An Understanding of the Differences between Internal and External Auditors in Obtaining and Assessing Information about Internal Control Weaknesses

by

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AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

A critical role of the internal auditor is to design and monitor their organization's system of internal controls (COSO, 2004). In addition, they may be expected to objectively assess the quality of internal controls as professional auditors (Gray, 2004). External auditors have expressed concern that an internal auditor's strong identity with their organization will bias any internal control assessments he or she makes of that organization (Schneider, 1984). Even so, accounting regulators believe internal auditors' internal control assessments can be objective, and also maintain that having external auditors rely on these assessments should help to lower audit fees without jeopardizing audit quality (AICPA, 1990 - AS 5). Through two separate experiments, relying on social identity theory, social norms and the organizational silence literature in psychology, I examine whether the "employee" identity the internal auditor assumes as a member of the organization encourages other employees to share more information about internal control weaknesses with the internal auditor than the external auditor. In addition, I explore conditions under which the external auditor may be willing to rely on the internal auditor's internal control assessment even if the internal auditor's organizational identity is strong. Overall, this research will help external auditors, managers and regulators understand conditions under which the internal auditor can maintain their objectivity when performing an internal control assessment. Specifically, this research examines the potential importance of cueing internal auditors through the use of a strong code of ethics, such as the code of ethics enacted by the Institute of Internal Auditors, to the maintenance of the objectivity of all internal auditors. If the internal audit work is objective enough to be relied upon by the external auditor, the client can benefit from an audit of high quality while at the same time potentially lowering overall audit fees.

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Dedication

Dedicated to Al, Iz, Li and Rosie.

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Chapter 1

Introduction

Since the enactment of the Sarbanes-Oxley Act of 2002 (SOX), internal auditors (hereafter, the IA) have been required, more than ever, to take on dual roles within their organizations (Roth, 2002). On one hand, they are expected to be an independent auditor and maintain their professional auditor identity by acting as the internal 'watch dog' for the organization.[1] In this role they are expected to be independent and objective in their assessments of the firm's systems of internal controls, allowing external auditors (hereafter, the EA) to rely on their work (SAS 65). On the other hand, IAs are also expected to maintain an employee identity by acting as the 'trusted insider' who advises and consults with management of the organization to improve the organization's system of internal controls. The question then arises whether these dual identities improve or detract from the IA's overall evaluation of the firm's system of internal control. Can the IA work closely with others within the organization when discussing internal controls (i.e., invoke their employee identity), but then switch to their more objective auditor identity, when the situation requires?

The Institute of Internal Auditors (hereafter, the IIA) believes the IA's role as an organizational insider allows the IA to have a stronger understanding of the organization's

[1] Throughout this thesis I use Akerlof and Kranton's (2010) simplified definition of identity, "…identity defines who they are - their social category." This identity will then influence an individual's decision making because each social category will have different social norms associated with it. Specifically, professional identity is considered a group identity, which is formed through the affiliation with a specific group. The group will have certain social norms that all members are expected to adhere to in order to be a member (King, 2002; Akerlof and Kranton, 2010). Employee identity will be formed similarly but with reference to work group affiliations within the organization.

internal controls and helps to ensure the identification of any control system weaknesses (Chadwick, 2000; Fitzpatrick, 2001). Critics argue that the relationships the IA develops within the organization will affect their objectivity when asked to assess the organization's internal controls. The objective of the current study is to ask whether it is possible for both points of view to be correct, at least to some degree, and further, whether IAs can actually use these dual identities to their advantage.[2]

This research project examines the following two research questions. First, does the "employee" identity IAs assume within the organization allow them the opportunity to discover more internal control weaknesses than would an external auditor? Particularly, will employees share more information about internal control weaknesses with the IA than the EA? Second, once the IA has obtained the internal control weaknesses, can the IA readily move from one identity to the other (i.e., from the organizational insider to the professional auditor) and assess the internal control information objectively? Particularly, will the IA be able to objectively assess internal control weaknesses so that the EA can be confident in relying on the IA's work? These two questions are intertwined in that if the IA cannot objectively assess the internal control information obtained from employees, then any benefit gained from being an organizational insider is lost. Therefore, to fully understand the benefits and limitations of the IA's role in the evaluating the firm's system of internal controls, one must answer both questions.

[2] Both viewpoints can be somewhat correct as the IA may be able to obtain internal control weaknesses, but then may be biased in assessing these same weaknesses.

Certain strands of prior research suggest the IA may have an advantage over the EA in collecting information about internal control weaknesses. First, according to social identity theory (hereafter, SIT), in-group members trust other in-group members more than they trust out-group members (Ashforth et al., 2008). Research relying on SIT has also shown that individuals will share more information with their in-group than with their out-group (Ashforth et al., 2008). The connection the IA has with the organization should allow the IA to become part of the organizational in-group. Therefore, the IA in his/her role as a trusted internal advisor is likely to obtain higher in-group status with other employees than will the EA. If this in-group status is salient to employees during the IA's internal control interview process, then it is likely employees will share more information about the internal control system and its workings with the IA than they would share with the EA. Therefore, it is possible that the IA will not only obtain more information from employees concerning the firm's system of internal controls, but also potentially more information about control system weaknesses than would an organizational outsider such as the external auditor.

The severity of the identified control weaknesses will also impact how much will be shared. Research in "organizational silence" indicates that employees are more willing to share negative information within their organization than outside of it (Tangirala and Ramanujam, 2008; Van Dyne et al., 2003).[3] Three types of silence can be invoked; acquiescent (i.e., assuming one's information will be ignored), defensive (i.e., protecting oneself), and pro-social (i.e., protecting the organization). According to theory, sharing

[3] Organizational silence is defined by Van Dyne et al. (2003) as the intentional withholding of relevant information, opinions or ideas within an organization, by one of the organization's employees.

negative information outside of the organization (e.g., with EAs) will invoke both defensive and pro-social silence, whereas sharing information inside the organization (i.e., with the IA) will invoke defensive silence alone. When perceived severity of control system weaknesses is low, it is unlikely that silence of any type will be invoked regardless of whether the information is required by those inside or outside of the organization, which is expected based on research by Kish-Gephart et al. (2009). As the degree of perceived severity of control system weaknesses increases, both pro-social and defensive silence may be invoked when asked to share it with outsiders while only defensive silence may be invoked when asked to share with insiders; therefore, I expect employees will share relatively more information about control system weaknesses within the organization (i.e., with the IA) than outside the organization (i.e., with the EA) as its perceived severity increases.

Although gaining more information is a benefit of the IA's in-group status, there is also a potential cost of in-group status in terms of IA objectivity. Several prior studies have demonstrated the IA may lack objectivity when evaluating estimates and opinions of management (Ahlawat and Lowe, 2004; Glover et al., 2008; Bedard and Graham, 2011) due to their relationship with their organization. To attenuate any bias emanating from the IA's in-group status, the IA needs to be able to switch identities, from "insider" to objective "auditor", when assessing the obtained information. Previous work has shown that members of the IIA have been able to resist threats to their objectivity when their IIA membership status is made salient to them (Harrell et al., 1989). Therefore, increasing the salience of the IA's professional norms (including the norm of objectivity), by reminding the IA of the IIA code of ethics before they assess the evidence collected concerning internal control

weaknesses identified by employees in their organization, should allow them to provide a more objective assessment.

I examine these ideas through two separate experiments. The first experiment examines whether the IA can actually obtain more negative information about internal control system weaknesses from employees than can an EA as predicted by SIT and the organizational silence literature. To investigate this question, I manipulate interviewer type (IA/EA) between-subjects and internal control weakness severity (high/low) within subjects.[4]

Participants are 85 employees with experience dealing with internal controls, recruited through the Amazon Mechanical Turk task system.[5] The dependent variable is participants' willingness to share four specified internal control weaknesses that they are informed have occurred within their organization. Based on social identity theory and the organizational silence literature, I predict that overall, participants will share more information with the IA than the EA. This effect will be magnified by the severity of the internal control weakness. The second experiment investigates the degree to which cueing the IA's professional norms with the IIA code of ethics helps the IA to remain objective when assessing the organization's internal control weaknesses. In this experiment, I manipulate two factors between subjects; organizational identity strength, which is defined as the strength of perception of belonging to

[4] These weaknesses are identified as high and low in severity based on pilot testing with senior auditing students who have had on average 5 months of experience in public practice. Similar results were found in a later pretest in which participants were drawn from the same participant pool as used in hypothesis testing.

[5] Started in 2005, Amazon's Mechanical Turk (AMT) is an internet labor market, which allows requesters to pay individuals to complete Human Intelligence Tasks (HITs). Recently, AMT has become a popular source of experimental data for social scientists due to the large and easily accessible participant pool, which has been shown to be more diverse than traditional participant pools (Paolacci et al., 2010). Furthermore, studies run on AMT have been able to consistently replicate prior decision making findings where participants were drawn from more traditional participant pools (e.g. undergraduate and graduate students) (Paolacci, et al. 2010; Horton et al., 2010; Farrell et al. 2014).

an organization (Mael and Ashforth, 1992) and professional norm salience, defined as the prominence in the IA's judgment process of information about the expectations of the professional group to which they belong. Participants include 83 IAs and 34 EAs. Internal control assessments are compared between IAs and EAs, given EAs are organizational "outsiders" who are unlikely to derive any substantial "organizational identity" from their association with their client. Even so, EAs should be high on professional identity and thus will exhibit objectivity of the level I am trying to invoke using the IIA code of ethics with the IA groups. Thus EAs judgments are used as a baseline for objective control system evaluation against which the judgments of the IA groups will be compared.

Participants work through a case-based scenario in which they are asked to imagine they performed an internal control assessment and have reviewed a report of the results. Half of the IA participants are asked to imagine they assessed internal controls within their own organization (strong organizational identity) and the other half are asked to imagine they assessed internal controls within a new sister division, XYZ, Inc., that was recently acquired by the IA's organization (weak organizational identity). In addition, professional norm salience is manipulated by requiring half of the IAs to read and confirm adherence to a summary of the IIA's code of ethics (high salience) before assessing the severity of identified internal control weaknesses, while the other half of IA participants will not (low salience).[6] This manipulation is similar to ones used in prior studies to operationalize social norm salience (Bauer, 2011; Davidson and Stevens, 2013; Mazar et al., 2008). The dependent

[6] As professional auditors, IAs are expected to follow the IIA code of ethics, but due to being employed by an organization made up mainly of non-auditors, the professional code of ethics and professional internal auditing norms may not always be salient to them.

variable is a measure of the severity of the identified internal control weaknesses which are the same weaknesses utilized in the first experiment.

The EA participant group reads the same case scenario except that the case refers to the internal control assessment of a new client, XYZ, Inc. They are asked to assess internal control weaknesses within this new client's organization and their organizational identity with this new client will be weak (or non-existent) by design. To better understand whether knowing the IA adheres to the IIA code of ethics will affect the EAs' reliance judgment, I manipulate whether the EA is aware that the IA has agreed to adhere to this code of ethics or is unaware of this fact. EAs in practice have expressed concern that IAs will be too attached to their organizations and will therefore make biased assessments of the quality of their organization's system of internal controls (Desai et al., 2011). Knowing the IA has agreed to adhere to the IIA professional code of ethics may increase the EA's evaluation of IA objectivity and consequently, their willingness to rely on the IA's work.

This paper contributes to existing literature in several ways. First, Messier (2010) argues that recent financial scandals and resulting SOX legislation have increased the importance of the work of the IA in ensuring the quality of firms' financial disclosures. Second, most of the recent IA literature has focused on the potential for reduction of audit fees through the reliance of the EA on the IA's work or on measuring the quality of the IA's work (Felix et al., 2001; Lawler, 1989; Prawitt et al., 2011). These studies, while important, do not focus on one additional and important aspect of the IA's work, namely, the potential differences in pertinence of the information obtained by IAs and EAs. Although Glover et al. (2008) focus on the EAs' use of the IA's work and Gramling et al. (2012) focus on the IA's

objectivity, neither one compares the quality of the information gathered by the IA and EA as I do in this study.

Third, there have recently been some conflicting views expressed in the literature on the degree to which the IA can remain objective. For example, Stefaniak et al. (2012) demonstrate, in an experimental setting, that the IA may be less lenient than the EA in evaluating the severity of a particular internal control deficiency, whereas Bedard and Graham (2011), in an archival study, find that the IA is typically more lenient when classifying the severity of internal control deficiencies than the EA. My study will extend the literature in this area by testing whether the leniency found by Bedard and Graham (2011) can be explained by social identity theory and by examining ways such leniency might be mitigated. Finally, previous studies of SIT in psychology have typically focused on why identity matters, but they have not generally looked at the consequences this identity may have on the sharing of negative information; therefore, it is important to explore the conditions under which employees will share more negative information with the internal and/or external auditors.

This study contributes to practice in several ways. First, regulators who have promoted the idea that EAs should rely more heavily on the IA's work through SAS 65, ISA 610 and AS 5, would be interested to know under what conditions the IA can obtain more pertinent information for the internal control assessment than the EA and under what conditions the IA can remain objective when performing their internal control assessment. Also, organizations employing the IA would be able to expect their EAs to rely more heavily on the IA's control assessments, thus helping to their reduce audit fees. Lastly, EAs would know that relying more heavily on the work of the IA could improve their audit process.

More specifically, if the IA is competent, then the potential that additional negative information would be provided to the IA by employees would allow the IA to conduct a more accurate internal control assessment than could be performed by the EA. Therefore, if the EA can use the IA's work as SAS 65 recommends, the EA may feel more confident in relying on the IA's internal control assessment.

The remainder of this thesis is organized as follows. In Chapter 2, I complete a review of the accounting and psychology literatures on which my predictions rely. In Chapter 3, I develop my predictions in five separate hypotheses. In Chapters 4 and 5, I describe my research designs and results of Study one and Study two, respectively. In Chapter 6, I draw my conclusions, while discussing practical implications and limitations for the thesis as a whole.

