

Finally, hypothesis 8 was tested by hierarchically regressing secret disclosure intent on the control variable, main effects of perceived social value and organizational disidentification, and an interaction between the two variables. As before, the main effects model was significant ( $F_{\text{change}}(2,126) = 16.01$ ,  $p < 0.01$ ), driven by the effects of both perceived social value ( $\beta = -0.36$ ,  $p < 0.01$ ) and organizational disidentification ( $\beta = 0.27$ ,  $p < 0.01$ ). While the perception of social value decreased one's intent to reveal the secret, disidentification with the organization significantly increased secret revelation intent. However, the interaction between the two terms was not significant ( $F_{\text{change}}(1,125) = 2.03$ ,  $p > 0.10$ ), lending no support to hypothesis 8.

The overall pattern of results from Study 1 indicated strong support for the proposed main effects of perceived secret characteristics (i.e., perceived market and social value) on secret disclosure intent. The proposed moderating effects, on the other hand, were mostly unsupported, with the sole exception of hypothesis 6, which ran reverse in direction to what was hypothesized. Some of these non-findings may be attributed to the sample used to study the phenomenon in Study 1 – undergraduate business students may not have the requisite work experience in a corporate setting, and may not have been exposed to organizational secrets to begin with. Due to these systematic differences, results from an undergraduate student sample may not be generalizable to the larger business world. To address some of the deficiencies inherent in an undergraduate student sample, a second study was conducted using a sample of executive MBA students and working adults to examine the disclosure of organizational secrets. Results from the second study are discussed below.

### **C. Study 2 Results**

Descriptive statistics and correlations between variables in Study 2 are presented in Table 4. Once again, the pattern of correlations seems to support the main tenets of the rational calculus model of secret disclosure. Secret disclosure intent is negatively correlated with the perceived market value of knowledge ( $r = -0.28, p < 0.01$ ). It is also negatively correlated with situational risk aversion ( $r = -0.49, p < 0.01$ ) and moral identity ( $r = -0.27, p < 0.01$ ). That said, there seems to be little initial support for the social weighting model of secret disclosure. While secret disclosure intent is indeed positively associated with organizational disidentification ( $r = 0.30, p < 0.01$ ), it has no significant correlation with the perceived social value of concealment ( $r = -0.07, p > 0.10$ ). Possible reasons for the lack of support of the social weighting model of secret disclosure among experienced practitioners are put forth in the discussion section.

#### **Hypothesis Testing**

As before, hierarchical multiple regression was used to test hypotheses. Hypothesis 1-4 outlined the rational calculus model of secret disclosure. Hypothesis 1 predicted a negative effect of the perceived market value of knowledge on secret disclosure intention. Controlling for age, the perceived market value of knowledge encapsulated by the secret indeed had a significant negative effect on secret disclosure intent ( $\beta = -0.27, F_{\text{change}}(1,161) = 12.71, p < 0.01$ ), supporting hypothesis 1. Results from this analysis are presented in Table 5.

Hypothesis 2 predicted that the negative effect of the perceived market value of knowledge on secret disclosure intention would be moderated by one's internalized moral identity. In order to test this hypothesis, secret disclosure intent was hierarchically regressed on mean-centered variables representing the main effects of perceived market value and moral identity, and a product of the two variables representing the interaction term.

**Table 4**

## Study 2: Descriptive Statistics and Correlations Between Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Ambiguity Tolerance	4.06	0.79									
2. Dispositional Risk Aversion	4.04	0.96	-0.52**								
3. Situational Risk Aversion	4.93	1.34	-0.07	0.25**							
4. Org. Identification	4.97	1.26	0.03	-0.12	0.19*						
5. Org. Disidentification	2.32	1.47	-0.33**	0.21**	-0.02	-0.21**					
6. Moral Identity	6.20	1.04	0.20*	0.03	0.14	0.10	-0.40**				
7. Need for Status	3.74	1.35	-0.09	-0.03	0.07	0.32**	0.27**	-0.13			
8. PMV	5.66	0.99	0.05	-0.05	0.26**	0.40**	-0.04	0.22**	0.16*		
9. PSV	5.28	1.05	-0.14	-0.17*	0.11	0.29**	0.11	-0.01	0.25**	0.42**	
10. Secret Disclosure Intention	2.75	1.44	-0.10	0.04	-0.49**	-0.12	0.30**	-0.27**	0.12	-0.28**	-0.07

Note: M = Mean. SD = Standard Deviation. Org = Organizational. PMV = Perceived Market Value of Knowledge. PSV = Perceived Social Value of Concealment.

† p < 0.1, \* p < 0.05, \*\* p < 0.01

**Table 5**

## Study 2: Hierarchical Regression Tests of the Rational Calculus Model

Variables	Hypothesis 1		Hypothesis 2		Hypothesis 3		Hypothesis 4	
	Control	Main	Main	Int.	Main	Int.	Main	Int.
Age	-0.11	-0.09	-0.07	-0.07	-0.09	-0.09	-0.09	-0.09
PMV		-0.27**	-0.22**	-0.22**	-0.13 <sup>†</sup>	-0.11	-0.27**	-0.26**
Moral Identity			-0.22**	-0.21**				
Dispositional Risk Aversion					0.16*	0.17*		
Situational Risk Aversion					-0.49**	-0.47**		
Ambiguity Tolerance							-0.09	-0.09
PMV X MI				0.01				
PMV X DRA						-0.15*		
PMV X SRA						-0.09		
PMV X AT								0.01
R <sup>2</sup>	0.01	0.08**	0.13**	0.13**	0.29**	0.32**	0.09**	0.09**
ΔR <sup>2</sup>	0.01	0.07**	0.12**	0.00	0.28**	0.04 <sup>†</sup>	0.08**	0.00
F <sub>change</sub>	1.80	12.71**	10.69**	0.01	20.96**	2.62 <sup>†</sup>	7.06**	0.01

Note: Standardized Beta coefficients are reported. Int = Interaction. PMV = Perceived Market Value of Knowledge. MI = Moral Identity. DRA = Dispositional Risk Aversion. SRA = Situational Risk Aversion. AT = Ambiguity Tolerance.

<sup>†</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01

The main effects model explained significant variance in the dependent variable ( $F_{\text{change}}(2,160) = 10.69, p < 0.01$ ). Moral identity ( $\beta = -0.22, p < 0.01$ ) and perceived market value ( $\beta = -0.22, p < 0.01$ ) had strong negative effects on secret disclosure intent. However, the proposed interaction model did not explain any additional variance in the dependent variable ( $F_{\text{change}}(1,159) = 0.01, p > 0.10$ ), indicating no support for hypothesis 2 in this study.

Hypothesis 3 predicted that situational and dispositional risk aversion would moderate the effect of perceived market value of knowledge on secret disclosure intent. To test this hypothesis, secret disclosure intention was regressed on age, main effects of perceived market value and situational and dispositional risk aversion, and two-way interactions between perceived market value and situational and dispositional risk aversion. The main effect model significantly explained variance in the dependent variable ( $F_{\text{change}}(3,159) = 20.96, p < 0.01$ ), driven by the significant effects of dispositional ( $\beta = 0.16, p < 0.05$ ) and situational ( $\beta = -0.49, p < 0.01$ ) risk aversion and the marginally significant effects of perceived market value ( $\beta = -0.13, p = 0.06$ ). As with the results from study 1, the direction of the effect of dispositional risk aversion appears to be counter-intuitive; however, in the current study, an interaction term qualifies this main effect. The interaction model marginally explained additional variance in secret disclosure intent ( $F_{\text{change}}(2,157) = 2.62, p = 0.08$ ), driven by the interaction between perceived market value and dispositional risk aversion ( $\beta = -0.15, p < 0.05$ ). Thus, hypothesis 3 was partially supported in this study.

Hypothesis 4 predicted that ambiguity tolerance would moderate the effect of perceived market value on secret disclosure intent. Regression results indicate no support for this hypothesis. While the main effect model was significant ( $F_{\text{change}}(2,160) = 7.06, p < 0.01$ ), the

interaction model did not explain significant additional variance in secret disclosure intention ( $F_{\text{change}}(1,159) = 0.01, p > 0.10$ ).

While the first four hypotheses put forth key tenets of the rational calculus model, hypotheses 5-8 relate to the social weighting model of secret disclosure. Hypothesis 5 predicted a negative effect of perceived social value of concealment on secret disclosure intent. Results of the hierarchical regression analysis are presented in table 6. Controlling for age, the perceived social value of concealment did not have a significant main effect on secret disclosure intent ( $F_{\text{change}}(1,161) = 1.07, p > 0.10$ ), indicating no support for hypothesis 5 in these data.

Hypothesis 6 predicted that need for status would moderate the relationship between perceived social value and secret disclosure intent. The main effect model was significant ( $F_{\text{change}}(2,160) = 8.85, p < 0.01$ ), driven by the strong positive effect of need for status on secret disclosure intention ( $\beta = 0.34, p < 0.01$ ). Although this main effect was not hypothesized *ex ante*, this finding presents rather interesting insights into the secret disclosure process – these insights are addressed in the discussion section. Nevertheless, the proposed interaction effect was not significant ( $F_{\text{change}}(1,159) = 0.19, p > 0.10$ ), lending no support to hypothesis 6 in the second study.