Chapter 2
Literature Review

2.1 Role of the Internal Auditor

Prior to the enactment of the Sarbanes Oxley Act (SOX 2002), the internal audit function was mainly focused on ensuring proper governance through the detection of internal control weaknesses within the organization (Hass et al., 2006). Their role has evolved and today the IA is asked to perform many different functions including risk assessments, control assurance and compliance, and recently they have taken on a consulting role (Roth, 2002). Consulting has become such an important part of the IA's duties that the IIA has recently updated the definition of the IA to include consulting activities as follows:

> *Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance process (IIA, 2011).*

This consulting role creates a dual identity, or two social categories, for the IA. The first, professional identity, is created through their role as professional auditors, focused on assurance and governance of their organization through objective assessment. In this role the IA is seen as a "watch dog" by management (Gray, 2004). The second, employee identity, is created by their role as an "organizational consultant" or "trusted partner," working alongside management to improve the overall governance of the organization (Hass et al., 2006). The dual roles that the IA takes on can shift daily or multiple times within one day. At one moment, the IA may be asked by management to recommend how to construct a particular element of the internal control system, while the next moment they may be required to audit

the effectiveness of a similar system supervised by the same manager. [7] The IA must manage the different identities that these two roles create in order to ensure objectivity during the assessment of controls. The interaction of these two identities could have a large negative effect on the overall objectivity, actual or perceived, of the IA and their work because the employee identity may bias the professional identity during the assessment process.

While creating lines of reporting where the IA reports directly to the audit committee supports IA independence, it may not ensure IA objectivity. Many believe that outsourcing of the IA function would help to resolve objectivity issues (Glover et al., 2008), but the IIA strongly believes that an IA "housed internally within the organization" (IIA, 2011) is ideal. This is based on the assertion that in-house IAs have more day to day contact with organizational actors. This contact allows more opportunities to discover problems, build relationships, and guide management in the appropriate direction (Chadwick, 2000; Fitzpatrick, 2001). Basically, the IIA believes a strong employee identity can improve the IA's work.

Critics of the IIA's view argue that the close contact with the organization and the relationships created with management are an overall hindrance and can limit the IA's objectivity. Several prior studies have demonstrated the IA may lack objectivity when evaluating managements' estimates and opinions (Ahlawat and Lowe, 2004; Glover et al.,

[7] I am not implying the IA would both design and evaluate the same control. This would be contrary to the International Standards for the Professional Practice of Internal Auditing. I am referring to the general idea that the IA does design and different evaluate controls within the same organization and at times within the same department.

2008; Bedard and Graham, 2011), although Harrell et al. (1989) found that IAs who were members of the IIA were able to resist threats to objectivity.

The objectivity of the IA is important not only to the organization, but also to the external auditor. The Public Company Accounting Oversight Board's (PCAOB) Audit Standard 5 (AS5) (PCAOB, 2007) requires that external auditors make use of the IA during an integrated audit. This consists of: (1) employing the direct assistance of internal auditors in performing audit tasks, and, (2) relying on relevant work previously completed by the IA to reduce the amount of additional evidence the external auditor must obtain. Reliance on IA work has been found to typically lower external auditors' budgeted hours by 15 to 30 % (Maletta and Kida, 1993; Gramling, 1999).

AS 5 (PCAOB, 2007) was created to help increase the use of the IA and to reiterate the American Institute of Certified Public Accountants' (AICPA) Statements on Auditing Standards 65 (SAS 65) (1997), which also stated EAs can rely on the IA for audit tasks and relevant work previously performed (AICPA, SAS 65, 1997). Several prior studies have found that external auditors believe the IA has not been relied on to the fullest extent possible (Taylor et al., 1997; Ward and Robertson, 1980). Even so, Felix et al. (2001) found that, within the Fortune 1000 firms, the IA completed approximately 27% of the financial statement audit work and that increasing IA involvement in the audit from 0 to 29.5% decreased the client's audit fee by approximately 18%. A recent study by Prawitt et al. (2011) found that these cost savings occur when the EA employs the assistance of the IA, but not when using previous IA work, such as internal control assessments. EAs mainly avoid the use of previous IA work because SAS 65 requires the external auditor to "obtain sufficient,

competent, and evidential matter to support the auditor's report" and the external auditor's personal knowledge "is generally more persuasive than information obtained indirectly" (pg. 259). This is evidence that external auditors in general may not rely on the IA's work as much as regulators suggest they could.

One area where the prior work of the IA could be particularly useful to the external auditor is the monitoring and evaluation of the organization's system of internal controls. The Committee of Sponsoring Organizations (COSO) published the document "Internal Control – Integrated Framework" in 1992 which states that IAs play an important role in the monitoring of internal controls (Rezaee, 1995). An IA's main method to assess the effectiveness of the internal controls is by conducting an internal audit.

To conduct a quality internal audit, the IA will first evaluate the design of the internal controls. This is done by reviewing the policies and procedures to ensure that adequate controls are in place. Also, the IA will interview employees that are directly involved with the procedures to better understand the control environment and determine where weaknesses may exist. Interviewing employees is very important in identifying areas where controls can be overwritten or procedures are not being followed. At this point the IA will have a better understanding of what controls need to be tested for operating effectiveness. Throughout this process, the IA has significant contact with the organization's management and employees. The IA may then provide recommendations to each department for future improvements to their internal controls.

Due to their extensive knowledge of the internal controls within their employing organization, the IA is quite often involved in the testing of controls required by SOX Section

404 (Gramling et al., 2004). Again, the day to day access to systems within the organization and the relationships the IA is able to maintain with employees and management throughout the organization can be a valuable resource to the EA in this process.

In summary, IAs have to manage the two main identities, employee and professional, that may impact their overall performance within their organization. In the next section, I complete a thorough literature review of the identity concept and focus on the specific elements of identity that relate to the IA obtaining and assessing information.

2.2 Identity

Throughout this paper, I rely on Akerlof and Kranton's (2010) simple definition of identity, "…identity defines who they are - their social category." (pg. 13). Although I rely on this simple definition, a more detailed explanation of identity is necessary. First, I will give a brief overview of origins of the identity term within Social Identity Theory (SIT) and then focus on key concepts stemming from SIT such as characteristics and levels of identity, organizational identity, and social norms. These are the key elements on which I rely while developing my hypotheses.

The social identity concept first appeared in a paper by Leon Festinger (1954), "A Theory of Social Comparison Processes", in which the author states that "People, then, tend to move into groups which, in their judgment, hold opinions which agree with their own and whose abilities are near their own." (pg. 136). The term "Social Identity Theory" was not formally defined until the 1970s by Henri Tajfel. Tajfel defined it as "that part of an individual's self-concept which derives from his knowledge of his membership of a social

group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978). SIT is seen as a continuum between interpersonal behavior and intergroup behavior, where an individual's behavior is driven by the combination of the two (Tajfel, 1978). Since that time, SIT has been seen as intergroup social comparisons that seek to confirm or to establish a favoured in-group based on evaluative distinctiveness between in-groups and out-groups (Hogg and Abrams, 2003). In addition, self-categorization theory extends SIT to include the notion that these group members gain a descriptive and evaluative sense of their own personal identity through the comparison of the in-group to a salient out-group (Tajfel and Turner, 1986; Hogg and Abrams, 2003). This comparison is done by creating a prototype within that in-group, which helps to describe and prescribe a person's perceptions, attitudes, feelings and behaviours (Tajfel and Turner, 1986; Hogg and Abrams, 2003). Individuals will then associate or disassociate themselves with certain groups in order to view themselves in a more positive manner (Ashforth et al., 2008). This is guided by the pursuit of an evaluative positive social identity, which is obtained through positive intergroup distinctiveness (Ashforth et al., 2008).

The term 'identity' was constructed within SIT to explain the intergroup behaviors that occur. Within a course of a person's life, individuals will associate themselves with multiple identities which will have an impact on their behaviour. How much the different identities affect an individual's behavior depend on certain characteristics (salience and strength) and the level (situated and deep-structured) of the identity. Identity salience and strength are discussed next, followed by a discussion of the different levels of social identity.

2.2.1 Identity Characteristics

Two main characteristics of identity, salience and strength, stem directly from SIT. Salience is defined as the degree to which an identity will stand out compared to other identities in a particular situation. When multiple identities exist, their respective salience will determine which identity comes forward to guide behavior (Ashforth et al., 2008). Identity salience will increase with identity cues and can be activated even by just mentioning the in-group (Van Dick et al., 2005). The second characteristic, strength of the identity, is defined as the degree to which an identity is associated with an individual's sense of self. Strong identification with the in-group creates a bias that leads to increased effort and information sharing within that in-group (Ashforth et al., 2008). This identification can range in the level of overall strength. The more the group members share certain perceptions and traits, the stronger the identity will become (Kriener and Ashforth, 2004).

Many studies have shown salience and strength to be intertwined, but Forehand et al. (2002) have shown that they are two distinct constructs. Identity strength can have an effect on how salient an identity will be. Stronger identities may be made salient more easily as individuals will perceive these identities to be more relevant. However, these strong identities can be low in salience when they are not perceived relevant in the situation. Weak identities can also have high or low salience depending on the situation.

2.2.2 Identity Levels

Also stemming from SIT is the concept of different identity levels: situated and deep-structured (Rousseau, 1998). Situated identification is fleeting or temporary, is usually

brought on by certain situational cues or social categories, and only persists as long as the cues are present (Rousseau, 1998). Identity becomes situated when individuals perceive the affiliated group identity as having features in common with their own self-concept (Pratt, 1998).

Deep structured identification differs from situated identity in that it is caused by a much more fundamental connection with the group. Deep structured identity develops over time through the group's norms and beliefs. Individuals emulate group members and internalize the group's identity with their own self-concepts (Pratt, 1998). These effects are lasting and harder to lose than those of situated identity. However, situated identity can be strengthened over time and may eventually become a deep structured identity (Ashforth et al., 2008). This change can occur through common interests or common goals (Rousseau, 1998). Salience and strength can apply to either situated or deep structured identities, however, situated identities that are not salient have very little relevance to the individual.

2.2.3 Organizational Identity

Throughout my thesis I use the term "employee identity" and focus on how this type of identity will impact the behavior of both the IA and the employee sharing information with the IA. Employee identity is a type of identity, based on SIT, which stems from organizational identity (OI), where OI is defined as the perception of belonging to an organization (Mael and Ashforth, 1992). OI is considered a more permanent and deep structured identity (Van Knippenberg and Van Schie, 2000). The individual identifies him or herself with an organization, and, in turn, the organization provides the individual with a

sense of identity.[8] Although organizational identity focuses on the organization as a whole, it can also be apparent at the unit level as work group identity. Brewer (1991) finds that individuals are more likely to identify with smaller groups. This is caused by the desire to obtain both inclusiveness and exclusiveness with the group. Organizations provide the individual with inclusiveness (membership to a group), but, due to the size of many organizations, there is a lack of exclusiveness. Work-group identity provides individuals with both inclusiveness and exclusiveness and therefore, provides a much stronger identity (Kriener and Ashforth, 2004). Exclusiveness is obtained because individuals perceive strong similarities with their work-group based on actual work performed, such as through performing common work related tasks. Also, individuals spend most of their organizational life in these work-groups, which creates familiarity (Moreland and Beach, 1992) and also strengthens work group identity.

2.2.4 Social Norms

One way an identity can influence an individual's behavior is through the group's social norms. This is because the identity (in-group) will have certain social norms that all members are expected to adhere to in order to be a member (King, 2002; Akerlof and Kranton, 2010). Social norms are defined by Bicchieri (2006) as the customary rules that help control the behavior of a specific group. When a certain group creates a set of rules or

[8] Organizational identity differs from organizational commitment. Commitment represents a positive attitude toward the organization, where the self and the organization remain two separate entities (Van Knippenberg and Van Schie, 2000). Organizational identity is a perceived oneness with the organization (Ashforth et al., 2008). Research has suggested that strong organizational identity can help to increase affective organizational commitment (Meyer, et al., 2004).

regulations, they are attempting to form the social norms of that group, basically stating "this is how the members of our group are expected to behave." Bicchieri (2006) develops a model of social norms to help explain how norms can be used to guide action. Her model requires two conditions to be satisfied in order for a social norm to exist. The first condition is a sufficient number of people need to be aware that the norm exists and, second, there must be a sufficient number of people that have a "conditional preference" to adhere to that norm. This conditional preference is based upon the expectations that others have for the individual in question and upon any empirical evidence held by the individual about adherence to the norm. Therefore compliance or activation of a social norm is dependent on knowing what is expected of you from the group as a whole. This activation of a social norm can also have a positive effect on group identity (Akerlof and Kranton, 2010). Social norms not only strengthen an identity with the specific group, but they also can make that group identity more salient to the individual (Akerlof and Kranton, 2010).

In the accounting literature, King (2002) finds an auditor's affiliation with a professional organization or group can help to activate certain social norms within that group. These professional organizations or groups can also create social norms through the creation of certain rules of conduct or codes of ethics for that group. The activation of social norms can also be seen empirically in a recent study by Davidson and Stevens (2013). In their study, investors are asked to provide funds to a manager. The manager earns a return on these funds valued at three times the value of the initial funds invested and then must return some funds to the investor. The manager's return behavior was measured as the percent of funds returned to the investor by the manager. Investor confidence is measured as the percent of total funds the

investor provides to the manager initially. The researchers find that having managers state that they will adhere to a code of ethics before performing the task helps to improve manager return behavior and investor confidence through the activation of social norms. The code of ethics cued the managers to what behavior was expected of them as members of the management team.

This idea of cueing individuals with social norms can also be seen in Mazar et al. (2008), in which the authors use the "attention to standards" mechanism to predict that when moral standards are more accessible, people will need to confront the meaning of their actions. The attention to standards mechanism predicts that the cueing of moral standards, a form of social norm, can increase an individual's honesty as expected of them as a member of that group. Therefore, this manipulation specifically relies on making the social norms salient to the individual. In their experiment, Mazar et al. (2008) require participants to write down the Ten Commandments. This cueing makes salient a very general social norm and is strong enough to remind people what standards society generally expects them to adhere to. The researchers argue and find that when standards become more accessible, people pay more attention to their own actions and expectations put on them by the social group. Bateson et al. (2006) found a similar result by cueing individuals to the fact that they were being watched. Again, this cueing made the individual more aware of their actions and improved their cooperation because they become aware of the salient social norms and what others, or their group, expected of them.

2.2.5 Accounting Literature Using SIT

Social Identity Theory (SIT) has been around for many decades within the psychology literature, but has also been found to play a role in accounting with the literature focusing mainly on an accountant's various identities with their organization, with their clients and within their profession. One of the earliest accounting studies featuring SIT is Chatman (1991). This study found that a strong similarity between staff accountants' values and their accounting firms' values (i.e. identification) was associated with higher job satisfaction and longevity with the firm. Since then however, most of the SIT research focuses mainly on identity conflicts that external auditors face. Research has shown that auditors have three main identities to deal with in their position; client firm identity, accounting firm identity (i.e., organizational identity) and professional bodies' identity (i.e., professional identity). Particularly, the conflict between client and professional identity has prompted research because of the concern that audit firms push for value-added services, which may undermine an auditors' professionalism.

Focusing on this conflict, King (2002) used an experiment with actual auditors to determine if auditor decisions can be biased based on communications with an organization's management, which is used to form an identity with the client. King found that these communications with management caused the auditor to focus more on saving the firm money (while providing a lower quality audit) than creating a higher quality audit since that would be expensive for the firm. This helped to show client identity contributes to an in-group bias, or favouritism, although when a salient social norm manipulation was added, this bias was neutralized. The manipulation entailed having auditors interact with fellow auditors before

making their decisions. This helped to create a salient social norm within their professional identity, increasing the psychological cost of a poor quality audit. Also, this affiliation acted like a "team identity", which motivated auditors to focus on the collective goal of conducting appropriate audits.

In reality, the "team identity" that King (2002) created does exist. It is parallel to an auditor's association with a professional organization such as the organization of Certified Public Accountants (CPA) or the Institute of Internal Auditors (IIA). The accreditations these organizations provide tie auditors to their codes of ethical conduct. Accreditation of this kind is commonly pursued prior to developing an affiliation with an accounting firm and remains after the auditor leaves that firm. Research has shown that this professional affiliation is separate and precedes organizational identity (Aranya et al., 1981). Bamber and Iyer (2002) examine the relationship between the professional identity and the organizational identity of external auditors. Overall, Bamber and Iyer find high levels of both professional and organizational identity within a sample of auditors and find that these two identities are highly correlated and, overall show a low level of organizational-professional identity conflict.

Bamber and Iyer (2007) also rely on SIT to investigate another major concern of audit regulators, that is, auditor independence. External auditors work closely with and need to be very familiar with the client in order to plan and perform an effective audit. Regulators are concerned that this familiarity may hinder auditor independence. Bamber and Iyer (2007) surveyed 252 practicing external auditors to test whether this familiarity creates a client identification that would reduce auditor independence. Results indicate that auditors do in fact identify with their clients, and that auditors with higher client identification are more likely to

agree with a client-preferred position on controversial audit issues. They also measured professional identity and found auditors with high professional identity are less likely to agree with a client-preferred position. These results are consistent with the literature indicating that a strong professional identity can help maintain auditor independence.

Warren and Alzola (2009) theoretically expand on this line of research and discuss how the threat to auditor independence is dependent on the saliency of professional identity among auditors. The authors focus on the process of making professional identity salient within the auditor. By emphasizing an auditor community and auditor expertise, the authors posit professional identity salience will increase leading to the maintenance of auditor independence.

In summary, accounting literature has mainly used SIT to focus on the conflict between an external auditor's client and professional identities. Studies have documented an in-group bias, or favouritism, that can occur and/or be neutralized due to these different identities. In the next chapter I will rely on this literature to hypothesize how an IAs behavior can be affected by their organizational and professional identities. Next, I will summarize the information sharing literature.

2.3 Sharing Information

As established in the SIT literature, group members generally share more information with in-group members than out-group members. To understand how specific types of information, especially negative information, will affect an employee's willingness to share information I focus on the information sharing literature. Sharing information within the

organization has mainly been studied within the psychology literature and is typically referred to as "employee voice" (Van Dyne et al., 2003; Dutton and Ashford, 1993; Frese et al., 1999; Graham, 1986; Howell and Higgins, 1990; LePine and Van Dyne, 1998; Morrison and Phelps, 1999; Withey and Cooper, 1989; Zhou and George, 2001). Although voice is an important concept, this concept only focuses on one side of the decision by an employee, which is to share information. Employee "silence", or the decision not to share information, is also important to consider (Morrison and Milliken, 2000; Pinder and Harlos, 2001). The key difference between voice and silence is not necessarily the act of speaking or not, but the individual's motivation to withhold or share the information (Van Dyne et al, 2003).

Specifically, organizational silence is defined as "withholding genuine expression about behavioral, cognitive, and/or affective evaluations of organizational circumstances to people who seem capable of changing the situation" (Pinder and Harlos, 2001). This act can be seen as a conscious decision to withhold relevant information based on philosophical and ethical concerns (Bok, 1983). Much of the silence literature focuses on reasons why employees fail to share negative information (Tangirala and Ramanujam, 2008; Van Dyne et al., 2003). For example, employees tend to remain silent about conflicts with coworkers, disagreements with management decisions, personal knowledge of potential weaknesses in work processes, and concerns about illegal behaviors (Morrison and Milliken, 2000).

Pinder and Harlos (2001) define two basic forms of organizational silence. The first, acquiescent silence, is defined as the passive withholding of relevant information due to resignation or submission. This occurs when an individual believes their ideas will not be used or acknowledged. The second, quiescent silence (also known as defensive silence), is

defined as the active withholding of information to protect oneself. This is based on a fear of the consequences of speaking up. Van Dyne et al. (2003) expand this work and propose a third type of silence, pro-social silence. Pro-social silence is based on organizational citizenship behavior and is defined as the withholding of work-related information with the goal of benefiting the organization. An example of pro-social silence is an employee protecting organizational proprietary knowledge (Van Dyne et al., 2003). Both defensive and pro-social silence are based on fear of repercussions from sharing information. As intensity of the perceived threat is increased, there is an increase in the chance of silence being invoked due to the increase in fear (Kish-Gephart et al., 2009). A majority of the time, all types of organizational silence end up being detrimental to the company (Morrison and Milliken, 2000). Therefore, employee activation of silence will depend on the threat of that information, or the severity of that information. Specifically, when asked for information, not only will the employee's interest in protecting the organization drive organizational silence, but silence will also depend on who asks for the information.

Organizational silence is very similar to the construct "knowledge hiding" which comes from the knowledge sharing literature, and specifically focuses on the withholding of negative information. Overall, the knowledge sharing literature, which differs from employee silence in that it focuses on sharing of information to contribute to knowledge application, innovation, and ultimately the competitive advantage of the organization (Jackson et al., 2006), also recognizes that identity plays a role in an individual's reasons to share information. Although knowledge hiding often involves deception, this is not always the case. The term "knowledge hiding" was constructed to explain the intentional act of

withholding information from others (Connelly et al., 2012). This concept differs from knowledge sharing in terms of the intent of the individual. An individual may unintentionally fail to share information, which would not be considered knowledge hiding. In general, knowledge hiding is affected by the relationship between the individuals involved. Specifically, distrust has been found to be a major predictor of knowledge hiding. Distrust stems from a negative relationship or the concerns of the other individual sharing different cultural values (Sitkin and Roth, 1993).

Edmondson (2003) provides quantitative evidence of how relationships can affect knowledge sharing. In her study, she investigates 16 operating teams learning to use a new technology and finds that the relationship between the team and the team leader can encourage or discourage information sharing. Leaders that could remove status barriers between themselves and their team increased overall information sharing, which helped ensure successful implementation of new technology.

Additionally, a study by Milliken, Morrison and Hewlin (2003) was able to help explain why individuals would or would not share relevant information within the workplace. The researchers conducted interviews within the work place, focusing on a variety of issues in which the interviewee had chosen to remain silent. They found that fear plays an important role in motivating silence. This fear was driven by the potential negative outcomes that could occur from speaking up. This study points to the strong use of defensive silence within the workplace. Therefore, the decision between choosing voice or silence will depend on factors including the severity of the information, the status of the individual requesting the information, and who or what will be harmed by this information. As the motivations for

being silent are removed, individuals have more reason to share the information (i.e., express voice) to benefit the organization. Table 1 shows a summary of the information sharing literature on which my hypotheses, discussed in the next chapter, are based.

TABLE 1
Summary of Information Sharing Literature

Source:	**Definitions:**	**References:**
Employee Voice: Intentional sharing of information by employee	1) Agreeing due to low self-efficacy (Acquiescent voice) 2) Expressing ideas to shift attention away from self (Defensive voice) 3) Constructive ideas to benefit organization (Pro-social voice)	Van Dyne et al., 2003; Dutton and Ashford, 1993; Frese et al., 1999; Graham, 1986; Howell and Higgins, 1990; LePine and Van Dyne, 1998; Morrison and Phelps, 1999; Withey and Cooper, 1989; Zhou and George, 2001.
Employee Silence: Lack of sharing information by the employee	1) Passive withholding of relevant information due to resignation or submission (Acquiescent silence) 2) Active withholding of information to protect oneself (Defensive silence) 3) Withholding of work-related information with the goal of benefiting other people or the organization (Pro-social silence)	Pinder and Harlos, 2001; Bok, 1983; Tangirala and Ramanujam, 2008; Van Dyne et al., 2003; Morrison and Milliken, 2000.
Knowledge Sharing:	Sharing of information to contribute to knowledge application, innovation, and ultimately the competitive advantage of the organization	Jackson et al., 2006; Burgoon and Buller, 1996; Edmondson, 2003.

Chapter 3
Hypothesis Development

3.1 Introduction

In this chapter, I use the different streams of literature reviewed in the previous chapter to develop hypotheses about the effects on IAs when attempting to obtain and then assess internal control weaknesses. Specifically, Hypothesis 1 uses the identity literature to predict that the IA's in-group status with the employee will help create an in-group bias, resulting in the employee sharing more information with the IA than the EA. Hypothesis 2 uses the information sharing literature to predict that the increase in severity of the information will invoke silence through the fear of sharing and attempting to protect the organization as a whole, therefore high severity will magnify the effect predicted in H1. Hypothesis 3 uses the identity literature to predict that the IA's in-group status, that is, their organizational identity, will bias their assessment of the information gathered. Hypothesis 4 uses theories around social norms to predict that any bias the IA exhibits when assessing information can be mitigated by making salient the norms of the IA's profession. Finally, Hypothesis 5 again uses social norms to predict that making the EA aware of the social norms of the IA's professional group will allow the EA to become more comfortable in relying on the IA's work.

3.2 Organizational Identity

Identity is defined as "that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978). This definition has also

been refined to include the notion that group members gain a descriptive and evaluative sense of identity through the comparison of the in-group to a salient out-group (Tajfel and Turner, 1986). Individuals will then associate or disassociate themselves with certain groups in order to view themselves in a more positive manner (Ashforth et al., 2008). In-group identity is higher when group members share common perceptions and traits (Kriener and Ashforth, 2004). An organization can provide the individual with a sense of identity. The salience of that identity will increase with identity cues and can be activated by just mentioning the in-group status (Van Dick et al., 2005).[9] Strong identification with the in-group creates a bias that leads to increased information sharing within that in-group (Ashforth et al., 2008). Therefore, I predict an employee will be more willing to share negative information with a member of their in-group (i.e., the IA) than with a member of their out-group (i.e., the EA). This prediction is formalized as follows:

> **H1:** Employees will share more information about internal control weaknesses with the internal auditor than the external auditor.

3.3 Severity of Weakness

SOX 404 internal control assessment requires management and EAs to report on the internal controls of an organization (SOX, 2002). [10] The SEC has provided examples to help both management and EAs assess the level of severity of any identified internal control

[9] Although SIT suggests this prediction will hold, an IA's direct contact with the organization's employees is in some cases minimal (IIA, 2011). Thus, the employee may view the IA as part of their in-group as compared to the external auditor, but as part of the out-group as compared to other members of the employee's own department (Kriener and Ashforth, 2004). Therefore, clarity of the comparative out-group is important for this hypothesis to hold.

[10] Typically the IA will be in charge of management's assessment. Therefore I refer to the IA instead of management throughout the paper.

weaknesses. These weaknesses are classified according to professional standards as deficiencies (low severity), significant deficiencies (medium severity) and material weaknesses (high severity). As previously stated, for silence to be invoked there needs to be a conscious decision to withhold relevant information based on philosophical and ethical concerns (Bok, 1983). The decision to withhold relevant information increases with the intensity of threat that information provides (Kish-Gephart et al., 2009). Therefore, as the severity of the weakness increases (from low to high), I expect an increase in silence (i.e., less information will be shared).

Since the IA specifically asks employees to provide information during the internal control evaluation interview process, employees should not be concerned about being heard. Therefore, I do not expect acquiescent silence to be invoked. I do, however, expect both defensive and pro-social silence to be invoked. Defensive silence is invoked when employees are concerned with reprisal against themselves or from fear (Milliken et al., 2003). Therefore, I predict employees' expectations of reprisal due to negative information shared to be lower when sharing with the IA than the EA, due to their in-group status with the IA. In-group members typically see each other in a more positive light than out-group members (Ashforth et al., 2008). For pro-social silence to be invoked, individuals would be attempting to protect the organization by keeping information in-house (Van Dyne et al., 2003). Again, I expect pro-social silence is less likely to be invoked when communicating with the IA as compared to the EA. To summarize, theory suggests employees are more likely to withhold information (i.e., remain silent) about high severity internal control weaknesses compared to low severity internal control weaknesses, and in addition, they will be more likely to withhold

this information from an EA compared than an IA. Combining the above expectations with H1, I predict the following interaction:

> **H2:** As the severity of the internal control weakness increases, the difference in the employee's willingness to share information with the internal auditor as compared to the external auditor will be magnified.

3.4 Internal Auditor Objectivity

Once the IA has gathered information, an objective assessment of the severity of the internal control weakness is paramount. As stated previously, a major concern of external auditors when deciding to rely on the IA's internal control evaluation is the possibility of a biased assessment caused by their strong connection with the organization (i.e., their organizational identity). The IA function has been shown in the past to be swayed by management (Ahlawat and Lowe, 2004; Glover et al., 2008) and to show a lack of objectivity (Gramling et al., 2012) due to this organizational identity. The idea that an IA's judgment may be biased is corroborated by a recent field study by Bedard and Graham (2011) using actual data from large audit firms. They found that the IA typically classifies internal control deficiencies as less severe than they should be, which leads the EA to override these classifications.

These results are consistent with predictions of SIT. As an IA works for a specific organization, an identity is created. Organizational identity is seen as the perception of belonging to an organization (Mael and Ashforth, 1992) and is considered permanent and deep structured (Van Knippenberg and Van Schie, 2000). Also, SIT predicts that individuals typically make more positive evaluations of their in-group than their out-group (Ashforth and

Mael, 1989; Hogg and Terry, 2000). Therefore, it is likely the IA will view their in-group (i.e., members of the organization) in a more favorable light than they should, causing them to assess internal control weaknesses less severely than the external auditor who is expected to provide an independent assessment.[11] This argument leads to the following hypotheses:

> **H3a:** An internal auditor will assess internal control weaknesses less severely when their organizational identity is strong rather than weak.
>
> **H3b:** An internal auditor with strong organizational identity will assess internal control weaknesses less severely than will an external auditor.