Hypothesis 7 and 8 predicted that organizational identification and disidentification, respectively, would moderate the relationship between perceived social value and secret disclosure intention. In testing hypothesis 7, neither the main effects model ( $F_{\text{change}}(2,160) = 1.40, p > 0.10$ ) nor the interaction model ( $F_{\text{change}}(1,159) = 0.36, p > 0.10$ ) explained significant variance in the dependent variable. Thus, organizational identification had no discernible effects on secret disclosure intent, indicating no support for hypothesis 7. However, in testing hypothesis 8, organizational disidentification was seen to have a strong main effect on secret disclosure

**Table 6**

## Study 2: Hierarchical Regression Tests of the Social Weighting Model

Variables	Hypothesis 5		Hypothesis 6		Hypothesis 7		Hypothesis 8	
	Control	Main	Main	Int.	Main	Int.	Main	Int.
Age	-0.11	-0.11	-0.09	-0.09	-0.12	-0.12	-0.11	-0.12
PSV		-0.08	-0.06	-0.06	-0.05	-0.05	-0.12	-0.12
Need for Status			0.34**	0.34**				
Organizational Identification					-0.11	-0.10		
Org. Disidentification							0.31**	0.34**
PSV X NFS				0.03				
PSV X OI						0.05		
PSV X OD								-0.05
R <sup>2</sup>	0.01	0.02	0.10**	0.10**	0.03	0.03	0.11**	0.12
ΔR <sup>2</sup>	0.01	0.01	0.09**	0.00	0.02	0.00	0.10**	0.00
F <sub>change</sub>	1.80	1.07	8.85**	0.19	1.40	0.36	9.23**	0.37

Note: Standardized Beta coefficients are reported. Int = Interaction. PSV = Perceived Social Value of Concealment. NFS = Need for Status. OI = Organizational Identification. OD = Organizational Disidentification.

† p < 0.1, \* p < 0.05, \*\* p < 0.01



intent ( $\beta = 0.31$ ,  $F_{\text{change}}(2,160) = 9.23$ ,  $p < 0.01$ ). The proposed interaction model, on other hand, was not significant, lending no support to hypothesis 8.

These results, taken collectively, provide mixed support for the key tenets of the rational calculus model of secret disclosure, and scant support for the social weighting model in Study 2. In the following section, key findings from and limitations of the two studies, and implications for research and practice are discussed.

## **VI. Discussion**

This dissertation sought to explore the various factors that affect one's intent to disclose an organizational secret. More specifically, two studies were designed to explore the effects of perceived secret characteristics and individual-level variables on secret disclosure intention. Results of the two studies suggest that perceptions of market and social value of the secret have strong effects on secret disclosure intent. The market value of a secret represents the extent to which the knowledge contained in the secret creates (or is perceived to create) financial value for the firm (i.e., when the knowledge is related to the core business of the firm, and its possession leads to superior market performance; Schmidt & Keil, 2013). In the two studies conducted, perceived market value explained 8 to 25% of variance in secret disclosure intent. In general, the higher the perceived market value of the secret, the less likely employees were to disclose the secret. This finding provides some support for the rational calculus model of secret disclosure where people are thought to assess the risks and benefits of disclosing an organizational secret, and become risk averse when secrets are highly valuable to the firm.

The social value of an organizational secret, on the other hand, represents the extent to which the secret in question demarcates between insiders and outsiders, bestows an attractive group identity, and elevates the social status of insiders. In the first study, perceived social value of the secret significantly explained about 13% of variance in secret disclosure intent. The higher the perceived social value of the secret, the less likely employees were to disclose the secret. In the second study, however, perceived social value of the secret had no significant effects on secret disclosure intention. These findings, taken together, provide mixed support for the social weighting model of organizational secrecy, where people are thought to be intrinsically

motivated to maintain socially valuable secrets to satisfy their needs of belonging, self-distinction and self-enhancement (Baumeister & Leary, 1995).

In addition to the perceived characteristics of organizational secrets, certain individual-level variables were hypothesized to affect the secret disclosure process. First, conceptualizing the disclosure of strategically-valuable organizational secrets as a deviant organizational behavior, certain individual-level factors that affect one's decision risk assessment (like ambiguity tolerance, risk aversion, and moral identity) were proposed to moderate the negative effect of the market value of knowledge on secret disclosure intent. The first study found significant main effects of situational risk aversion, and marginal effects of dispositional risk aversion and ambiguity tolerance on secret disclosure intent. The second study found significant main effects of moral identity, and situational and dispositional risk aversion on secret disclosure intent. However, most of the proposed interactions between individual-level factors and perceived market value of the secret were not significant. Only one proposed interaction between perceived market value of the secret and dispositional risk aversion was marginally significant in the second study.

Second, the disclosure of socially-valuable organizational secrets was proposed to be driven by a weighting of social psychological risks and benefits of disclosure. Drawing on work in organizational status and social identity theory, certain individual-level factors (like need for status, organizational identification and disidentification) were proposed to moderate the negative effect of the social value of concealment on secret disclosure intent. While the two studies found significant main effects of organizational disidentification on secret disclosure intent, only the second study found a significant main effect of need for status. However, as before, few of the proposed interactions between the perceived social value of the secret and

individual-level factors were significant. In fact, only one proposed interaction between perceived social value of the secret and need for status was significant in the first study.

Thus, while the two studies found ample support for the main effects of perceived secret characteristics and individual-level factors on secret disclosure intent, it largely failed to detect significant interaction effects between perceived secret characteristics and individual-level factors. There appear to be two major reasons for these non-findings. First, the strength of manipulations of independent variables in the two studies may have been limited due to the use of experimental vignette methodology (EVM). EVM has significant advantages over pure experiments and field studies in that it can be used to study sensitive topics like organizational secrecy while attaining rather high levels of internal and external validity at the same time (Aguinis & Bradley, 2014; Atzmüller & Steiner, 2010). However, compared with pure experimental designs, the strength of manipulations of independent variables in EVM is somewhat constrained due to the use of realistic and immersive scenarios, impeding the detection of interaction effects. A third study using experimental methods to study secret disclosure behavior may help shed light on these non-findings. This is further addressed in the future research directions section.

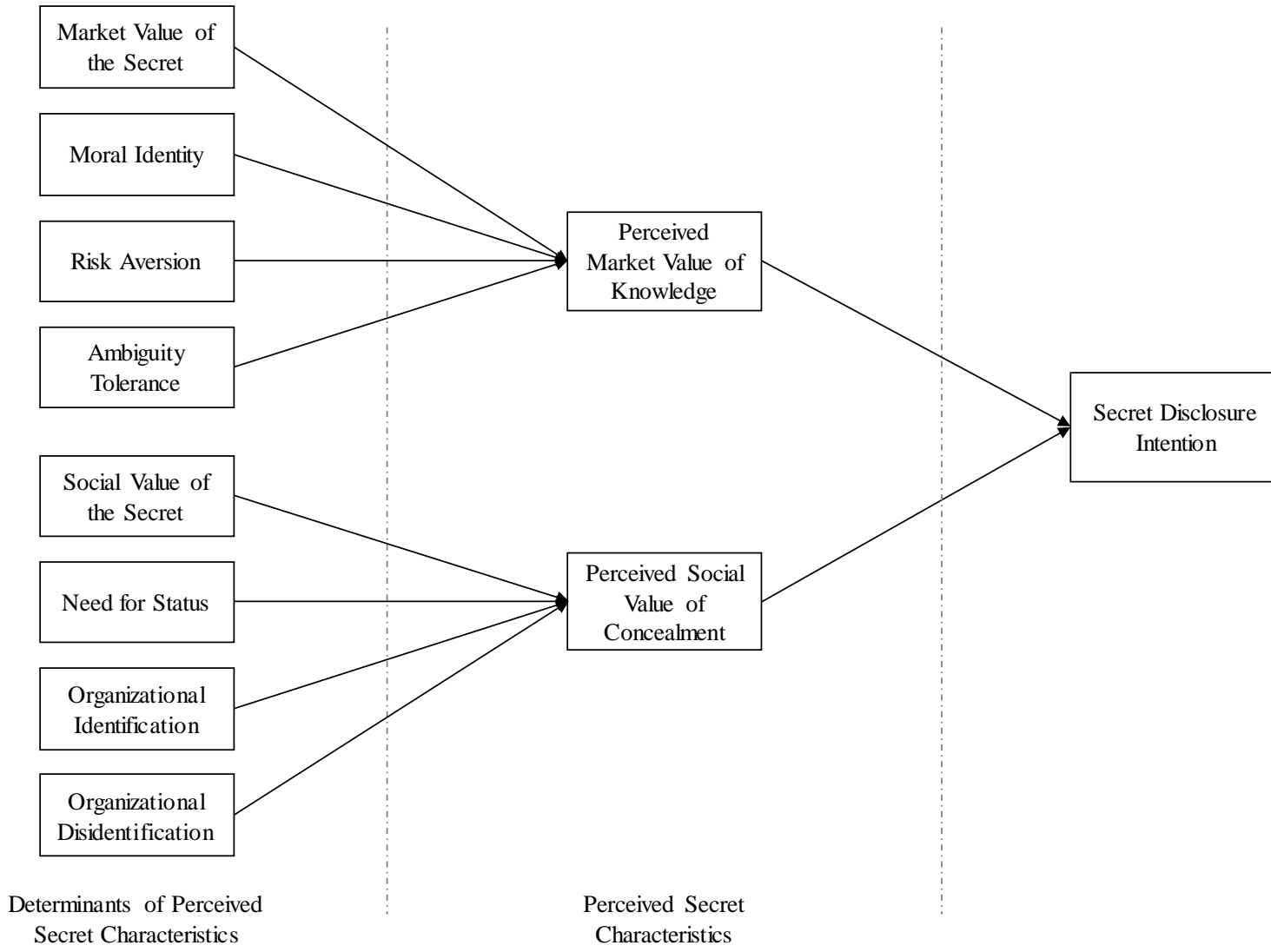
A second possible reason for the lack of significant interaction effects relate to a potential model misspecification. While there were ample reasons to conceptualize individual-level factors as moderators of the perceived value – secret disclosure intent relationship, an alternative model may have considered perceived market and social value to mediate the relationship between individual-level factors and secret disclosure intention. Such an alternative conceptualization depicts a causal chain, incorporating direct and indirect effects of individual-level factors and secret characteristics on secret disclosure intent. Here, perceptions of market value of the secret

would be determined not only by the objective characteristics of the secret, but also by individual-level factors like ambiguity tolerance, risk aversion, and moral identity. Similarly, the perceived social value of the secret would be determined by both objective secret characteristics and individual-level factors concerning status and identity (i.e., need for status, organizational identification, and organizational disidentification). This alternative post-hoc conceptualization is depicted in Figure 5.

A post-hoc analysis was conducted with Study 1 data to test this alternative conceptualization. Due to the small sample size ( $n = 130$ ) and the resulting low levels of power, structural equation modeling could not be used to determine the path coefficients in the model. Instead, Hayes' (2013) PROCESS was used to test the mediated effects for significance using bootstrap samples. First, Hayes' (2013) Model 4 was used to test the direct and indirect effects of the objective market value of the secret, moral identity, risk aversion, and ambiguity tolerance on secret disclosure intention, mediated by the perceived market value of the secret (see top half of Figure 5). The objective market value of the secret was dummy coded according to the vignette manipulation employed. Controlling for age, the objective market value of the secret had no significant direct or indirect effects on secret disclosure intention. Moral identity had no significant direct effects on secret disclosure intent; however, it had a significant negative indirect effect on secret disclosure intention, mediated by perceived market value ( $\beta = -0.24$ ,  $SE = 0.07$ , 95% CI [-0.43, -0.12]). Dispositional risk aversion had no significant direct effects either, but had a negative indirect effect on secret disclosure intent ( $\beta = -0.17$ ,  $SE = 0.07$ , 95% CI [-0.33, -0.04]) mediated by perceived market value of the secret. Situational risk aversion, on the other hand, had significant negative direct ( $\beta = -0.25$ ,  $SE = 0.10$ , 95% CI [-0.45, -0.04]) and indirect effects ( $\beta = -0.24$ ,  $SE = 0.06$ , 95% CI [-0.38, -0.12]) on secret disclosure intention,

**Figure 5**

Alternative Post-hoc Conceptualization



the latter mediated by perceived market value. Finally, ambiguity tolerance had no significant direct or indirect effects on secret disclosure intent.

Similar to the above analysis, Hayes' (2013) Model 4 was used to test the direct and indirect effects of the objective social value of the secret, need for status, organizational identification, and organizational disidentification on secret disclosure intention, mediated by the perceived social value of the secret (see bottom half of Figure 5). After dummy coding for the social value of the secret according to the vignette manipulation, the objective social value of the secret was found to have no discernible direct or indirect effects on secret disclosure intention. Need for status and organizational identification did not have any significant direct or indirect effects on secret disclosure intent either. Organizational disidentification, however, had a significant positive direct effect on secret disclosure intent ( $\beta = 0.28$ ,  $SE = 0.08$ , 95% CI [0.12, 0.45]), but had no significant indirect effects mediated by the perceived social value of the secret.

The above post-hoc analysis paints a more complex picture of secret disclosure. The initial assumption in this dissertation was that employees' perceptions of secret value (be it the market value of knowledge or social value of concealment) are largely determined by the objective characteristics of the organizational secret. Starting with this assumption, it was hypothesized that perceptions of secret value would affect secret disclosure, and that individual-level factors would affect the disclosure decision by affecting one's calculus of financial and social risks and benefits of secret disclosure. The post-hoc conceptualization challenged the assumption that perceptions of secret value are mostly determined by objective secret characteristics, and made the case that individual-level factors may play an important role in shaping perceptions of secret value. The results from the post-hoc analysis suggest that perceptions of secret value may indeed be affected by individual-level factors like moral identity

and situational and dispositional risk aversion. Thus, there is a need to study the antecedents of perceptions of secret value, in addition to its consequences. Since perceptions of secret value play an important role in shaping secret disclosure intent, future research might consider systematically studying the individual-level and secret-related factors that shape one's perceptions of secret value.

## **A. Implications**

### **Implications for Research**

This dissertation has several important implications for research in secrecy. Prior research in secret disclosure mostly focused on the disclosure of family secrets, personal or stigmatizing secrets, and unethical organizational practices. The literature on family and personal secrets held that people mostly reveal secrets for cathartic (e.g., reduction of cognitive discomfort / dissonance), social (e.g., maintenance of social relationships and enhancement of social status), and instrumental (e.g., harm to the family) reasons (see Kelly, 2002, for a review). The whistleblowing literature, on the other hand, held that people reveal unethical organizational practices to bring about positive change, gain financial rewards from the legal system, and attain social recognition for their actions (Miceli et al., 2008). While these two literatures have improved our understanding of the disclosure of personal and unethical organizational secrets, respectively, little research has examined the disclosure of value-creating organizational secrets in particular.

The results of the two vignette studies suggest that employees are much less likely to disclose the organizational secrets they perceive to be valuable. The perceived value of an organizational secret can be decomposed into two components: the perceived market value of knowledge, and the perceived social value of concealment. While the market value of knowledge



is central to the strategic secrets (or trade secrets) literature, the social value of concealment is central to the sociological perspective of organizational secrecy (Costas & Grey, 2014; Goffman, 1959). Perceived market value of knowledge significantly explained 8 to 25% of variance in secret disclosure intent across the two studies conducted, while the perceived social value of concealment explained 2 to 13% of variance in secret disclosure intention.

The empirical findings lend some support for the idea that employees routinely assess the risks and benefits of disclosing a value-creating organizational secret. There are several potential financial and social benefits of disclosing such an organizational secret, but these benefits are often overshadowed by the potential for severe financial, legal, and social repercussions. When organizational secrets are perceived to be characterized by high levels of market and social value, employees become risk averse and highly sensitive to the severity of potential repercussions from disclosure, significantly reducing their intention to disclose the organizational secret. Thus, by putting forth a dual-mode conceptualization of secret value, developing measures of perceived market and social value of an organizational secret, and testing the effects of perceived market and social value on disclosure intent, this dissertation significantly improves our understanding of the disclosure of value-creating organizational secrets.

The post-hoc analysis of data collected for this dissertation also improves our understanding of antecedents of perceived secret value. Initially, perceived market and social value of the secret was assumed to be driven by objective characteristics of the organizational secret. Certain individual-level factors were thought to moderate the effects of perceived market and social value on secret disclosure intent. However, driven by the relative absence of interactive effects, an alternative mediational model was put forth and tested. The data provides

some support for the idea that perceptions of secret value are determined not only by objective secret characteristics, but also by individual-level factors like moral identity and risk aversion. These post-hoc findings generate several compelling propositions regarding the antecedents of perceived market and social value of the secret. Thus, this dissertation paves the way for future research treating perceptions of secret value as mediators or outcomes.

### **Implications for Practice**

Findings of the two studies have implications for organizations concerned with protecting their stocks of knowledge through secrecy. Results suggest that employees' perceptions of market and social value of an organizational secret play an important role in shaping secret disclosure intent. When employees perceive organizational secrets to be financially and socially valuable, they are likely to perceive significant financial, legal, social and social-psychological risks of disclosure. Leaders who wish to protect a firm's valuable secrets would be well-advised to communicate to insiders the critical nature of the secret for the firm's continued success, amplifying insiders' perceptions of market value of the secret. They may also wish to communicate the social status and prestige associated with being included in the insider group, enhancing insiders' perceptions of the social value of concealment. This, however, does not preclude the routine communication of the firm's confidential information protection rules and the financial, legal, and social penalties for unauthorized disclosure of organizational knowledge. Such organizational communication may enhance the perceived risks in secret disclosure.

Results also provide some evidence that individual-level factors like moral identity and organizational disidentification, among other factors, affect secret disclosure intent. Moral identity, or one's self-conception as a fundamentally moral person (Aquino & Reed, 2002), seems to have direct and indirect negative effects on secret disclosure intent, the latter mediated

through perceived market value of the secret. Employees who have a strong sense of moral identity seem to perceive significant ethical risks in secret disclosure. They even seem to be more likely to perceive an organizational secret as financially valuable, indirectly reducing their secret disclosure intent. On the other hand, organizational disidentification, or the extent of cognitive separation between one's self-conception and organizational identity (Elsbach, 1999), appears to have a positive main effect on secret disclosure intent. Employees who are fundamentally disconnected from the organization seem to perceive little financial and social risk in disclosing a valuable organizational secret. They may also be motivated to reveal valuable organizational secrets for self-verification purposes, to cement their identity as largely separate from that of the organization (Elsbach, 1999).

Thus, from an organizational knowledge management perspective, it makes sense to limit the knowledge of value-creating organizational secrets to employees with a strong sense of moral identity. At the very least, organizational leaders would be well-advised to exclude disidentified employees from the insider group. Implementing these recommendations in practice would entail psychological screening of employees prior to being entrusted with an organizational secret. Additionally, by understanding factors that lead to organizational disidentification, steps may also be taken to prevent negative organizational associations among insiders. These recommendations, when implemented in tandem with other intellectual property protection mechanisms like confidentiality, non-disclosure and non-compete agreements, will reduce the likelihood of disclosure of valuable organizational secrets.

## **B. Limitations and Future Research Directions**

This dissertation represents a first step towards understanding the factors that affect the voluntary disclosure of value-creating organizational secrets by insiders. While the two studies

make valuable contributions towards our knowledge of secret disclosure, there are a few key limitations that need to be kept in mind.

First, while this dissertation sought to improve our understanding of the disclosure of valuable organizational secrets, it relied on research in personal/stigmatizing secrets, family secrets and whistleblowing to generate a model of organizational secret disclosure. The proposed dual-mode conceptualization of secret value provides some key insights into secret disclosure. However, as evidenced by the absence of proposed interactive effects, there is still a need to systematically examine the mechanisms, antecedents, and consequences of perceptions of market and social value of an organizational secret. Future research could explore the impact of individual-level factors and situational variables on employees' perceptions of secret value. For instance, building on research in the resource-based view of the firm, scholars might study the impact of a manager's current knowledge stocks, perceptions of market position, and perceptions of competitive improvement from possessing the knowledge on perceptions of market and social value of a secret (Schmidt & Keil, 2013). A manager who believes that their organization is underperforming in the market, and who perceives significant competitive improvement from secret-keeping is likely to perceive the focal secret as highly valuable. Another manager at the same organization who does not see potential competitive improvement from secret-keeping is less likely to perceive the focal secret as valuable, affecting his or her secret disclosure intent.