These hypotheses are not without tension given Stefaniak et al. (2012) (SHC) find that the IA participants in their experiment were actually *less* lenient with internal control evaluations as their employee identity increased. I argue, as have others, (Ashforth et al., 2008; Ashforth and Mael, 1989) that the in-group bias created by identity with the organization will cause individuals to see their firm in a more favourable light; therefore, I expect IA's with high organizational identity to assess weaknesses less severely than they should. I believe the differences between our predictions can be explained by the differences in the types of identities each study examines and their experimental settings.

IA's in SHC were asked to make evaluations for a hypothetical organization, not their own organization; therefore organizational identity was measured based on their perceived identity with this hypothetical organization, not the IA's actual organization. This 'hypothetical employee identity' is a situated identity, which is different from the deep

[11] This independence is not necessarily in fact, but mainly in appearance.

structured "actual organizational" identity examined in the current study.[12] Deep structured identity differs from situated identity in that it is caused by a much more fundamental connection with the group (Pratt, 1998). Also, strong identity creates a strong in-group bias (Ashforth and Mael, 1989). Based on prior results in the psychology literature (Ashforth and Mael, 1989; Ashforth et al., 2008), I expect the deep structured "actual" organizational identity to create an in-group bias causing a "blinding" of the IA to the level of severity of the internal control weaknesses within their own organization.

3.5 Quality of Internal Control Evaluations

Although many IAs have professional designations and/or are members of the IIA, we would expect their professional identity to not be as salient as an external auditor's due to the lack of professional obligation to protect the public interest and the salient organizational identity that exists day to day. To address this issue, the IIA has created a code of ethics for all IAs to follow, whether they are members of the IIA or not. This code of ethics stresses the importance of objective and independent decision making. In a recent study, Davidson and Stevens (2013) show that having managers state that they will adhere to a code of ethics improves manager return behavior and investor confidence through the activation of social norms.[13] Social norms can not only strengthen an identity, but can also make that identity

[12] SHC (2012) also acknowledged that their measure of identity may not be the same as an actual identity developed by an IA over time within an organization. Although I use a vignette study, I ask the IA about their actual organization, so their responses are based on their actual deep structured organizational identity.

[13] Davidson and Stevens (2013) ran an experiment in which investors provided funds to a manager. The manager earned a return 3 times the value of the initial funds. Manager return behavior was measured by the percent of funds returned to the investor by the manager. Investor confidence was the percent of total funds the investor provided to the manager initially.

more salient (Akerlof and Kranton, 2010). For example, Mazar et al. (2008) use the attention to standards mechanism to predict that when moral standards (social norms) are more accessible, people will need to confront the meaning of their actions. They use this mechanism to help explain how cueing individuals about moral standards can increase honesty. Specifically, the attention to standards mechanism relies on salience. They argue that when standards become more accessible, people will pay more attention to their own actions. Bateson et al. (2006) found a similar result by cueing individuals to the fact that they were being watched. Again, this cueing made the individual more aware of their actions and improved their cooperation. In this current study, I focus on the social norms of the IAs' professional group. By reminding the IA of the presence of the IIA's mandatory code of ethics, their profession's standards (i.e., their professional norms) will become more salient. This will increase the IAs' awareness of their own actions relative to the standards of behavior expected by the internal audit profession. This increase in awareness will cue the IA to the need to more objectively assess internal control weaknesses. Based on the above reasoning, I hypothesize the following:

H4a: Salient professional norms will attenuate the difference between an IA's assessment of internal control weaknesses when their organizational identity is strong rather than weak.

H4b: Salient professional norms will attenuate the difference between an IA's assessment of internal control weaknesses, when their organizational identity is strong, and an EA's assessment of the same internal control weaknesses.

The salience of a mandatory code of ethics for IAs should also have an effect on the external auditor's perception of the IA's objectivity. Glover et al. (2008) find external

auditors are more willing to rely on outsourced IAs than in-house IAs, which they found to be indirectly caused by the difference in perception of objectivity between the two groups. They argue that external auditors see a close alignment between the IA and management, which affects their perception of the IAs objectivity. SAS 65 requires the objectivity of the IA to be one of the main factors considered by the external auditor when considering the use of the IA's previous work. I expect that increasing the salience of the IA's professional identity will improve the external auditors' perception of IA objectivity and the EA will be more willing to rely on the IA's work.[14] This leads to the following hypothesis:

> **H5:** When the external auditor is aware that the internal auditor adheres to a set of professional norms, the external auditor will be willing to rely on the internal auditor's work to a greater degree than when the external auditor is not aware.

To summarize, H1 and H2 focus on my first research question; will employees share more information about internal control weaknesses with the IA than the EA? Particularly, H1 predicts that employees will share more information with the IA than the EA. H2 predicts that as severity increases the difference in employee information sharing with IAs as compared to EAs will be increased. Both H1 and H2 will be tested using Study one, which is discussed in chapter 4. H3, H4, and H5 focus on my second research question; will the IA be able to objectively assess internal control weaknesses so that the EA can be confident in

[14] The EAs reliance decision is based on an evaluation of three factors: work performance, competence and objectivity. (See Bame-Aldred et al., 2012 for a more detailed review of this topic). I am only exploring differences in perceived objectivity in this study while holding work performance and competence constantly high. Future work might examine the inter-relationships between objectivity, competence and work performance from the perspective of social identity.

relying on the IA's work? H3 predicts that when professional norms are not salient IAs with strong OI will assess internal control weaknesses less severely than EAs and IAs with weak OI. H4 predicts that the salient professional norms of the IAs professional group will attenuate the difference in assessment between EAs and IAs. Finally H5 predicts that EAs that are aware of the strong IA's professional norms will rely on the IAs work more than EAs that are not aware of the strong IA's professional norms. H3, H4, and H5 will be tested in study 2 and will be discussed in chapter 5. Table 2 summarizes all predictions.

TABLE 2
Summary of Hypotheses and Theories

Study 1:	**Theory:**	**Prediction:**
H1:	Social Identity Theory	Employees will share more information about internal control weaknesses with the internal auditor than the external auditor.
H2:	Social Identity Theory and Organizational Silence	As the severity of the internal control weakness increases, the difference in the employee's willingness to share information with the internal auditor as compared to the external auditor will be magnified.

Study 2:	**Theory:**	**Prediction:**
H3:	Organizational Identity	An IA will assess internal control weaknesses less severely when their organizational identity is strong rather than weak and less severely than an EA.
H4:	Organizational Identity and Social Norms	Salient professional norms will attenuate the difference between an IA's assessment of internal control weaknesses when their organizational identity is strong rather than weak and between an EA's assessments.
H5:	Social Norms	When the EA is aware that the IA adheres to a set of professional norms, the EA will be willing to rely on the IA's work to a greater degree than when the EA is not aware.

Chapter 4
Study One

4.1 Experimental Method

Study one focuses on my first research question; does the "employee" identity the IA assumes within the organization allow them the opportunity to discover more internal control weaknesses within their organization than would an EA? I design a 2 X 2 mixed factorial lab experiment to test Hypothesis 1 and 2. The experiment consists of manipulating employee social identity with the auditor (high/low) between subjects and the severity of the internal control weaknesses (high/low) within subjects.

I make two separate predictions that are tested in Study one. Hypothesis 1 predicts a main effect of organizational identity, in that employees of an organization will be willing to share more information about internal control weaknesses with the IA than the EA. Hypothesis 2 predicts an interaction of identity and severity, in that as the severity of the identified control system weakness increases, the difference between the willingness of the employee to share the information with the IA rather than the EA will also increase. Below I describe the experimental design of Study one and analyze the results.

4.1.1 Participants

I recruited participants from Amazon's Mechanical Turk (MTurk) platform. I recruited organizational employees that, in their current position, had interacted with either an EA or IA in the past. I ran a pre-screening survey through MTurk which required participants to be currently working in an office setting, to have experience interacting with auditors and to not be an auditor themselves. The pre-screening survey was used to ensure the participants

would be members of the relevant population and would see the experimental scenario as realistic. While 227 potential participants attempted the screening questionnaire, 85 participants qualified and completed the experiment online.[15] Each participant that completed the experiment was paid through the Amazon MTurk system.[16]

4.1.2 Experimental Procedures

After completing the pre-screening questionnaire, participants moved to the main experiment. In this experiment, participants were asked to play the role of an employee within a fictitious organization, XYZ, Inc. Next, participants were told that an internal control assessment was occurring within the organization. To ensure the participants did not think they had been singled out, they learned they had been randomly selected to be interviewed by the auditor performing the assessment. All participants learned that the internal control assessment was standard and that the auditor was interested in information about all possible control system weaknesses, no matter the level of severity or materiality.

At that point, social identity with the auditor was manipulated. Half of the participants were told they would be interviewed by an IA and the other half by an EA. I ensured the participants were aware that the IA was an employee of their same organization (i.e., within their in-group) while the external auditor was not (i.e., in the out-group). Participants were

[15] To estimate the number of participants that would be required given the estimated effect size, I used the statistical software program G*Power, a popular statistical analysis program used in both social and behavioral research viewed as a valid and reliable tool throughout both research communities (Faul et al., 2007). Based on prior identity research (Stefaniak et al., 2012) and to be conservative, I assumed a small effect size and required significance at 95% resulting in a required sample size of 85 participants.

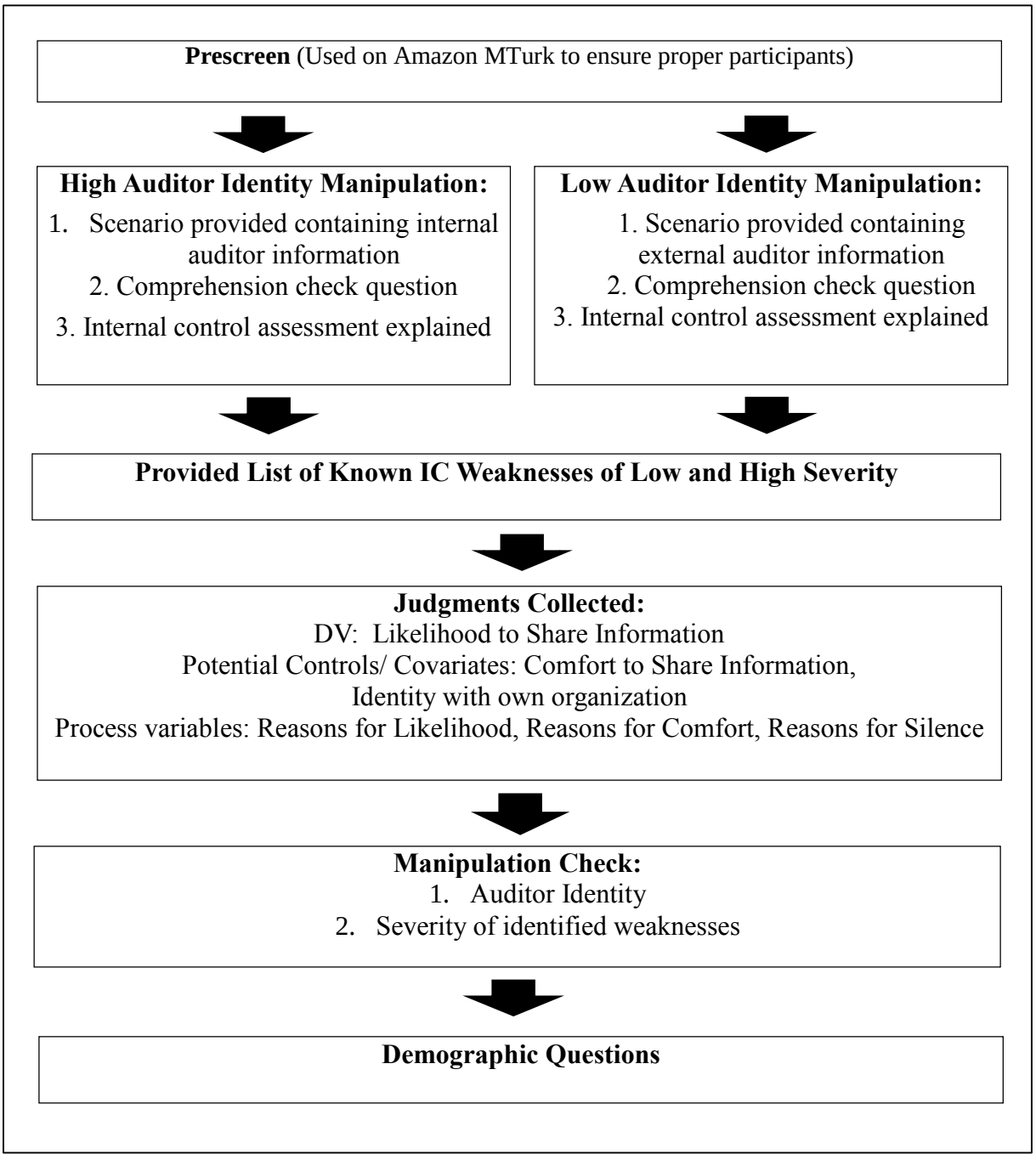
[16] Participants were paid $.50 to attempt the pre-screening survey and an additional $1 if they qualified and completed the main survey. The main survey took about 15 minutes of time and this payment amount is typical of other Amazon Mturk surveys.

also asked to assume they had not had any previous experience with this particular auditor. This was to eliminate any preconceived opinions of the auditor. At this point, a comprehension check question was asked and a correct answer was needed to continue.

Next, all participants were provided with a list of internal control weaknesses that they were asked to imagine they had become aware of during the year. These internal control weaknesses involved the within-subject manipulation of the severity of the internal control weakness. All participants were also told that the auditor might or might not learn about these weaknesses from other employees and that the auditor was unaware that the employee had this information. All participants were then asked to indicate their willingness to share this information with the auditor (i.e., the dependent variable), their degree of comfort in sharing this information with the auditor and their reasons for these judgments. Also, participants were asked why they would not share this information as a process measure (silence measure). Finally, I asked an auditor identity manipulation check question and other relevant demographic questions. Figure 1 summarizes the experimental design flow and Appendix A provides all information provided to the participants during the experiment.