A second key limitation of the theoretical framework is that the model developed in this dissertation only applies to certain types of organizational secrets. As mentioned earlier, Goffman (1959) theorized the existence of four types of organizational secrets: strategic secrets that hide information about a firm's plans from competitors and create competitive advantages; dark secrets that limit knowledge of unethical organizational practices; inside secrets that denote

group membership and create a sense of belonging; and entrusted secrets that denote trustworthiness. Hannah and colleagues (2014) studied organizational secrecy from a marketing perspective, postulating that organizational secrets may vary along two independent dimensions (strategic value (or value to the firm), and marketing value (or value in the eyes of customers)), resulting in four types of secrets. Yet others have alluded to legitimate and illegitimate organizational secrets (i.e., the extent to which secrets in question are normative and legitimate; Keane, 2008), public and private organizational secrets (i.e., the extent to which the public is aware of the existence of an organizational secret; Anand et al., 2017), industry secrets (e.g., the tobacco industry's secrets regarding the ill-effects of smoking; Hurt & Robertson, 1998), etc. This dissertation only considered the disclosure of value-creating organizational secrets – i.e., strategic, inside, and entrusted secrets that create market value or social value for the firm. Thus, findings from the studies are only applicable to these specific types of organizational secrets, and are not generalizable to other types of secrets. Future research could consider studying the disclosure of other types of organizational secrets.

A third key limitation is that the theoretical model advanced in this dissertation focuses on secret disclosure intention and does not consider actual action. While it is indeed beneficial to have a good understanding of the various factors that affect intention, secret disclosure behavior may have a very different set of predictors. Future research might consider alternative designs to theorize and test predictors of secret disclosure behavior. For example, in-depth interviews with key informants who have disclosed valuable organizational secrets in the past may help one arrive at a grounded model of secret disclosure. The grounded model may then be tested in an experimental setting. For example, consider a repeated lab experiment where participants work on contrived tasks within teams. Say the participants are exposed to a valuable team secret by an

experimenter posing as a team-member. The team secret may relate to a shortcut for completing the contrived tasks, resulting in higher levels of pay and team ranking. Also imagine that experimental setting allows participants from different teams to converse during scheduled breaks. Such a mixed-method exposition may contribute significantly to our knowledge of secret disclosure.

A fourth limitation of the theoretical model is that it focuses exclusively on disclosure, and ignores secret maintenance. Maintenance and disclosure may seem to be related processes from an organizational knowledge management perspective, but individual-level and situational factors that affect the two processes are likely to be very different. While one's disclosure of an organizational secret is seen to be governed by a risk-benefit analysis, one's motivation to maintain a secret may be affected by positive long-term organizational associations. For example, some employees of Bletchley Park kept their involvement in the clandestine organization secret for decades, long after the U.K. government declassified the information (Costas & Grey, 2014). Future research might examine the antecedents and processes of secret maintenance in addition to factors affecting secret disclosure.

In addition to the theoretical limitations above, there are a few methodological limitations that merit discussion. The proposed model of secret disclosure was tested using experimental vignette methodology. EVM is uniquely suited to study organizational secrecy, as it enables researchers to present realistic and immersive scenarios to expose participants to hypothetical organizational secrets, and manipulate aspects of organizational secrets to study secret disclosure intention. However, EVM is not a panacea – the lower strength of manipulations (compared to pure experimental designs) and the inferior realism of these manipulations (compared to field studies and field experiments), among other aspects, have the potential to affect our observations

of the phenomenon. Future research could consider using multiple quantitative and qualitative methods to study the disclosure of organizational secrecy. For example, a qualitative study where managers are interviewed to develop a grounded theory of secret maintenance and disclosure might significantly enhance our breadth of knowledge of the phenomenon. Similarly, a field experiment where organizational members are selectively exposed to a value-creating organizational secret, and where organizational communication media are monitored for secret disclosure may help test different theories of secret disclosure.

Another methodological limitation stems from a mismatch between certain constructs in the model and the method employed to test the model. While positive and negative organizational associations (like organizational identification and disidentification) may indeed be central to secret disclosure, the appropriateness of using paper-people vignettes to study their effects on disclosure can be questioned. Future research might consider alternative methods like field studies in contexts where individuals are actually identified or disidentified with their organizations to test the effects of these constructs on secret disclosure intent and behavior.

Apart from these broad methodological limitations, certain sample-related constraints must be noted. The first study used a sample of undergraduate business students enrolled in a senior-level strategic management class at the University of Arkansas. Due to the potential systematic differences between undergraduate business students and organizational employees, there was a need to conduct a second study to enhance generalizability and transferability of study findings. The second study initially used a sample of executive MBA students at the University of Arkansas. But owing to low response rates, this sample was bolstered with adults from the general working population in the United States between the ages of 25 and 55 with at least 4 years of full-time work experience or 6 years of part-time work experience, most of

whom had a four-year college degree. Despite the sheer breadth of this second sample, certain systematic effects might still affect study findings, since the adults from the general working population were recruited through Qualtrics Data Services. Future work in this area could consider directly approaching organizational members in industries where intellectual property concerns exist.

### **C. Conclusion**

This dissertation sought to examine the intentional disclosure of value-creating organizational secrets by organizational employees. The studies provide compelling evidence that employees' perceptions of market and social value of an organizational secret help shape their secret disclosure intent. Individual-level factors like moral identity and organizational disidentification also play important roles in the disclosure of organizational secrets. This dissertation contributes to the secrecy literature by studying a topic that is important, under-researched, and has significant financial and social consequences for organizations. It also contributes to practice by outlining a few recommendations to constrain the scope of organizational secrets and enhance employees' perceptions of market and social value of secrets. Future research should examine the mechanisms through which perceptions of secret value are formed, and the antecedents and consequences of perceived value. Measures of perceived market and social value developed for this study might be used to develop and test the nomological network of these constructs.



## References

- Adler, P. A., & Adler, P. (1988). Intense Loyalty in Organizations: A Case Study of College Athletics. *Administrative Science Quarterly*, 33(3), 401-417.
- Afifi, T., & Steuber, K. (2009). The Revelation Risk Model (RRM): Factors that Predict the Revelation of Secrets and the Strategies Used to Reveal Them. *Communication Monographs*, 76(2), 144-176.
- Afifi, T. D., & Schrodt, P. (2003). Uncertainty and the Avoidance of the State of One's Family in Stepfamilies, Postdivorce Single-Parent Families, and First-Marriage Families. *Human Communication Research*, 29(4), 516-532.
- Afifi, W. A., & Caughlin, J. P. (2006). A Close Look at Revealing Secrets and Some Consequences that Follow. *Communication Research*, 33(6), 467-488.
- Afifi, W. A., & Guerrero, L. K. (2000). Motivations Underlying Topic Avoidance in Close Relationships. In S. Petronio (Ed.), *Balancing the Secrets of Private Disclosures* (pp. 165-180). New York, NY: Taylor & Francis.
- Aguinis, H., & Bradley, K. J. (2014). Best Practice Recommendations for Designing and Implementing Experimental Vignette Methodology Studies. *Organizational Research Methods*, 17(4), 351-371.
- Albert, S., & Whetten, D. A. (1985). Organizational Identity. *Research in Organizational Behavior*, 7, 263-295.
- Alvesson, M. (2004). *Knowledge Work and Knowledge-Intensive Firms*. New York, NY: Oxford University Press.
- Anand, V., & Rosen, C. C. (2008). The Ethics of Organizational Secrets. *Journal of Management Inquiry*, 17(2), 97-101.
- Anand, V., Rosen, C. C., & Franklin, D. (2017). *Secret Keeping in Organizations*. Unpublished manuscript, Management Department, University of Arkansas, Fayetteville, AR.
- Anderson, C., Srivastava, S., Beer, J. S., Spataro, S. E., & Chatman, J. A. (2006). Knowing Your Place: Self-Perceptions of Status in Face-to-Face Groups. *Journal of Personality and Social Psychology*, 91(6), 1094-1110.
- Aquino, K., & Reed II, A. (2002). The Self-Importance of Moral Identity. *Journal of Personality and Social Psychology*, 83(6), 1423-1440.
- Argyle, M. (1994). *The Psychology of Social Class*. New York, NY: Routledge.
- Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in Organizations: An Examination of Four Fundamental Questions. *Journal of Management*, 34(3), 325-374.

- Ashforth, B. E., & Mael, F. (1989). Social Identity Theory and the Organization. *Academy of Management Review*, 14(1), 20-39.
- Atzmüller, C., & Steiner, P. M. (2010). Experimental Vignette Studies in Survey Research. Methodology: *European Journal of Research Methods for the Behavioral and Social Sciences*, 6, 128-138.
- Bandura, A. (1999). Moral Disengagement in the Perpetration of Inhumanities. *Personality and Social Psychology Review*, 3(3), 193-209.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.
- Bast, C. M. (1999). At What Price Silence: Are Confidentiality Agreements Enforceable? *William Mitchell Law Review*, 25(2), 627-714.
- Baumeister, R. F., & Leary, M. R. (1995). The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation. *Psychological Bulletin*, 117(3), 497-529.
- Behr, H. (2006). Special Section: Secrecy and Confidentiality in Groups. *Group Analysis*, 39(3), 356-365.
- Bennett, R. J., & Robinson, S. L. (2003). The Past, Present, and Future of Workplace Deviance Research. In *Organizational Behavior: The State of the Science* (pp. 247-281). Mahwah, NJ: Lawrence Erlbaum.
- Berger, J., Cohen, B. P., & Zelditch Jr, M. (1972). Status Characteristics and Social Interaction. *American Sociological Review*, 37(3), 241-255.
- Berger, J., Ridgeway, C. L., & Zelditch, M. (2002). Construction of Status and Referential Structures. *Sociological Theory*, 20(2), 157-179.
- Berggren, E., & Bernshteyn, R. (2007). Organizational Transparency Drives Company Performance. *Journal of Management Development*, 26(5), 411-417.
- Bergman, M. E., Langhout, R. D., Palmieri, P. A., Cortina, L. M., & Fitzgerald, L. F. (2002). The (Un) Reasonableness of Reporting: Antecedents and Consequences of Reporting Sexual Harassment. *Journal of Applied Psychology*, 87(2), 230-242.
- Bhattacharya, C., & Elsbach, K. D. (2002). Us Versus Them: The Roles of Organizational Identification and Disidentification in Social Marketing Initiatives. *Journal of Public Policy & Marketing*, 21(1), 26-36.
- Birchall, C. (2011). Introduction to 'Secrecy and Transparency': The Politics of Opacity and Openness. *Theory, Culture & Society*, 28(7), 7-25.
- Bok, S. (1982). *Secrets: On the Ethics of Concealment and Revelation*. New York, NY: Pantheon Books.