FIGURE 1

Experiment 1: Flow Chart



4.1.3 Independent Variables

Employee Social Identity with the Auditor

To manipulate employee social identity with the auditor, I varied the type of auditor (internal or external) that the participants were told conducted the interview. Participants within the IA condition were told that the internal control assessment was being conducted across the whole organization by the internal audit department. They also learned that the assessment was used to fulfill management's SOX 404 requirements. I also controlled for IA quality by stating "In the past the IA has been assessed by the external auditor as being competent and objective", and "although the IA is performing the procedures necessary to fulfill management's SOX 404 requirement, they report to the Audit Committee, ensuring independence." The participants being interviewed by the IA were provided details to increase the salience of the IA's organizational in-group status. Wording such as "the IA is part of the organization", "the IA's office is within the same building as yours", and "the IA is paid in a similar manner to yourself" is used to create similarities, which are needed to create an in-group status (Tajfel and Turner, 1986; Hogg and Terry, 2000). Wording such as "you will be interviewed by an internal auditor as compared to an external auditor" also helped to ensure the salience of the in-group vs. out-group status.

Participants within the EA condition were told that the assessment was being conducted across the whole organization by the external auditor. They also learned that this assessment was be used to fulfill management's SOX 404 requirements. EA quality was controlled with the following wording, "The external auditing firm is a reputable organization" and "the external auditor only reports to supervisors within their own

organization and is completely independent" Although this wording created a difference between conditions, it was necessary to ensure EA quality is constant and controlled for. (Refer to Appendix A for exact wording used in each condition). The participants being interviewed by the EA were provided details to show that the EA was not part of their organizational in-group. Wording such as "the EA is part of a 3rd party organization", "the EA's office is located on the other side of town", and "the EA is paid directly by their own firm." Based on previous research, this should be sufficient to create an out-group status (Tajfel and Turner, 1986; Hogg and Terry, 2000).

Perceived Severity of Internal Control Weaknesses

The internal control weaknesses used within this experiment were created from examples provided by the SEC, the PCAOB, accounting firms and previous accounting research. I first created a total of 11 control system weaknesses of various levels of severity in order to test how the severity of the negative information affects the participant's willingness to share it. To ensure differences in perceived severity of control system weaknesses, I first recruited 120 audit undergraduate and graduate students from the University of Waterloo to complete an online survey designed using Surveymonkey.com. The students were presented with the 11 internal control system weaknesses (See complete list in Appendix C) and asked to assess the severity of each one on a seven point scale with 1 = Low in Severity and 7 = High in Severity. Based on these ratings, I selected the six weaknesses listed in Table 3 (Panel A) with mean severity ratings ranging from very severe (e.g., IC1 with mean = 6.33, SD = 1.05) to relatively low in terms of severity (e.g., IC6 with mean= 3.21, SD 1.40).

I conducted an additional pretest of perceived severity of the six selected internal control system weaknesses with participants recruited through Amazon Mturk to determine if perceived severity level would differ between the auditing students and participants recruited on Mturk. A total of 110 employees were recruited through Amazon Mturk and attempted the pre-survey screening test. All individuals were screened to ensure they worked in a business setting, were not an auditor, and had experience working with an auditor in the past. After pre-screening, 40 participants qualified and completed the experiment online. Over 50 percent of the participants were between 30 and 50 years of age and all were at least 20 years of age. Participants had at least 4 years work experience and over 50percent had more than 10 years of work experience. Also, 47 percent were male and 75 percent had previously participated in an internal control assessment.

Means and standard deviations of internal control weakness severity ratings for this sample are presented in the second column of Table 3 (Panel A). Overall, I found similar results to those in the initial pretest with auditing students. I also presented the list of weaknesses in reverse order for half of these Mturk participants to test for order effects and found none. I note that IC3a and IC3b were developed originally for use as a proximity manipulation (i.e., did the weakness occur within the employee's own department or in a different department?). This manipulation did not work as expected in further pretesting of the study so I removed this manipulation and related control system weaknesses in the final version of the study.

To limit the number of weaknesses, and thus requirements on participants' time to complete the study, the two highest severity weaknesses (IC1 and IC2) and the two lowest

severity weaknesses were selected (IC5 and IC6) to be used in the final study. Through paired t-tests I confirmed that IC1 and IC2 (high severity) were rated as significantly more severe than the low severity weaknesses IC5 and IC6 (all $p < 0.001$). The results from this pretest also highlighted certain adjustments needed for the final study. In particular, I made some minor adjustments to the wording of the four IC weaknesses to improve their clarity.

TABLE 3
Pretests of Perceived Severity of Identified Control System Weaknesses

Internal Control System Weaknesses	Audit students [n=120] Mean (std. dev.)	MTurk participants [n=40] Mean (std. dev.)
IC1 An employee with password protected access to confidential client information stores their password on a sticky note underneath their keyboard. Client information includes credit card and SI insurance numbers.	6.33 (1.05)	5.83 (0.97)
IC2 Sales personnel frequently modify the terms of the company's standard sales contracts and there is not a review process in place to approve these changes. The nature of the modifications can affect the timing and amount of revenue recognized. Individual sales transactions are frequently significant to the entity, and the gross margin can vary significantly for each transaction.	5.42 (1.37)	5.05 (1.22)
IC3a *(Close to employee)* There seems to be a level of undue bias or lack of objectivity from those responsible for accounting estimates with your department. For example, consistent understatement of expenses or overstatement of allowances at the direction of your direct supervisor has occurred.	5.25 (1.44)	5.32 (1.15)
IC3b *(Far from employee)* There seems to be a level of undue bias or lack of objectivity from those responsible for accounting estimates within some departments. For example, consistent understatement of expenses or overstatement of allowances at the direction of other departments' managers has occurred.	5.25 (1.44)	5.32 (1.15)
IC4 A lack of segregation of duties over the company's shipping and receiving and the inventory record-keeping functions have been noted. This resulted in underreporting of inventory levels and an understatement of company-wide net income by 3.8%. The misstatement was detected by management and corrected prior to issuing external financial reports.	4.68 (1.43)	4.29 (1.23)
IC5 Salespeople gave discounts to customers and failed to record them on the customer order. In most instances, adjustments to revenue were made without contacting these salespeople.	4.37 (1.40)	3.80 (1.41)
IC6 The company has a written policy outlining when it is appropriate to provide meals to employees and requires a list of all attendees. Many times documentation supporting meals and refreshment expenses at large company meetings does not generally show who attended these meetings or why attendees required food and refreshments to conduct business.	3.21 (1.40)	2.85 (1.25)

Note: Perceived severity was rated on a 7 point scale with 1=low severity and 7= high severity

4.1.4 Dependent Variable

The main dependent variable of interest was the participants' judged likelihood to share negative information about internal control weaknesses with the auditor. Likelihood to share (LTS) was measured using a 7-point Likert scale, with 1 = highly unlikely to share information and 7 = highly likely to share information. Open ended questions requesting the reason why the participants would or would not be likely to share the information were asked to better understand the reasons behind information sharing choices.[17]

4.1.5 Covariate and Demographics

An important and potentially significant covariate is the participant's degree of identity with the organization in which they are employed. This is the level of organizational identity they bring with them to the experiment independent of the identity with the auditor manipulated within the experiment itself. To measure organizational identity, I use a modified version of Mael and Ashforth's (1992) six question scale.[18]

I also collected demographic information to test for possible effects of other possible determinants of the participants' behavior, although I expect these should be reasonably controlled via random assignment of participants to conditions. These variables include age, sex, years of work experience and whether or not the participant has previously been involved in an internal control assessment.

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[17] Some analysis of these responses can be found in the results section.

[18] Items making up this scale and related descriptive statistics are presented in the results section (Table 7) below.

4.2 Results – Study One

4.2.1 Participants

A total of 227 employees attempted the pre-screening survey through Amazon Mturk. The pre-screening survey was used to ensure the participants currently worked in a business setting, they were not auditors, and they had experience working with an auditor in the past. After pre-screening, 85 participants qualified and completed the experiment online. Of the 85 qualified participants, over 50 percent were between 30 and 50 years of age and all were at least 20 years of age. Of the 85 participants, 90 percent had at least 4 years of work experience and over 50 percent had more than 10 years of experience. Also, 51 percent were male and 75 percent had participated in an internal control assessment in the past. Overall, the demographics of these participants were very similar to the pre-test participants recruited through Mturk.

Random assignment of participants to the two conditions appears to have been successful as age, experience, involvement in an internal control assessment, and sex do not vary significantly based on *Auditor Type* (all $p > 0.10$). However, to the extent that these characteristics have effects across all conditions, I do run all main hypothesis tests with the above variables as controls, and none turn out to be significant. Also, none of these variables are correlated with the dependent variable *Likelihood to Share*. Demographics data are reported in Table 4.

TABLE 4
Participant Demographics [n = 85]

Panel A: Demographics by Range, Number, Percentage and Cumulative Percentage

	Range:	#	%	Cumulative %
Work Experience:	1-3	10	11.8	11.8
	4-6	11	12.9	24.7
	7-9	14	16.5	41.2
	10+	50	58.8	100
Sex:	Male	44	51.8	
	Female	41	48.2	
Age:	20-30	27	31.8	34
	31-40	35	41.2	72.9
	41-50	12	14.1	87.1
	>50	11	12.9	100
Experience with previous IC assessment:	Yes	64	75.3	
	No	21	24.7	

4.2.2 Manipulation Checks

All participants were asked a comprehension check question to ensure they understood whether an internal or external auditor was interviewing them. All participants answered this question correctly before they rated their likelihood to share this information with the auditor. In addition, to test for the success of the experimental manipulation of employee social identity with the auditor, I used a modified version of the *Inclusion of Others in Self Scale* (Aron et al., 2004) as used in SIT research in psychology. This scale provided the participant with seven images of two overlapping circles labeled 'self' and 'auditor'. These images range from no overlap (weak identity) to almost complete overlap (strong identity).[19] A sample of the scale is presented in Appendix A. Results indicate the manipulation worked well as there was a significant difference between conditions ($F=22.763$, $p<0.001$). Results can be found in Table 5.

[19] Several previous studies in accounting have used a measure of social identity modified by Bamber and Iyer (2007). Their measure was derived from Mael and Ashforth (1992) and has been shown to provide similar results to the measure by Aron et al. (2004) that I use in this study. Aron et al. (2004) have shown their measure to highly correlate with Mael and Ashforth's (1992), but the ease of administering 1 question instead of 6 questions makes it a much more efficient measure.

TABLE 5
Social Identity with the Auditor Manipulation Check [n=85]

Panel A: Descriptive Statistics

Mean (std. dev.) n	**Auditor Type**		
	IA	**EA**	**Overall**
Identity with Auditor	5.450 (1.863) 38	3.53 (1.811) 47	4.39 (2.065) 85

Panel B: One way ANOVA of Employee Identity with Auditor Strength

Source	***df***	**F**	**p-value**
Auditor Type	1	22.763	**<0.001**
Total	83		

Notes:
Social Identity is measured using a modified version of the *Inclusion of Others in Self Scale* (Aron et al., 2004). 1 = no overlap of auditor and self circles, 7 = full overlap and self circles.

Auditor Type IA indicates employee interviewed by internal auditor and EA indicates employee interviewed by external auditor.

p-value is one tailed because one direction is expected for the manipulation.

To test the effectiveness of the severity manipulation, all participants were asked to rate the severity of the four IC weaknesses on a scale of 1 = low severity and 7 = high severity. Participants rated the means of all four ICs as expected and consistent with the pilot test ratings. See Table 6 below for reported means and standard deviations. *Ex ante*, IC1 and IC2 were both considered to be high severity weaknesses and IC5 and IC6 were considered to be low severity weaknesses. To confirm there is a difference between high and low perceived severities of identified control system weaknesses in this sample, I first run a one-way

ANOVA comparing high severity (IC1 and IC2) to low severity (IC5 and IC6) items. I find a significant difference ($F=101.27$, $p<0.001$) between groups. To determine if there is difference within the severity levels I run post-hoc adjusted paired sample t-tests comparing ICs within high/low severity groups. I do not find a significant difference between perceived severity of the high items, IC1 and IC2, ($t=0.88$, $p=0.382$). However, I do find a significant difference between the low items, IC5 and IC6, ($t=6.913$, $p<0.001$). Next, I ensure both low items severity is perceived differently from the high items by running further t-tests. These t-tests confirm there is a significant difference between both low items (IC5 and IC6) compared to both high items (IC1 and IC2); all at a $p<0.001$.

TABLE 6

Manipulation Check on Perceived Severity of Identified Internal Control System Weaknesses [n = 85]

Panel A: Descriptives of ICs Severity Ratings

Internal Control Weaknesses	**Mean (std. dev.)**
High Severity:	
IC1 Employees with password protected access to confidential client information stores their password on a sticky note underneath their keyboard. Client information includes credit card numbers and Social Insurance numbers.	5.48 (1.76)
IC2 Sales personnel frequently make unauthorized modifications to the terms of the company's standard sales contracts and there is not a review process in place to approve these changes. The nature of the modifications can greatly affect the timing and amount of revenue recognized. Individual sales transactions are frequently significant to the entity, and the gross margin can vary significantly for each transaction.	5.67 (1.31)
Low Severity:	
IC5 Salespeople gave discounts to customers and failed to record them on the customer order. In most instances, minor adjustments to revenue were made without contacting these salespeople.	4.54 (1.70)
IC6 The company has a written policy outlining when it is appropriate to provide meals to employees and requires a list of all attendees. Many times documentation supporting these meals and refreshment expenses at large company meetings does not generally show who attended these meetings or why attendees required food and refreshments to conduct business.	2.88 (1.60)

Table 6 continued

Panel B: One Way ANOVA of High (IC1 and IC2) vs Low (IC5 and IC6) Perceived Severity Ratings

Source	***df***	**F**	**p-value**
Severity	1	101.27	**<0.001**
Total	338		

Panel C: Paired Sample t-tests

Effect	**Mean Error**	**t**	***df***	**p-value (two-tailed)**
High severity:				
IC1 vs IC2	0.214	0.880	84	0.382
Low severity:				
IC5 vs IC6	2.212	6.913	84	**<0.001**
Between Severity:				
IC1 vs IC5	0.251	10.352	84	**<0.001**
IC1 vs IC6	0.279	3.377	84	**<0.001**
IC2 vs IC5	0.230	12.115	84	**<0.001**
IC2 vs IC6	2.203	5.551	84	**<0.001**

Notes:

Perceived severity was rated on a 7 point scale with 1 = low severity and 7 = high severity.