- Brabeck, M. (1984). Ethical Characteristics of Whistle Blowers. *Journal of Research in Personality*, 18(1), 41-53.
- Brady, D. (2012). KFC's Big Game of Chicken. *Bloomberg Businessweek*. Retrieved from <https://www.bloomberg.com/news/articles/2012-03-29/kfcs-big-game-of-chicken>
- Bramson, R. S. (1981). Intellectual Property as Collateral: Patents, Trade Secrets, Trademarks and Copyrights. *The Business Lawyer*, 36(4), 1567-1604.
- Budden, M. C. (1996). *Protecting Trade Secrets Under the Uniform Trade Secrets Act: Practical Advice for Executives*. Westport, CT: Greenwood Publishing Group.
- Cable, D. M., & Judge, T. A. (1994). Pay Preferences and Job Search Decisions: A Person-Organization Fit Perspective. *Personnel Psychology*, 47(2), 317-348.
- Callahan, E. S., & Dworkin, T. M. (1992). Do Good and Get Rich: Financial Incentives for Whistleblowing and the False Claims Act. *Villanova Law Review*, 37(2), 273-336.
- Camerer, C. (2005). Three Cheers - Psychological, Theoretical, Empirical - For Loss Aversion. *Journal of Marketing Research*, 42(2), 129-133.
- Caughlin, J. P., Scott, A. M., Miller, L. E., & Hefner, V. (2009). Putative Secrets: When Information is Supposedly a Secret. *Journal of Social and Personal Relationships*, 26(5), 713-743.
- Cavanagh, G. F., & Fritzsche, D. J. (1985). Using Vignettes in Business Ethics Research. *Research in Corporate Social Performance and Policy*, 7, 279-293.
- Chan, C. (2014). The Vault Where KFC Guards the Colonel's Secret Original Recipe. *Gizmodo*. Retrieved from <http://sploid.gizmodo.com/this-is-the-vault-where-kfc-guards-the-colonels-secret-1650566046>
- Child, J. (1972). Organizational Structure, Environment and Performance: The Role of Strategic Choice. *Sociology*, 6(1), 1-22.
- Chiu, R. K. (2003). Ethical Judgment and Whistleblowing Intention: Examining the Moderating Role of Locus of Control. *Journal of Business Ethics*, 43(1), 65-74.
- Cohen, A. (2013). Securing Trade Secrets in the Information Age: Upgrading the Economic Espionage Act After United States v. Aleynikov. *Yale Journal on Regulation*, 30, 189-232.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35(1), 128-152.
- Colquitt, J. A., Scott, B. A., Judge, T. A., & Shaw, J. C. (2006). Justice and Personality: Using Integrative Theories to Derive Moderators of Justice Effects. *Organizational Behavior and Human Decision Processes*, 100(1), 110-127.

Conner, K. R., & Prahalad, C. K. (1996). A Resource-Based Theory of the Firm: Knowledge Versus Opportunism. *Organization Science*, 7(5), 477-501.

Conway, J. M., & Huffcutt, A. I. (2003). A Review and Evaluation of Exploratory Factor Analysis Practices in Organizational Research. *Organizational Research Methods*, 6(2), 147-168.

Costas, J., & Grey, C. (2014). Bringing Secrecy into the Open: Towards a Theorization of the Social Processes of Organizational Secrecy. *Organization Studies*, 35(10), 1423-1447.

Cowen, L., Cavendish, T. E., Cornell, R. H., Cosway, R., Dole, R. F., Ring, C. C., & Pierce, W. J. (1985). Uniform Trade Secrets Act with 1985 Amendments.

D'Aveni, R. A. (1994). *Hypercompetition*. New York, NY: Free Press.

Dandliker, R. (2012). Intellectual Property Theft: Beware The Enemy Within. *Forbes*. Retrieved from <http://www.forbes.com/sites/ciocentral/2012/08/27/intellectual-property-theft-beware-the-enemy-within>

das Neves, J. C., & Vaccaro, A. (2013). Corporate Transparency: A Perspective from Thomas Aquinas' Summa Theologiae. *Journal of Business Ethics*, 113(4), 639-648.

Delafontaine, R. (2015). Tobacco Litigation. In *Historians as Expert Judicial Witnesses in Tobacco Litigation: A Controversial Legal Practice* (pp. 173-209). New York, NY: Springer.

Derlega, V. J., Winstead, B. A., & Folk-Barron, L. (2000). Reasons for and Against Disclosing HIV-Seropositive Test Results to an Intimate Partner: A Functional Perspective. In S. Petronio (Ed.), *Balancing the Secrets of Private Disclosures* (pp. 53-69). New York, NY: Taylor & Francis.

Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., & Wagner, G. G. (2011). Individual Risk Attitudes: Measurement, Determinants, and Behavioral Consequences. *Journal of the European Economic Association*, 9(3), 522-550.

Dozier, J. B., & Miceli, M. P. (1985). Potential Predictors of Whistle-Blowing: A Prosocial Behavior Perspective. *Academy of Management Review*, 10(4), 823-836.

Dubois, D., Rucker, D. D., & Galinsky, A. D. (2012). Super-Size Me: Product Size as a Signal of Status. *Journal of Consumer Research*, 38(6), 1047-1062.

Dubois, D., Rucker, D. D., & Galinsky, A. D. (2015). Social Class, Power, and Selfishness: When and Why Upper and Lower Class Individuals Behave Unethically. *Journal of Personality and Social Psychology*, 108(3), 436-449.

Dufresne, R. L., & Offstein, E. H. (2008). On the Virtues of Secrecy in Organizations. *Journal of Management Inquiry*, 17(2), 102-106.

- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational Images and Member Identification. *Administrative Science Quarterly*, 39(2), 239-263.
- Eastman, J. K., Goldsmith, R. E., & Flynn, L. R. (1999). Status Consumption in Consumer Behavior: Scale Development and Validation. *Journal of Marketing Theory and Practice*, 7(3), 41-52.
- Edwards, M. R. (2005). Organizational Identification: A Conceptual and Operational Review. *International Journal of Management Reviews*, 7(4), 207-230.
- Elsbach, K. D. (1999). An Expanded Model of Organizational Identification. In R. I. Sutton & B. M. Staw (Eds.), *Research in Organizational Behavior* (pp. 163-199). Greenwich, CT: JAI Press.
- Elsbach, K. D., & Bhattacharya, C. (2001). Defining Who You Are by What You're Not: Organizational Disidentification and the National Rifle Association. *Organization Science*, 12(4), 393-413.
- Faia, M. A. (2000). "Three Can Keep a Secret if Two Are Dead" (Lavigne, 1996): Weak Ties as Infiltration Routes. *Quality & Quantity*, 34(2), 193-216.
- Feldman, S. P. (1988). Secrecy, Information, and Politics: An Essay on Organizational Decision Making. *Human Relations*, 41(1), 73-90.
- Ferris, D. L., Brown, D. J., & Heller, D. (2009). Organizational Supports and Organizational Deviance: The Mediating Role of Organization-Based Self-Esteem. *Organizational Behavior and Human Decision Processes*, 108(2), 279-286.
- Festinger, L. (1962). *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.
- Fine, G. A., & Holyfield, L. (1996). Secrecy, Trust, and Dangerous Leisure: Generating Group Cohesion in Voluntary Organizations. *Social Psychology Quarterly*, 59(1), 22-38.
- Flaccus, G. (2010). Former Boeing Engineer Gets 15 years in China Spy Case. *USA Today*. Retrieved from [http://usatoday30.usatoday.com/money/industries/technology/2010-02-08-economic-espionage\\_N.htm](http://usatoday30.usatoday.com/money/industries/technology/2010-02-08-economic-espionage_N.htm)
- Forrester. (2010). *The Value of Corporate Secrets*. Retrieved from <https://www.nsi.org/pdf/reports/The Value of Corporate Secrets.pdf>
- Friedman, D. D., Landes, W. M., & Posner, R. A. (1991). Some Economics of Trade Secret Law. *The Journal of Economic Perspectives*, 5(1), 61-72.
- Ghosh, D., & Ray, M. R. (1997). Risk, Ambiguity, and Decision Choice: Some Additional Evidence. *Decision Sciences*, 28(1), 81-104.
- Glazer, M. P., & Glazer, P. M. (1989). *The Whistleblowers: Exposing Corruption in Government and Industry*. New York, NY: Basic Books.

- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. Garden City, NY: Overlook Press.
- Goldsmith, D. J., Miller, L. E., & Caughlin, J. P. (2007). Openness and Avoidance in Couples Communicating about Cancer. *Annals of the International Communication Association*, 31(1), 62-115.
- Grant, R. M. (1996). Toward a Knowledge-Based Theory of the Firm. *Strategic Management Journal*, 17(S2), 109-122.
- Gray, B., & Kish-Gephart, J. J. (2013). Encountering Social Class Differences at Work: How “Class Work” Perpetuates Inequality. *Academy of Management Review*, 38(4), 670-699.
- Greve, H. R., Palmer, D., & Pozner, J. E. (2010). Organizations Gone Wild: The Causes, Processes, and Consequences of Organizational Misconduct. *The Academy of Management Annals*, 4(1), 53-107.
- Grey, C. (2014). An Organizational Culture of Secrecy: The Case of Bletchley Park. *Management & Organizational History*, 9(1), 107-122.
- Griffiths, V. (1995). *Adolescent Girls and their Friends: A Feminist Ethnography*. Aldershot, UK: Avebury.
- Halter, M. V., De Arruda, M. C. C., & Halter, R. B. (2009). Transparency to Reduce Corruption? *Journal of Business Ethics*, 84, 373-385.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling Status with Luxury Goods: The Role of Brand Prominence. *Journal of Marketing*, 74(4), 15-30.
- Hannah, D., Parent, M., Pitt, L., & Berthon, P. (2014). It's a Secret: Marketing Value and the Denial of Availability. *Business Horizons*, 57(1), 49-59.
- Hannah, D. R. (2005). Should I Keep a Secret? The Effects of Trade Secret Protection Procedures on Employees' Obligations to Protect Trade Secrets. *Organization Science*, 16(1), 71-84.
- Hannah, D. R. (2007). An Examination of the Factors that Influence Whether Newcomers Protect or Share Secrets of Their Former Employers. *Journal of Management Studies*, 44(4), 465-487.
- Hannah, D. R., & Robertson, K. (2015). Why and How Do Employees Break and Bend Confidential Information Protection Rules? *Journal of Management Studies*, 52(3), 381-413.
- Hart, D., Atkins, R., & Ford, D. (1998). Urban America as a Context for the Development of Moral Identity in Adolescence. *Journal of Social Issues*, 54(3), 513-530.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: Guilford Press.