All t-test are post-hoc, therefore p-values are two tailed and adjusted accordingly.

By construction and confirmed through pilot testing, IC1 and IC2 are considered high severity, whereas IC5 and IC6 and considered low severity.

4.2.3 Covariate

To control for the participants' level of identification with the organization they work for which is independent of the identity with the auditor as manipulated in this study, I measured organizational identity for all participants using a modified version of Mael and Ashforth's (1992) six question scale. Items making up this scale and their related means (std. dev.) are presented in Table 7. I use this measure to ensure that it is not the individual's pre-existing identity with their organization that is driving the overall results, but rather their identity with the auditor interviewing them as manipulated in the experiment.

I conduct a confirmatory factor analysis on the responses to these six questions. As shown in Table 7, all factor loadings are greater than 0.71 and the overall factor has an eigenvalue (variance explained) of 4.275 (71.24%), with a Chronbach's Alpha score of 0.917. Thus, this factor analysis indicates that these measures represent a single construct, which I call *OrgID*. I use the mean scores for each participant to calculate *OrgID*[20].

[20] Results are similar when using factor scores instead of summated raw mean scores.

TABLE 7

Descriptive Statistics and Exploratory Factor Analysis of Organizational Identity Control Variable (*OrgID)* [n=85]

Item	Mean (std. dev.)	*ORGID* Factor Scores
1. When someone criticizes my organization, it feels like a personal insult.	4.20 (1.624)	0.723
2. I am very interested in what others think about my organization.	3.68 (1.761)	0.846
3. When I talk about my organization, I usually say "we" rather than "they".	3.85 (2.003)	0.792
4. My organization's successes are my successes.	3.91 (1.843)	0.921
5. When someone praises my organization, it feels like a personal compliment.	3.89 (1.786)	0.904
6. If a story in the media criticized my organization, I would feel embarrassed.	3.58 (1.835)	0.864
Overall Mean (std. dev.)	3.85 (1.528)	
Eigenvalue % of Variance explained Chronbach alpha Composite Reliability		4.275 71% 0.917 0.937

Notes:

OrgID is a measure of organizational identity using a modified version of Mael and Ashforth's (1992) scale. Measured as 1 = Strongly agree to 7 = Strongly disagree.

4.2.4 Descriptive Statistics for Likelihood to Share

Descriptive statistics for Likelihood to Share are reported in Table 8 and Figure 2. Because I intentionally constructed each IC weakness to have a different severity level, I mean centered each IC weakness based on each IC overall mean score. This allows me to eliminate the differences found in severity for each IC and focus on the difference found between auditor types. Therefore a positive (negative) mean indicates employees in a certain cell stated they were more (less) likely to share the specific IC than the mean of employees for that IC. As expected, all means in the IA condition are positive (more likely to share) and in the EA condition are negative (less likely to share).

TABLE 8

Descriptive Statistics for Likelihood to Share Weaknesses Measure (LTS)

	Raw Mean *Centered Mean* **(std. dev.)** **n**	**Auditor Type**		
		Internal	**External**	**Overall**
Severity	**IC1 (High)**	5.39 *0.759* (2.02) 38	4.02 *-0.614* (2.33) 47	4.64 (2.29) 85
	IC2 (High)	5.73 *0.407* (1.91) 38	5.00 *-0.329* (2.07) 47	5.33 (2.02) 85
	IC5 (Low)	4.36 *0.086* (1.85) 38	4.21 *-0.069* (2.28) 47	4.28 (2.09) 85
	IC6 (Low)	4.97 *0.150* (2.23) 38	4.70 *-0.121* (2.10) 47	4.82 (2.15) 85
	Overall	4.93 *0.351* (1.59) 38	4.48 *-0.284* (1.56) 47	4.68 (1.57) 85

Notes:

Likelihood to share weaknesses is rated on a scale of 1 = very unlikely to share through 7 = very likely to share.

Auditor Type Internal for participants interviewed by an internal and external for participants interviewed by an external auditor.

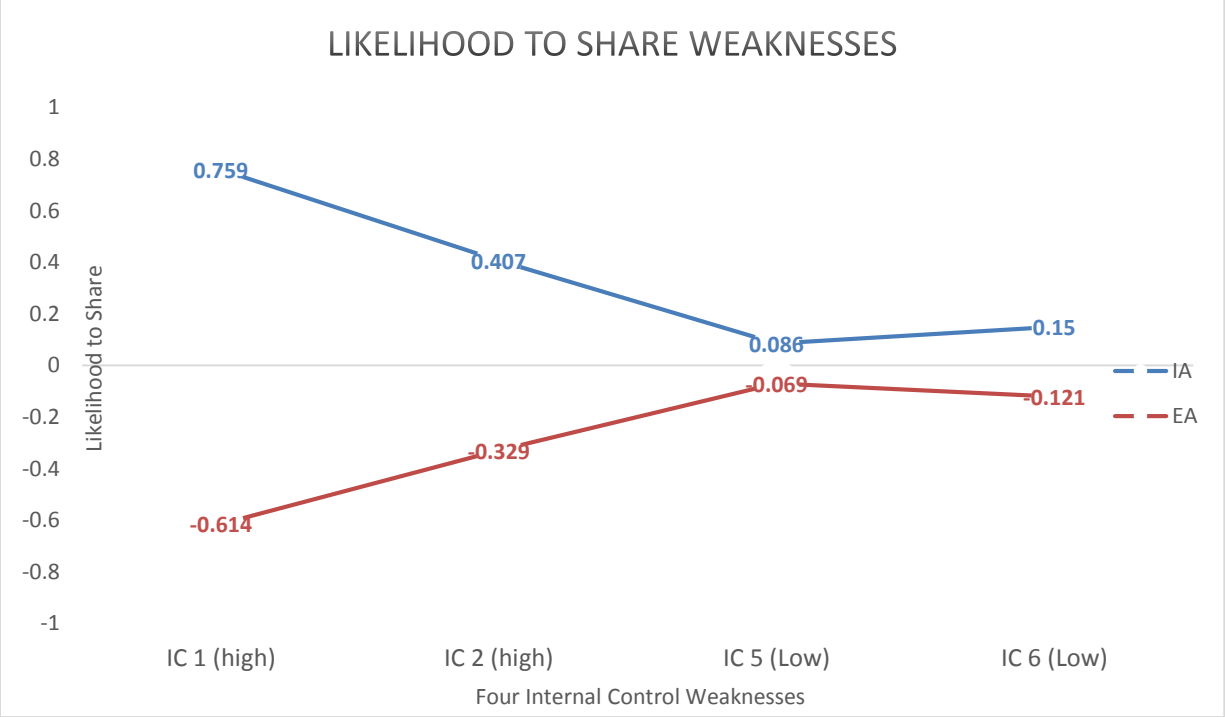
Severity differs at two levels: high (IC1 and IC2) and low (IC5 and IC6). IC1 through IC6 refers to the internal control weaknesses presented in Table 6.

Raw Mean is the overall mean of each IC.

Centered mean reported is created by centering on the overall mean for each IC.

FIGURE 2

Means of Likelihood to Share by Auditor Type and Internal Control Weakness



Notes:

Centered mean: Each IC mean is centered around the overall mean for that specific IC. By construction, if severity ratings in the EA condition are negative, then those in the IA condition must be positive, as the mean for each IC is zero. See IC descriptions in Table 6.

Likelihood to share weaknesses is rated on a scale of 1 = very unlikely to share through 7 = very likely to share.

Auditor Type IA for participants interviewed by an internal auditor and EA for participants interviewed by an external auditor.

4.2.5 Hypothesis Tests

In Hypothesis 1, I predict, based on social identity theory, that employees' willingness to share information about control system weaknesses with the internal auditor will be higher than with the external auditor. To test this hypothesis, I examine the effect of *Auditor Type* on their *Likelihood to Share* (LTS), using a repeated measures mixed model with LTS as the dependent variable, *Auditor Type* as the independent variable and two levels of *Severity* (high and low), with two repeated measures at each level. [21] The results presented in Table 9 below show a significant main effect of *Auditor Type* (F=5.199, p=0.012) providing support for Hypothesis 1.

[20] As discussed previously, I do not include any covariates in this analysis because none of the demographic variables or *OrgID* were found to be significant predictors of LTS.

TABLE 9

Tests of Hypothesis 1 and 2 [n = 85]

Panel A: Repeated Measure Mixed Model ANOVA for Likelihood to Share (LTS)

Effect	**Mean Squares**	**F**	***df***	**p-value (one-tailed)**
Within:				
Severity	0.167	0.070	1	0.396
*Severity*Auditor Type*	14.881	6.212	1	**0.007**
Error	2.396		168	
Between:				
Auditor Type	33.824	5.199	1	**0.012**
Error	6.505		168	

Panel B: Planned Comparisons

Effect	**Mean Error**	**t**	***df***	**p-value (one-tailed)**
High:				
IA vs EA	0.323	3.260	83	**0.001**
Low:				
IA vs EA	0.324	0.653	83	0.251

Notes:

LTS is the participants' likelihood to share weaknesses rated on a scale of 1 = very unlikely to share through 7 = very likely to share.

Auditor type *External auditor* (EA) means participants were to assume they were providing information to an external auditor and *Internal Auditor* (IA) means participants were told they were providing information to the internal auditor.

Severity has 2 levels; IC 1 and IC2 (High), and IC5 and IC6 (Low).

p-values are one tailed as hypotheses are directional.

This result leads directly to Hypothesis 2 which predicts that as the severity of the internal control weakness increases, the difference in the employee's willingness to share information with the internal auditor compared to the external auditor will be magnified. To test Hypothesis 2, I use the same repeated measures Mixed Model that was used to test Hypothesis 1. First, focusing on the repeated measures Mixed Model with LTS as the dependent variable and *Auditor Type* as the independent variable and two levels of *Severity* (high and low), with two repeated measures at each level, I find a significant interaction between *Auditor Type* and *Severity* ($F=6.212$, $p=0.007$).

To help understand the form of the interaction, I use planned comparisons. I expect to and do find that within the low *Severity* group there is no significant difference in LTS depending on *Auditor Type* ($t=0.653$, $p=0.251$), but when the IC weakness is in the high *Severity* category, there is a significant difference in LTS depending on *Auditor Type* ($t=3.260$, $p<0.001$). These results provide support for H2 as the significant interaction found between *Severity* and *Auditor Type* is driven by individuals sharing more internal control weaknesses with the internal auditor compared to the external auditor, especially when the weakness is severe.

4.2.6 Process Measures

I expect and predict that individuals will share negative information differently depending on who is interviewing them because theory suggests that different types of silence are invoked depending on the interviewer. I asked participants three questions based on the three different types of silence defined by Van Dyne et al. (2003); 1) "I do not believe I can make a difference" (acquiescent), 2) "I am fearful of the repercussions that could occur from

providing this information" (defensive) and 3) "I do not want to provide information that may hurt my organization" (pro-social). Each question was answered on a scale from 1 = Least likely the reason I might hold back information to 7 = Most likely the reason I might hold back information. The descriptive statistics for each type of silence are report in Panel A of Table 10. The means for acquiescent silence (IA=2.42, EA=2.72) are much lower than both defensive (IA=4.03, EA=4.72) and pro-social (IA=4.05, EA=4.81) silence as expected. This is confirmed with paired sample t-tests in Panel B of Table 10. Given individuals are given the chance to share information, I do not expect them to be concerned about not being heard. Comparing the means across A*uditor Type*, I find that defensive and pro-social silence are both considered more of a reason not to share the information with the external auditor compared to the internal auditor (defensive: t=1.560, p=0.061; pro-social: t=1.819, p=0.034). This provides some support that individuals are more concerned with sharing information outside their organization than inside their organization, due to both repercussions and the fear of hurting their organization.

TABLE 10

Descriptive Statistics for Silence Measures [n = 85]

Panel A: Descriptive Statistics – Reason for Silence

	Mean (std. dev.) n	Auditor Type		
		Internal	**External**	**Overall**
Type of Silence	**Acquiescent**	2.42 (1.68) 38	2.72 (1.96) 47	2.59 (1.82) 85
	Defensive	4.03 (2.03) 38	4.72 (2.04) 47	4.41 (2.05) 85
	Pro-social	4.05 (1.86) 38	4.81 (1.94) 47	4.47 (1.93) 85

Panel B: Paired Sample t-tests for *Silence*

Pairs	**Error**	**t**	***df***	**p-value (two-tailed)**
Acquiescent vs Defensive	0.268	6.807	84	**<0.001**
Acquiescent vs Pro-social	0.281	6.704	84	**<0.001**
Defensive vs Pro-social	0.211	0.279	84	0.781

Panel C: Paired Sample t-tests for *Auditor Type*

Pairs	**Error**	**t**	***df***	**p-value (two-tailed)**
Defensive				
Internal vs External Auditor	0.444	1.569	83	**0.061**
Pro-social				
Internal vs External Auditor	0.756	1.819	83	**0.034**

Table 10 continued

Panel D: Main Repeated Measure Mixed Model for LTS with *Silence* Measures Added

Effect	Mean Squares	F	*df*	p-value (two-tailed)
Within:				
Severity	19.752	8.622	1	0.004
*Severity*Auditor Type*	7.780	3.396	1	**0.067**
*Severity*Pro-social*	11.267	4.918	1	**0.028**
Error	2.291		166	
Between:				
Auditor Type	16.569	2.725	1	**0.101**
Defensive	2.950	0.485	1	0.460
Pro-social	73.855	12.146	1	**0.001**
Error	6.081		166	

Notes:
LTS is the participants' likelihood to share weaknesses rated on a scale of 1 = very unlikely to share through 7 = very likely to share.

Auditor type *External auditor* means participants were to assume they were providing information to an external auditor and *Internal Auditor* means participants were told they were providing information to the internal auditor.

Severity has 2 levels; IC 1 and IC2 (High), and IC 5 and IC 6 (Low).

Silence is measured using three questions asking the reason for not sharing IC weaknesses. These questions are based on the three different types of silence defined by Van Dyne et al. (2003); acquiescent, defensive and pro-social. Please refer to Appendix A for specific questions.

Based on prior results in the organizational silence literature, I measured participant's degree of comfort in sharing the internal control weaknesses (CTS) as a potential process measure. Comfort to share (CTS) is measured on a 7-point Likert scale with 1 = Not very comfortable sharing the information and 7 = Very comfortable sharing the information using the following question: "How comfortable would you be to share this information during the interview with the auditor?" This variable is measured because prior research has shown that the unwillingness to share negative information can be due to the discomfort in being the one to share that information (Van Dyne et al., 2003; Morrison and Milliken, 2000). Overall, I find that LTS for each internal control weakness is positively and significantly correlated with the corresponding CTS score. Also when running the main model (with and without silence variables included) with CTS instead of LTS as the dependent variable, I obtain similar results. This provides some support that an individuals' comfort level is associated with how willing they are to share information.

4.2.7 Supplemental Analysis

To confirm that silence is driving the interaction, as I predict, I include two measures of silence in the model (defensive and pro-social silence) presented in Table 10, Panel D. I find that defensive silence is not significant (F=0.485, p=0.460), but pro-social silence is significant (F=12.146, p=0.001). Also, when the measures of silence are included in the model, the original interaction of severity and identity becomes marginally significant (F=3.396, p=0.067), while the interaction of pro-social silence and severity is highly significant (F=4.918, p=0.028). Therefore, this provides support that silence is at least

partially driving the difference in information sharing between the two groups as severity increases.

Although a post hoc analysis focusing on the difference between high and low severity within IAs was only found to be marginally significant, the difference in means was not in the direction expected. Based on the means, individuals would share more high severity information than low severity information with the internal auditor. To understand this I focus on the qualitative responses that were provided. Individuals were asked after stating their likelihood to share the internal control weakness to "please state the reason for level of willingness to share the weakness."

For high severity items, the participants in the internal auditor condition stated their main reasons for sharing the information are to "keep the company safe" or to "protect the company", whereas for those in the external auditor condition, the main reasons **not** to share the information is "it reflects poorly on the company" or "it will impact the audit". Both groups seem to want to protect their organization, but when interviewed by an internal auditor, individuals see sharing the information as a way to protect their organization. When interviewed by an external auditor, withholding the information is seen as a way to protect the organization. These comments indicate that silence, particularly pro-social silence, is more likely to be invoked when employees are interviewed by EAs than by IAs. When interviewed by an IA, employee's voice seems to be invoked. As I did not focus on voice in this research I cannot confirm this and will leave this to be examined in future research.

For the low severity weaknesses, participants in both *Auditor Type* conditions indicated their main reasons for not sharing the information were because they were "not a big

deal" or only a "minor issue." Participants in the external auditor condition also stated they would not share the information because it "may make the company look bad if known", thus they are withholding information to protect the company.

These statements provide some support for silence being the process by which I find a difference in information being shared between internal and external auditors. When interviewed by external auditors, individuals appear to be trying to protect the company via pro-social silence, no matter the severity level of the information. When interviewed by an internal auditor, individuals are again trying to protect the company, but are doing so by sharing the more severe information in an attempt to improve the company' system of internal control.

Overall, I find support for both H1 and H2. Employees share more information with internal auditors than external auditors, as predicted by social identity theory. Also, as the severity of the information increases, the difference in information shared between IA and EA increases, as predicted by both the social identity and silence literatures. In the following chapter, I focus on whether the IA can objectively assess this information once obtained and whether the EA will rely on the IA's work.

Chapter 5
Study Two

5.1 Experimental Method

Study two focuses on my second research question; will the IA be able to objectively assess internal control weaknesses so that the EA can be confident in relying on the IA's work? Specifically, I make three separate predictions that are tested in Study two. Hypothesis 3 predicts that IAs with strong organizational identity (OI) will assess internal control weaknesses less severely than IAs with weak OI (H3a) and less severely than EAs (H3b). Hypothesis 4 predicts that the salience of the IA's professional norms will matter. Specifically, when IA professional norms are salient, the difference in assessment of internal control weaknesses of IAs with strong OI and IAs with weak OI will be smaller (H4a) than when professional norms are not salient. The same prediction is also made when comparing the difference in assessment of internal control weaknesses between IAs with strong OI and EAs (H4b). Finally Hypothesis 5 predicts that when EAs are aware the IA adheres to a set of professional norms, the EAs will be more willing to rely on the IAs work than when the EAs are not aware of this fact. Below I describe the participants, the experimental design and related results.

5.1.1 Participants

The participants for Study two are a larger group of IAs and a smaller group of EAs. IAs were recruited through the Institute of Internal Auditors (IIA) in New York State and the

province of Ontario.[22] Of the 101 IAs that started the online experiment, 83 completed it. IAs and EAs were recruited through CPA chapters the states of New York and Pennsylvania. Of the 41 EAs that started the online experiment, 34 completed it. As individuals volunteered to participate in the study, they were sent an email with the link to the online experiment. Demographic information was collected from both groups to ensure appropriate experience with internal control assessments and to control for experience, professional certification, education, sex, age, or specific firm effects. Participants volunteered to participate and were entered into a draw for five $100 restaurant gift cards for completing the study.

5.1.2 Experimental Design and Procedures

Study two includes a 2 (organizational identity strong/weak) X 2 (professional norms salient/non-salient) between subjects design using the IA participants to test H3a and H4a. The dependent variable in these tests is the IA's evaluation of the severity of the four internal control weaknesses identified in Study one. The group of EA participants also evaluates the severity of the same four IC weaknesses and their evaluations are compared with those of the IA group to test H3b and H4b. Finally, the EA group is subject to a 2x1 between subjects manipulation in which half of the group is informed that the IA adheres to a professional code of ethics while the other half is not informed of this fact. The EAs then provide an estimate of their willingness to rely on the IAs evaluation of the severity of the IC weaknesses to test H5.

[22] The number of participants needed was determined using the statistical software G-power. Based on a similar study (SHC, 2012) a small effect size was assumed and 95% significance required.

Experimental Procedures for Internal Auditor Participants

A flowchart of experimental procedures for the IA participants is presented in Figure 3 (Panel A) and a copy of the experimental instrument is provided in Appendix B. The experiment proceeds as follows. First, the IA is asked to read either the IIA code of ethics (professional norms salient) or an unrelated news article (professional norms non-salient).[23] The participants are asked to answer specific questions to ensure they actually read the code or related news article. Those receiving the code of ethics are also asked to compare the code to their own department's or professional designation's code of ethics and are asked to confirm that they adhere to this or a similar code.

Recall that social identity theory indicates organizational identity must be both strong and salient for identity to have an effect on judgment. Therefore, I first ensure that organizational identity is salient in the IA participant group by asking them to provide three reasons why their current employer is a quality organization to work for, similar to the salient manipulation used in Bauer (2011). I then measure the IA's organizational identity with their employer using a modified version of Mael and Ashforth's (1992) six question scale (also used in Study one). This measure is used to ensure that organizational identity is salient and also as a potential control for any differences in the organizational identity brought to the experiment by the IAs in the sample.

[23] I have some confidence in the efficacy of this manipulation based on Davidson and Stevens (2013), Mazar et al., (2008) and Bauer (2011) who all successfully manipulated group social norms salience using similar manipulations.

Next, organizational identity strength is manipulated within IAs. The manipulation involves the IA participant being asked to assume they are assessing internal control weaknesses for their own employing organization (strong organizational identity) or for a different organization, XYZ, Inc. (weak organizational identity). To create a weak identity with XYZ, Inc., the IAs are asked to imagine that XYZ, Inc. is a company that their organization has recently acquired and they are relatively unfamiliar with it at the time of the internal control assessment.

At this point, all of the IAs are asked to imagine they have conducted a series of interviews with employees and have identified four internal control weaknesses (same as those used in Study one, see Table 6). They are then asked to identify if each weakness should be consider a material weakness, a significant deficiency or neither and to assess the severity of each weakness on a 7-point scale. Finally, they complete manipulation check and demographic questions in a post-experimental questionnaire.

Experimental Procedures for External Auditor Participants

A flowchart of experimental procedures for the EA participants is presented in Figure 3 (Panel B) and a copy of the experimental instrument is provided in Appendix B. First, half of the EA participants are informed that the IA adheres to a code of ethics and are presented with the IIA code of ethics which they are asked to read carefully. The other half of the EA participants are provided with an unrelated news article which they are asked to read carefully. Both groups are then asked to answer some questions about what they have read to ensure they have paid attention to the material presented to them.

Next, all of the EAs are asked to imagine they are conducting an internal control assessment at one of their clients, XYZ, Inc. They are given additional information about the client's internal audit function including that the IAs working for XYZ's parent company are competent, have done work of high quality and their work has been relied upon in previous audits. The EAs learn there is pressure to reduce audit fees while maintaining a high quality audit.

At this point, all of the EAs are asked to imagine they have conducted a series of interviews with employees and have identified four internal control weaknesses (as used in Study one, see Table 6). They are then asked to identify if each weakness should be consider a material weakness, a significant deficiency or neither and to assess the severity of each weakness. Next the EAs are asked how willing they would have been to rely on a control assessment performed by XYZ's IA based on their knowledge of the organization's IA function (on a seven-point scale). Finally, the EAs answer a manipulation check question, as well as other demographic and comprehension questions.

FIGURE 3
Experimental Procedures

Panel A: Internal Auditor Sample

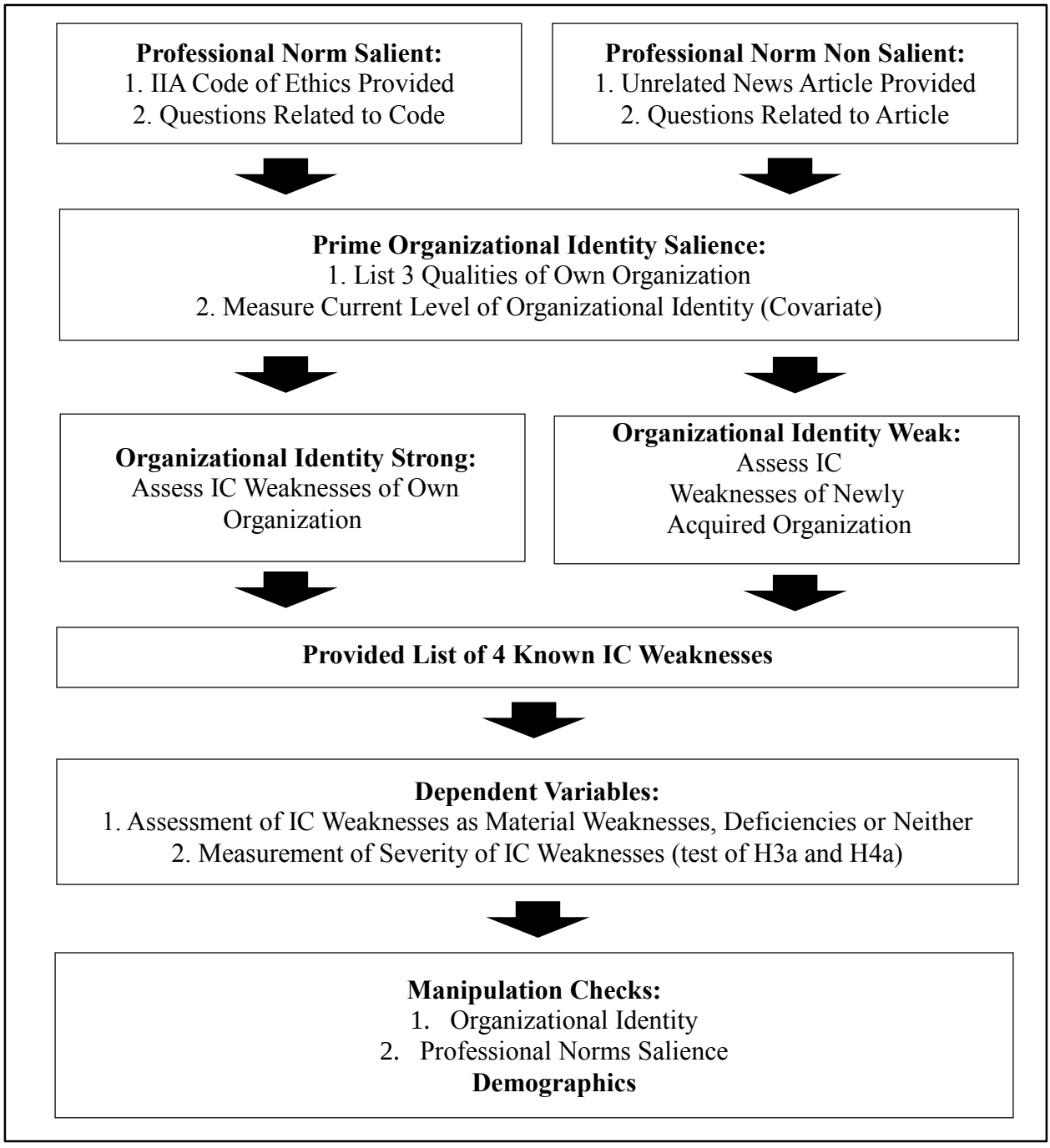
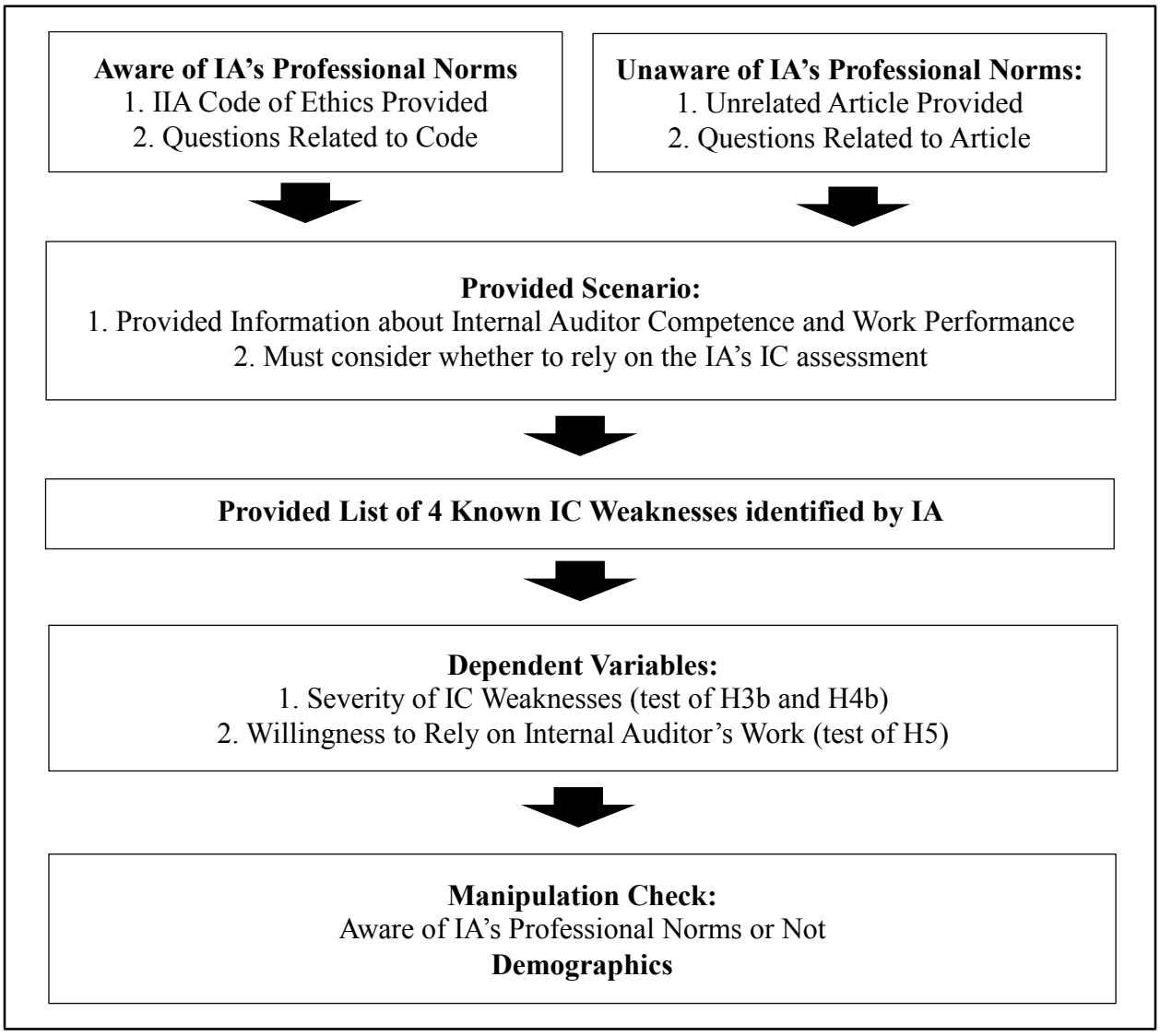