- Heffernan, R. J., & Swartwood, D. T. (1993). Trends in Competitive Intelligence. *Security Management*, 37, 70-70.
- Hofstede, G. (1980). Motivation, Leadership, and Organization: Do American Theories Apply Abroad? *Organizational Dynamics*, 9(1), 42-63.
- Hogg, M. A., & Terry, D. I. (2000). Social Identity and Self-Categorization Processes in Organizational Contexts. *Academy of Management Review*, 25(1), 121-140.
- Holland, J. L. (1959). A Theory of Vocational Choice. *Journal of Counseling Psychology*, 6(1), 35-45.
- Hurt, R. D., & Robertson, C. R. (1998). Prying Open the Door to the Tobacco Industry's Secrets about Nicotine: The Minnesota Tobacco Trial. *Journal of the American Medical Association*, 280(13), 1173-1181.
- Jeffries, H., Coble, H., Conyers, J., Chabot, S., Nadler, J., & Holding, G. (2014). Why Protecting Our Trade Secrets Is Essential to Saving the Economy. *Business Insider*. Retrieved from <http://www.businessinsider.com/protecting-our-trade-secrets-is-essential-for-the-economy-2014-8>
- Jones, T. M. (1991). Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model. *Academy of Management Review*, 16(2), 366-395.
- Josephs, R. A., Sellers, J. G., Newman, M. L., & Mehta, P. H. (2006). The Mismatch Effect: When Testosterone and Status are at Odds. *Journal of Personality and Social Psychology*, 90(6), 999-1013.
- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial Coping with Organizational Change: A Dispositional Perspective. *Journal of Applied Psychology*, 84(1), 107-122.
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision Under Risk. *Econometrica: Journal of the Econometric Society*, 47(2), 263-292.
- Keane, C. (2008). Don't Ask, Don't Tell: Secrets - Their Use and Abuse in Organizations. *Journal of Management Inquiry*, 17(2), 107-110.
- Kelly, A. E. (2002). *The Psychology of Secrets*. New York, NY: Plenum Publishers.
- Kelly, A. E., & Kahn, J. H. (1994). Effects of Suppression of Personal Intrusive Thoughts. *Journal of Personality and Social Psychology*, 66(6), 998-1006.
- Kim, Y., Lee, J., & Yang, T. (2013). Corporate Transparency and Firm Performance: Evidence from Venture Firms Listed on the Korean Stock Market. *Asia-Pacific Journal of Financial Studies*, 42(4), 653-688.

- Kraaijenbrink, J., Spender, J.-C., & Groen, A. J. (2010). The Resource-Based View: A Review and Assessment of its Critiques. *Journal of Management*, 36(1), 349-372.
- Lam, A. (2000). Tacit Knowledge, Organizational Learning and Societal Institutions: An Integrated Framework. *Organization Studies*, 21(3), 487-513.
- Lane, J. D., & Wegner, D. M. (1995). The Cognitive Consequences of Secrecy. *Journal of Personality and Social Psychology*, 69(2), 237.
- Larsson, R., Bengtsson, L., Henriksson, K., & Sparks, J. (1998). The Interorganizational Learning Dilemma: Collective Knowledge Development in Strategic Alliances. *Organization Science*, 9(3), 285-305.
- Liebeskind, J. P. (1997). Keeping Organizational Secrets: Protective Institutional Mechanisms and their Costs. *Industrial and Corporate Change*, 6(3), 623-663.
- Lipshitz, R., & Strauss, O. (1997). Coping with Uncertainty: A Naturalistic Decision-Making Analysis. *Organizational Behavior and Human Decision Processes*, 69(2), 149-163.
- Lobel, O. (2013). Filing for a Patent Versus Keeping Your Invention a Trade Secret. *Harvard Business Review*. Retrieved from <https://hbr.org/2013/11/filing-for-a-patent-versus-keeping-your-invention-a-trade-secret>
- Lorsch, J. W., & Morse, J. J. (1974). *Organizations and their Members: A Contingency Approach*. New York, NY: Harper & Row.
- Loury, K., & Goldberg, D. G. (2013). Creating a Trade Secret Protection Program. *Journal of Financial Planning*, 28-29.
- Mael, F., & Ashforth, B. E. (1992). Alumni and their Alma Mater: A Partial Test of the Reformulated Model of Organizational Identification. *Journal of Organizational Behavior*, 13(2), 103-123.
- Magee, J. C., & Galinsky, A. D. (2008). Social Hierarchy: The Self-Reinforcing Nature of Power and Status. *The Academy of Management Annals*, 2(1), 351-398.
- Major, B., & Gramzow, R. H. (1999). Abortion as Stigma: Cognitive and Emotional Implications of Concealment. *Journal of Personality and Social Psychology*, 77(4), 735-745.
- Marcus, L. (2014). When Loose Lips Sink Companies. *BBC*. Retrieved from <http://www.bbc.com/capital/story/20140910-loose-lips-and-corporate-secrets>
- McJohn, S. (2012). Top Tens in 2012: Patent, Trademark, Copyright and Trade Secret Cases. *Northwestern Journal of Technology and Intellectual Property*, 11(4), 173-220.
- McLain, D. L. (1993). The MSTAT-I: A New Measure of an Individual's Tolerance for Ambiguity. *Educational and Psychological Measurement*, 53(1), 183-189.



- McLain, D. L. (2009). Evidence of the Properties of an Ambiguity Tolerance Measure: The Multiple Stimulus Types Ambiguity Tolerance Scale–II (MSTAT–II). *Psychological Reports*, 105(3), 975-988.
- Merten, D. E. (1999). Enculturation into Secrecy Among Junior High School Girls. *Journal of Contemporary Ethnography*, 28(2), 107-137.
- Mesmer-Magnus, J. R., & Viswesvaran, C. (2005). Whistleblowing in Organizations: An Examination of Correlates of Whistleblowing Intentions, Actions, and Retaliation. *Journal of Business Ethics*, 62(3), 277-297.
- Miceli, M. P., Dozier, J. B., & Near, J. P. (1991). Blowing the Whistle on Data Fudging: A Controlled Field Experiment. *Journal of Applied Social Psychology*, 21(4), 271-295.
- Miceli, M. P., & Near, J. P. (1992). *Blowing the Whistle: The Organizational and Legal Implications for Companies and Employees*. New York, NY: Lexington Books.
- Miceli, M. P., & Near, J. P. (2002). What Makes Whistle-Blowers Effective? Three Field Studies. *Human Relations*, 55(4), 455-479.
- Miceli, M. P., Near, J. P., & Dworkin, T. M. (2008). *Whistle-blowing in Organizations*. New York, NY: Taylor & Francis.
- Miceli, M. P., Near, J. P., & Schwenk, C. R. (1991). Who Blows the Whistle and Why? *ILR Review*, 45(1), 113-130.
- Miceli, M. P., Van Scotter, J. R., Near, J. P., & Rehg, M. T. (2001). *Individual Differences and Whistle-Blowing*. Paper presented at the Academy of Management Annual Meeting.
- Miller, D., & Shamsie, J. (1996). The Resource-Based View of the Firm in Two Environments: The Hollywood Film Studios from 1936 To 1965. *Academy of Management Journal*, 39(3), 519-543.
- MSA. (1998). Tobacco Master Settlement Agreement. *California Department of Justice*. Retrieved from <http://ag.ca.gov/tobacco/pdf/1msa.pdf>
- 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. (1995). Effective Whistle-Blowing. *Academy of Management Review*, 20(3), 679-708.
- Near, J. P., & Miceli, M. P. (1996). Whistle-Blowing: Myth and Reality. *Journal of Management*, 22(3), 507-526.
- Near, J. P., Rehg, M. T., Van Scotter, J. R., & Miceli, M. P. (2004). Does Type of Wrongdoing Affect the Whistle-Blowing Process? *Business Ethics Quarterly*, 14(2), 219-242.

- Nelson, R. N., & Winter, S. G. (1982). *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.
- Newell, S. E., & Stutman, R. K. (1991). The Episodic Nature of Social Confrontation. *Annals of the International Communication Association*, 14(1), 359-395.
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. New York, NY: Oxford University Press.
- Norman, S. M., Avolio, B. J., & Luthans, F. (2010). The Impact of Positivity and Transparency on Trust in Leaders and Their Perceived Effectiveness. *The Leadership Quarterly*, 21(3), 350-364.
- Norton, R. W. (1975). Measurement of Ambiguity Tolerance. *Journal of Personality Assessment*, 39(6), 607-619.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational Commitment and Psychological Attachment: The Effects of Compliance, Identification, and Internalization on Prosocial Behavior. *Journal of Applied Psychology*, 71(3), 492-499.
- Pachankis, J. E. (2007). The Psychological Implications of Concealing a Stigma: A Cognitive-Affective-Behavioral Model. *Psychological Bulletin*, 133(2), 328-345.
- Peckham, M. (1998). New Dimensions of Social Movement/Countermovement Interaction: The Case of Scientology and its Internet Critics. *Canadian Journal of Sociology*, 23(4), 317-347.
- Penney, L. M., & Spector, P. E. (2005). Job Stress, Incivility, and Counterproductive Work Behavior (CWB): The Moderating Role of Negative Affectivity. *Journal of Organizational Behavior*, 26(7), 777-796.
- Pirson, M., & Malhotra, D. (2011). Foundations of Organizational Trust: What Matters to Different Stakeholders? *Organization Science*, 22(4), 1087-1104.
- Pratt, M. G. (2000). The Good, the Bad, and the Ambivalent: Managing Identification Among Amway Distributors. *Administrative Science Quarterly*, 45(3), 456-493.
- Priem, R. L., & Butler, J. E. (2001). Is the Resource-Based "View" a Useful Perspective for Strategic Management Research? *Academy of Management Review*, 26(1), 22-40.
- Rawlins, B. (2008). Give the Emperor a Mirror: Toward Developing a Stakeholder Measurement of Organizational Transparency. *Journal of Public Relations Research*, 21(1), 71-99.
- Rehg, M. T. (1998). *An Examination of the Retaliation Process Against Whistleblowers: A Study of Federal Government Employees*. Unpublished doctoral dissertation, Indiana University, Bloomington, IN.

- Rehg, M. T., Miceli, M. P., Near, J. P., & Van Scotter, J. R. (2008). Antecedents and Outcomes of Retaliation Against Whistleblowers: Gender Differences and Power Relationships. *Organization Science*, 19(2), 221-240.
- Rest, J. R. (1986). *Moral Development: Advances in Research and Theory*. New York, NY: Praeger.
- Robinson, S. L., & Bennett, R. J. (1995). A Typology of Deviant Workplace Behaviors: A Multidimensional Scaling Study. *Academy of Management Journal*, 38(2), 555-572.
- Rothschild, J., & Miethe, T. D. (1999). Whistle-blower Disclosures and Management Retaliation: The Battle to Control Information about Organization Corruption. *Work and Occupations*, 26(1), 107-128.
- Ruiz-De-La-Torre, J., & Manteca, X. (1999). Effects of Testosterone on Aggressive Behaviour After Social Mixing in Male Lambs. *Physiology & Behavior*, 68(1), 109-113.
- Saunders, K. M. (2005). The Law and Ethics of Trade Secrets: A Case Study. *California Western Law Review*, 42(2), 209-247.
- Schere, J. L. (1982). *Tolerance of Ambiguity as a Discriminating Variable Between Entrepreneurs and Managers*. Paper presented at the Academy of Management Annual Conference.
- Schmidt, J., & Keil, T. (2013). What Makes a Resource Valuable? Identifying the Drivers of Firm-Idiosyncratic Resource Value. *Academy of Management Review*, 38(2), 206-228.
- Schmidt, R., & Katz, I. (2015). Goldman Sachs Is Concerned Its Trade Secrets Walked Out the Door. *Bloomberg Businessweek*. Retrieved from <https://www.bloomberg.com/news/articles/2015-05-18/pwc-s-new-york-fed-hire-said-to-spur-secrecy-concerns-at-goldman>
- Schnackenberg, A. K., & Tomlinson, E. C. (2016). Organizational Transparency: A New Perspective on Managing Trust in Organization-Stakeholder Relationships. *Journal of Management*, 42(7), 1784-1810.
- Schrimshaw, E. W., & Siegel, K. (2002). HIV-Infected Mothers' Disclosure to Their Uninfected Children: Rates, Reasons, and Reactions. *Journal of Social and Personal Relationships*, 19(1), 19-43.
- Shamir, B., & Kark, R. (2004). A Single-Item Graphic Scale for the Measurement of Organizational Identification. *Journal of Occupational and Organizational Psychology*, 77(1), 115-123.
- Sherman, S. J., Hamilton, D. L., & Lewis, A. C. (1999). Perceived Entitativity and the Social Identity Value of Group Memberships. In D. Abrams & M. A. Hogg (Eds.), *Social Identity and Social Cognition*. Malden, MA: Blackwell Publishing.

- Shorris, E. (1984). *Scenes from Corporate Life: The Politics of Middle Management*. New York, NY: Penguin Books.
- Simmel, G. (1906). The Sociology of Secrecy and of Secret Societies. *American Journal of Sociology*, 11(4), 441-498.
- Sims, R. L., & Keenan, J. P. (1999). A Cross-Cultural Comparison of Managers' Whistleblowing Tendencies. *International Journal of Value-Based Management*, 12(2), 137-151.
- Smidts, A., Pruyn, A. T. H., & Van Riel, C. B. (2001). The Impact of Employee Communication and Perceived External Prestige on Organizational Identification. *Academy of Management Journal*, 44(5), 1051-1062.
- Sonenshein, S. (2007). The Role of Construction, Intuition, and Justification in Responding to Ethical Issues at Work: The Sensemaking-Intuition Model. *Academy of Management Review*, 32(4), 1022-1040.
- Spector, P. E., & Fox, S. (2002). An Emotion-Centered Model of Voluntary Work Behavior: Some Parallels Between Counterproductive Work Behavior and Organizational Citizenship Behavior. *Human Resource Management Review*, 12(2), 269-292.
- Starkey, P. L. (1998). *Whistleblowing Behavior: The Impact of Situational and Personality Variables*. University of Mississippi.
- Staub, E. (1978). *Positive Social Behavior and Morality: Social and Personal Influences*. New York, NY: Academic Press.
- Stiles, W. (1987). "I Have to Talk to Somebody": A Fever Model of Disclosure. In V. J. Derlega & J. H. Berg (Eds.), *Self-Disclosure: Theory, Research, and Therapy* (pp. 257-282). New York, NY: Plenum Publishers.
- Stiles, W. B. (1995). Disclosure as a Speech Act: Is it Psychotherapeutic to Disclose? In J. W. Pennebaker (Ed.), *Emotion, Disclosure, & Health* (pp. 71-91). Washington, DC: American Psychological Association.
- Stiles, W. B., Shuster, P. L., & Harrigan, J. A. (1992). Disclosure and Anxiety: A Test of the Fever Model. *Journal of Personality and Social Psychology*, 63(6), 980-988.
- Stolberg, S. (1996). Tobacco Firm Chief Lied, Scientist Says. *Los Angeles Times*. Retrieved from [http://articles.latimes.com/1996-01-27/business/fi-29352\\_1\\_tobacco-industry](http://articles.latimes.com/1996-01-27/business/fi-29352_1_tobacco-industry)
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral Emotions and Moral Behavior. *Annual Review of Psychology*, 58, 345-372.
- Teece, D. J. (1998). Capturing Value from Knowledge Assets: The New Economy, Markets for Know-How, and Intangible Assets. *California Management Review*, 40(3), 55-79.

- Tom, S. M., Fox, C. R., Trepel, C., & Poldrack, R. A. (2007). The Neural Basis of Loss Aversion in Decision-Making Under Risk. *Science*, 315(5811), 515-518.
- Vangelisti, A., Caughlin, J., & Timmerman, L. (2001). Criteria for Revealing Family Secrets. *Communication Monographs*, 68(1), 1-27.
- Vangelisti, A. L. (1994). Family Secrets: Forms, Functions and Correlates. *Journal of Social and Personal Relationships*, 11(1), 113-135.
- Vangelisti, A. L., & Caughlin, J. P. (1997). Revealing Family Secrets: The Influence of Topic, Function, and Relationships. *Journal of Social and Personal Relationships*, 14(5), 679-705.
- Vieira, P. (2015, Feb. 19, 2015). Canadian Police Charge SNC-Lavalin with Corruption, Fraud. *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/canada-police-charge-snc-lavalin-with-corruption-fraud-1424359641>
- Walsh, J. P. (1995). Managerial and Organizational Cognition: Notes from a Trip Down Memory Lane. *Organization Science*, 6(3), 280-321.
- Weber, M., Gerth, H., & Mills, C. W. (1946). *From Max Weber: Essays in Sociology*. New York: Oxford University Press.
- Wegner, D. M., & Lane, J. D. (1995). From Secrecy to Psychopathology. In J. W. Pennebaker (Ed.), *Emotion, Disclosure, & Health* (pp. 25-46). Washington, DC: American Psychological Association.
- Wegner, D. M., Schneider, D. J., Carter, S. R., & White, T. L. (1987). Paradoxical Effects of Thought Suppression. *Journal of Personality and Social Psychology*, 53(1), 5-13.
- Weick, K. (1979). *The Social Psychology of Organizing*. Reading, MA: Addison-Wesley.
- Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, 5(2), 171-180.
- Wexler, M. N. (1987). Conjectures on the Dynamics of Secrecy and the Secrets Business. *Journal of Business Ethics*, 6, 469-480.
- Williams, C. C. (2005). Trust Diffusion: The Effect of Interpersonal Trust on Structure, Function, and Organizational Transparency. *Business & Society*, 44(3), 357-368.
- Winter, S. G. (1987). Knowledge and Competence as Strategic Assets. In D. J. Teece (Ed.), *The Competitive Challenge: Strategies for Industrial Innovation and Renewal* (pp. 159-184). Cambridge, MA: Ballinger Publishing.
- Yeh, B. T. (2014). Protection of Trade Secrets: Overview of Current Law and Legislation. *Congressional Research Service*. Retrieved from <https://fpc.state.gov/documents/organization/231783.pdf>

Yoffie, D. B., & Freier, D. (2004). *Intellectual Property and Strategy*. Harvard Business Cases.  
Retrieved from <https://hbr.org/product/Intellectual-Property-and/an/704493-PDF-ENG>

## Appendix A: Research Compliance Documentation



Office of Research Compliance  
Institutional Review Board

April 28, 2016

### MEMORANDUM

TO: Danny Franklin  
Vikas Anand

FROM: Ro Windwalker  
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 16-04-713

Protocol Title: *The Disclosure of Organizational Secrets by Employees*

Review Type:  EXEMPT  EXPEDITED  FULL IRB

Approved Project Period: Start Date: 04/28/2016 Expiration Date: 04/27/2017

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<https://vpred.uark.edu/units/rscp/index.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

**This protocol has been approved for 400 participants.** If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or [irb@uark.edu](mailto:irb@uark.edu).

Research Compliance Documentation (contd.)



Office of Research Compliance  
Institutional Review Board

July 12, 2016

MEMORANDUM

TO: Danny Franklin  
Vikas Anand

FROM: Ro Windwalker  
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 16-06-820

Protocol Title: *The Disclosure of Organizational Secrets by Employees - Study 2*

Review Type:  EXEMPT  EXPEDITED  FULL IRB

Approved Project Period: Start Date: 07/08/2016 Expiration Date: 07/07/2017

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<https://vpred.uark.edu/units/rscp/index.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

**This protocol has been approved for 100 participants.** If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or [irb@uark.edu](mailto:irb@uark.edu).



## **Appendix B: Experimental Vignettes**

### **Study 1 Vignettes**

#### **Baseline Scenario** (Low Market Value; Low Social Value):

Tom is a plant manager at ABC Chemicals. His job function entails overseeing employees and meeting daily production targets of industrial chemicals.

ABC Chemicals had just developed a slightly innovative process for making methanol. The company's senior executives felt that this new process would add some value to the organization's portfolio of products, slightly improving their profitability. Senior executives asked Tom for his input in implementing the new production process.

Until this point, information about the new production process was available to several people within the organization and even a few outside the organization. Once process implementation began, ABC's competitors became curious. Tom received a call from John, a plant manager at XYZ Corp, one of ABC's major competitors. Over lunch, John tells Tom that executives at XYZ were impressed with Tom's work. They were considering making Tom an employment offer (representing a significant promotion from Tom's current position) for his knowledge in chemical manufacturing.

#### **Scenario 1** (High Market Value; High Social Value):

Cory is a plant manager at JAM Chemicals. His job function entails overseeing employees and meeting daily production targets of industrial chemicals.

JAM Chemicals had just developed a highly innovative process for making ethanol after extensive research and development. Expecting the new product to be extremely profitable, company executives decided to build a new plant for its production. They felt that this new process would add significant long-term value to the organization, pushing the organization to the top of its industry. However, for this to happen, it had to be executed in a manner that was hidden from view of competitors.

Senior executives of JAM Chemicals asked Cory for his input in designing the new plant. Until this point, information about the plant and the new production process was limited to only a small handful of trusted senior executives in the organization – Cory felt that he was part of an elite club within his organization, being exposed to this kind of inside knowledge. However, once plant construction began, JAM's competitors became curious about the new plant. Cory received a call from John, a plant manager at XYZ Corp, one of JAM's major competitors. Over lunch, John tells Cory that executives at XYZ were very impressed with Cory's work. They were considering making Cory an employment offer (representing a significant promotion from Cory's current position) for his knowledge in chemical manufacturing.

**Scenario 2** (Low Market Value; High Social Value):

Cory is a plant manager at JAM Chemicals. His job function entails overseeing employees and meeting daily production targets of industrial chemicals.

JAM Chemicals had just developed a slightly innovative process for making methanol. The company's senior executives felt that this new process would add some value to the organization's portfolio of products, slightly improving their profitability. Senior executives asked Cory for his input in implementing the new production process.

Until this point, information about the new production process was limited to only a small handful of trusted senior executives in the organization – Cory felt that he was part of an elite club within his organization, being exposed to this kind of inside knowledge. However, once process implementation began, JAM's competitors became curious. Cory received a call from John, a plant manager at XYZ Corp, one of JAM's major competitors. Over lunch, John tells Cory that executives at XYZ were very impressed with Cory's work. They were considering making Cory an employment offer (representing a significant promotion from Cory's current position) for his knowledge in chemical manufacturing.

**Scenario 3** (High Market Value; Low Social Value):

Cory is a plant manager at JAM Chemicals. His job function entails overseeing employees and meeting daily production targets of industrial chemicals.

JAM Chemicals had just developed a highly innovative process for making ethanol after extensive research and development. Expecting the new product to be extremely profitable, company executives decided to build a new plant for its production. They felt that this new process would add significant long-term value to the organization, pushing the organization to the top of its industry. However, for this to happen, it had to be executed in a manner that was hidden from view of competitors.

Senior executives of JAM Chemicals asked Cory for his input in designing the new plant. Until this point, information about the plant and the new production process was available to several people within the organization and even a few outside the organization. Once plant construction began, JAM's competitors became curious about the new plant. Cory received a call from John, a plant manager at XYZ Corp, one of JAM's major competitors. Over lunch, John tells Cory that executives at XYZ were very impressed with Cory's work. They were considering making Cory an employment offer (representing a significant promotion from Cory's current position) for his knowledge in chemical manufacturing.

## Study 2 Vignettes

### Baseline Scenario (Low Market Value; Low Social Value):

Nora is a Senior Internal Auditor at BAC Corp. She is responsible for due diligence and oversight of acquisitions pursued by her organization. For the last few years, she has been actively involved in shaping the acquisition strategy of BAC Corp, right from the target selection phase to the due diligence, execution and integration stages of the acquisition process.

Recently, Nora had been tasked with analyzing CDE Inc. as a potential acquisition target. Several people at BAC Corp. (and even a few outside BAC Corp.) were aware of the potential acquisition. Nora's analysis revealed that acquiring CDE would add some value to BAC's portfolio of products and services. Nora felt (and senior executives agreed) that this acquisition had the potential to slightly improve BAC's quarterly earnings in the short term – but only if it was executed in a way that was hidden from view of competitors.

Despite BAC's best efforts, the top management team of CDE Inc. rejected offers for the company, forcing BAC Corp. to make a hostile bid. When news of the hostile takeover attempt went public, Nora received a call from John to set up a lunch meeting. John was good friend from Nora's graduate school days; he worked in the accounting department of XYZ Corp, one of BAC's major competitors. Over lunch, John tells Nora that executives in his company were impressed with Nora's work. They were considering making Nora an employment offer (representing a significant promotion from Nora's current position) for her knowledge of mergers and acquisitions.

### Scenario 1 (High Market Value; High Social Value):

Hannah is a Senior Internal Auditor at HEC Corp. She is responsible for due diligence and oversight of acquisitions pursued by her organization. For the last few years, she has been actively involved in shaping the acquisition strategy of HEC Corp, right from the target selection phase to the due diligence, execution and integration stages of the acquisition process.

Recently, Hannah had been tasked with analyzing CDE Inc. as a potential acquisition target. Only a handful of senior executives at HEC were privy to information about the potential acquisition, putting her in a highly exclusive club within the organization. Hannah's detailed analysis revealed that acquiring CDE would add significant long-term value to HEC's portfolio of products and services. Additionally, since CDE is headquartered in South Asia, this acquisition had the potential to open up an entirely new geographic market for HEC's existing offerings. In sum, Hannah felt (and senior executives agreed) that this acquisition had the potential to propel HEC Corp. to the top of its industry – but only if it was executed in a manner that was hidden from view of competitors.

Despite HEC's best efforts, the top management team of CDE Inc. rejected offers for the company, forcing HEC to go hostile. When news of the hostile bid went public, Hannah received a call from John to set up a lunch meeting. John was good friend from Hannah's graduate school days; he worked in the accounting department of XYZ Corp, one of HEC's major competitors.

Over lunch, John tells Hannah that executives in his company were very impressed with Hannah's work. They were considering making Hannah an employment offer (representing a significant promotion from Hannah's current position) for her knowledge of mergers and acquisitions.

**Scenario 2** (Low Market Value; High Social Value):

Hannah is a Senior Internal Auditor at HEC Corp. She is responsible for due diligence and oversight of acquisitions pursued by her organization. For the last few years, she has been actively involved in shaping the acquisition strategy of HEC Corp, right from the target selection phase to the due diligence, execution and integration stages of the acquisition process.

Recently, Hannah had been tasked with analyzing CDE Inc. as a potential acquisition target. Only a handful of senior executives at HEC were privy to information about the potential acquisition, putting her in a highly exclusive club within the organization. Hannah's detailed analysis revealed that acquiring CDE would add some value to HEC's portfolio of products and services. Hannah felt (and senior executives agreed) that this acquisition had the potential to slightly improve HEC's quarterly earnings in the short term – but only if it was executed in a manner that was hidden from view of competitors.

Despite HEC's best efforts, the top management team of CDE Inc. rejected offers for the company, forcing HEC to go hostile. When news of the hostile bid went public, Hannah received a call from John to set up a lunch meeting. John was good friend from Hannah's graduate school days; he worked in the accounting department of XYZ Corp, one of HEC's major competitors. Over lunch, John tells Hannah that executives in his company were very impressed with Hannah's work. They were considering making Hannah an employment offer (representing a significant promotion from Hannah's current position) for her knowledge of mergers and acquisitions.

**Scenario 3** (High Market Value; Low Social Value):

Hannah is a Senior Internal Auditor at HEC Corp. She is responsible for due diligence and oversight of acquisitions pursued by her organization. For the last few years, she has been actively involved in shaping the acquisition strategy of HEC Corp, right from the target selection phase to the due diligence, execution and integration stages of the acquisition process.

Recently, Hannah had been tasked with analyzing CDE Inc. as a potential acquisition target. Several people at HEC (and even a few outside HEC) were privy to information about the potential acquisition. Hannah's detailed analysis revealed that acquiring CDE would add significant long-term value to HEC's portfolio of products and services. Additionally, since CDE is headquartered in South Asia, this acquisition had the potential to open up an entirely new geographic market for HEC's existing offerings. In sum, Hannah felt (and senior executives agreed) that this acquisition had the potential to propel HEC Corp. to the top of its industry – but only if it was executed in a manner that was hidden from view of competitors.

Despite HEC's best efforts, the top management team of CDE Inc. rejected offers for the company, forcing HEC to go hostile. When news of the hostile bid went public, Hannah received a call from John to set up a lunch meeting. John was good friend from Hannah's graduate school days; he worked in the accounting department of XYZ Corp, one of HEC's major competitors. Over lunch, John tells Hannah that executives in his company were very impressed with Hannah's work. They were considering making Hannah an employment offer (representing a significant promotion from Hannah's current position) for her knowledge of mergers and acquisitions.