Figure 3 continued

Panel B: External Auditors Sample



5.1.3 Independent Variables

Organizational Identity Strength of Internal Auditors

To manipulate organizational identity strength (OI) in the IA participant group, I vary information about the organization in which the IA is expected to assess the internal control weaknesses. They are asked to imagine that during interviews with employees, four internal control weaknesses were identified and their task is to assess the severity of each weakness. Participants in the strong OI condition assess the internal controls of their own organization. Participants in the weak OI condition assess the internal controls of XYZ, Inc., a company that has been recently acquired and is relatively unfamiliar to them.

IA Professional Norms Salience

Internal auditor participants in the IA professional norms *salient* condition receive the IIA code of ethics and are asked to read it, compare it to their own code, and state that they adhere to this or a similar code. Internal auditor participants in the IA professional norms *non-salient* condition receive an unrelated news article and are asked to read it and answer some questions about what they have read. The excerpt from the IIA Code of Ethics and the news article assigned are provided in Appendix B.

EA Professional Norm Awareness

Half of the EAs are informed that the IAs working for their audit client adhere to the IIA code of ethics and are provided with a copy of the code. The other half are told nothing

about a code of ethics and instead read an unrelated news article. Both groups answer questions about the content they have read to ensure they comprehend it and have spent time carefully reading it.

5.1.4 Dependent Variables

Severity of Internal Control Weaknesses

Similar to Gramling et al. (2012), I use two questions to measure the internal and external auditors' assessments of the severity of the internal control weaknesses. The first question asks "Please select whether you believe this internal control concern to be a material weakness, significant deficiency or neither." This question is asked because it is similar to a decision auditors would have to make in practice. The second question asks the auditor to "Please rate the internal control concern based on your opinion of the overall level of severity" on a scale of 1 to 7 where 1 = low severity and 7 = high severity.

Willingness to Rely on Internal Auditor Assessment

I use a modified version of the question used by Glover et al. (2008), in which they ask EA participants to indicate to what extent their audit firm would rely on work already performed by IAs. I modify this question to ask "to what extent would you have been willing to rely on a previously performed internal auditor assessment of the severity of these concerns?" I use a 7 point Likert scale, which is anchored at "not willing to rely" (1) and "very willing to rely" (7)

Usefulness of Internal Control Assessment

I also ask the EAs how useful having the IAs internal control assessment would have been when conducting their own assessment. I use a 7 point Likert scale, which is anchored at "not useful" (1) and "very useful" (7).

5.1.5 Manipulation Checks and Control Variables

To assess my manipulation of organizational identity strength, I use a modified version of the *Inclusion of Others in Self Scale* (Aron et al., 2004). This scale provides the participant with seven images of two overlapping circles, 'self' and 'organization (XYZ, Inc.)' depending on condition. These images range from no overlap (weak identity) to almost complete overlap (high identity).

To assess my manipulation of professional norms salience for IAs, I use a measure from Bauer (2011). Participants are asked "To what extent has the information in this experiment made you think about the accounting profession and the values, attributes, and qualities you possess as a member of this profession". I use a 7-point Likert scale anchored at "Gave it little thought" (1) and "Gave it much thought" (7).

To assess my manipulation of EA awareness of the IA's professional norms, I use the following question; "Based on the information in this experiment, please rate how objective you perceive the internal auditor to be". Again, responses are collected on a 7-point Likert scale anchored at "Not very objective" (1) and "Highly objective" (7). I design this question to capture the EA's perception of the IA's objectivity because making salient the IA's professional norms to the EA is expected to make the EA see the IA as being more objective.

I control for the EA's past perception of IA's objectivity by asking the following question; "Please rate how objective you typically perceive the internal auditors to be", anchored at "Not very objective" (1) and "Highly objective" (7). (Referred to as *Past Perception*). Finally, I control for the IA participants' pre-existing level of organizational identity using the modified six question identity scale from Mael and Ashforth (1992) as used in Study one.

5.2 Results

5.2.1 Participants

Demographics for all IA participants in Study two are presented in Table 11. More than 50 percent of participants in this group are over 40 years of age and all are at least 20 years of age. Ninety percent of participants have at least 4 years work experience and 85 percent have at least 4 years of internal audit work experience. Results also indicate that 48 percent are male and 85 percent have participated in an internal control assessment in the past.

Overall, I find no significant differences on demographics between experimental conditions (all $p > 0.100$). However, to the extent that these characteristics may have effects across all conditions, I do run all main hypothesis tests with the above variables as controls, but none are significant. Also, none of these variables are correlated with the dependent variables.

TABLE 11
Internal Auditor Demographics [n = 83]

	Range:	#	%	Cumulative %
Experience:	1-3	8	9.8	9.8
	4-6	15	18.3	28
	7-9	14	17.1	45.1
	10+	45	54.9	100
IA Experience:	1-3	11	13.4	13.4
	4-6	17	20.7	34.1
	7-9	15	18.3	52.4
	10+	39	47.6	100
Sex:	Male	38	45.8	
	Female	41	51.9	
Age:	20-30	20	24.7	24.7
	31-40	19	23.5	48.1
	41-50	26	32.1	80.2
	>50	16	19.8	100
Experience with IC Assessment:	Yes	70	85.4	
	No	12	14.6	
Accounting Designation:	Yes	56	67.5	
	No	27	32.5	
Education:	Undergrad	49	59.7	59.7
	Graduate	33	60.3	100
	PhD	0	0	

Demographics for all EA participants in Study two are presented in Table 12. In the EA respondent group, more than 35 percent are over 30 years of age and all are at least 20 years of age. Seventy percent of participants have at least 4 years work experience and 91 percent have no internal audit work experience. Also, 78 percent are male and 82 percent have participated in an internal control assessment in the past.

TABLE 12
External Auditor Demographics [n = 34]

	Range:	#	%	Cumulative %
Experience:	1-3	10	30.3	30.3
	4-6	10	30.3	60.6
	7-9	6	18.2	78.8
	10+	7	21.2	100
IA Experience:	0	31	90.9	90.9
	1-3	3	9.1	100
	4-6	0	0	100
	7-9	0	0	100
	10+	0	0	100
Sex:	Male	26	78.8	
	Female	7	21.2	
Age:	20-30	21	63.6	63.6
	31-40	8	24.2	87.9
	41-50	4	12.1	100
	>50	0	0	100
Involvement with IC Assessment:	Yes	27	81.8	
	No	6	18.2	
Accounting Designation:	Yes	29	87.9	
	No	4	12.1	
Education:	Undergrad	14	42.4	42.4
	Graduate	19	57.6	100
	PhD	0	0	

T-tests indicate marginally significant differences in years of experience (t = 1.869, p = 0.071) and involvement with prior internal control assessments (t=1.752, p=0.09) across conditions, as well as a significant difference on accounting designation across conditions (t=2.307, p=0.028). Age, sex, education and IA experience do not vary significantly between *IA Professional Norms Awareness* conditions (all p > 0.100). To the extent any of these characteristics have effects across the conditions, I do run all main hypothesis tests with the above variables as controls, but none are significant. Also, none of these variables are correlated with the dependent variable.

5.2.2 Manipulation Checks

Internal Auditor Sample

All IAs are initially asked a comprehension check question to ensure they understand whether they are assessing internal control weaknesses discovered in their own organization (IA strong OI) or XYZ, Inc., a recently acquired subsidiary (IA weak OI). All IAs answered this question correctly before they rated the severity of the weaknesses provided to them.

To assess my manipulation of organizational identity strength, I use a modified version of the *Inclusion of Others in Self Scale* (Aron et al., 2004). This scale includes seven representations of the auditor and the organization as two circles with varying degrees of overlap from no overlap (scored as 1) to almost complete overlap (scored as 7). The participants are asked to choose the degree of overlap that best represents how they feel about the alignment of their personal attributes, qualities and values with those of the organization. I find that there is a marginally significant difference between the mean score of the two groups of IAs (F=1.608, p=0.104). While I had hoped to achieve a stronger effect, this marginally

significant difference will only limit my ability to find a differences in internal control assessments between the IA groups. Results can be found in Table 13.

TABLE 13
Internal Auditor Organizational Identity Strength Manipulation Check [n=83]

Panel A: Descriptive Statistics

Mean (std. dev.) n	**Auditor Organizational Identity Strength**		
	OI Strong	**OI Weak**	**Overall**
Identity with the Organization	4.643 (1.162) 43	4.308 (1.245) 40	4.482 (1.217) 83

Panel B: One way ANOVA of Auditor Organizational Strength

Source	***df***	**F**	**p-value**
Auditor OI	1	1.608	0.104
Total	82		

Notes:
Organizational identity strength is measured using a modified version of the *Inclusion of Others in Self Scale* (Aron et al., 2004) that uses a scale of 1 = weak identity and 7 = strong identity.

Auditor OI Manipulation: OI Strong when assessing weaknesses in own company and OI Weak when assessing weaknesses in newly acquired subsidiary.

p-value is one tailed because hypotheses are directional.

To assess my manipulation of professional norms salience for IAs, I use a measure from Bauer (2011). Participants are asked "To what extent has the information in this experiment made you think about the accounting profession and the values, attributes, and qualities you possess as a member of this profession". I use a 7-point Likert scale anchored at

"Gave it little thought" (1) and "Gave it much thought" (7). I find that there is a significant difference between the two groups (F=3.497, p=0.032). Results can be found in table 14.

TABLE 14
Internal Auditor Professional Norms Salience Manipulation Check [n=83]

Panel A: Descriptive Statistics

Mean (std. dev.) n	**Professional Norms Salience**		
	Salient	**Non-Salient**	**Overall**
Salience of "... the values, attributes, and qualities you possess as a member of this profession"	5.450 (1.319) 43	4.907 (1.324) 40	5.169 (1.342) 83

Panel B: One way ANOVA of Professional Norms Salience

Source	***df***	**F**	**p-value**
Professional Norms Salience	1	3.497	**0.032**
Total	82		

Note:
Professional Norms Salience measured by asking on a 7 point scale, "To what extent has the information in this experiment made you think about the accounting profession and the values, attributes, and qualities you possess as a member of this profession".
p-value is one tailed because hypotheses are directional.

External Auditor Sample

All EAs are initially asked a comprehension check question to ensure they understand they are auditing an existing client. All EAs answered this question correctly before they rated the severity of the information provided to them.

To assess my manipulation of EA awareness that the IA adheres to a set of professional norms, I use the following question; "Based on the information in this experiment, please rate how objective you perceive the internal auditor to be?" on a scale of 1 = Not very objective to 7 = strongly objective. I find that there is a significant difference between conditions, while controlling for EAs past perception of IA objectivity (F=6.814, p=0.014; Past perception F=1.807, p=0.189). This result shows that the EA's perception of the objectivity of the IAs internal control assessment in this sample is significantly higher when the EA is aware that the IA adheres to the IIA code of ethics (i.e., the IA's professional identity is made salient to the EA), as expected. See Table 15 for results.

To control for the EAs level of past willingness to rely on IAs' work, I also ask "Please rate the degree to which you personally typically rely on your client's internal audit work" on a scale of 1 = Not Very likely to 7 = Highly likely (denoted in tables as *Prior Rely).* Running a one way ANOVA with *Prior Rely* as the dependent variable, I find that there is a significant difference between conditions (F=10.073, p=0.003), summarized in Table 15, panel B. Given its statistical significance, I include *Prior Rely* as a covariate when testing H5.

TABLE 15
EA Manipulation Checks and Covariates

Panel A: Descriptive Statistics

Mean (std. dev.) n	EA Awareness of IA Professional Norms		
	Aware	**Unaware**	**Overall**
How objective you perceive the internal auditor to be?	4.813 (1.276) 16	3.647 (0.785) 17	4.212 (1.192) 33

Panel B: ANOVA for EA Awareness of IA Professional Norms [n=33]

Effect	**Mean Squares**	**F**	***df***	**p-value (two-tailed)**
Perceived Objectivity	7.352	6.814	1	**0.014**
Covariate:			1	
Past Perception of typical IA objectivity	1.950	1.807		**0.189**
Error	1.079		30	

Panel C: ANOVA for *Prior rely*

Source	***df***	**F**	**p-value**
IA Professional Norm Salience	1	**10.073**	**0.003**
Total	32		

Notes:
Awareness of IA Professional Norms manipulation – Aware when EA knows the IA adheres to IIA code of ethics and reads its contents and not aware when EA reads an unrelated news article and no mention is made of IIA code of ethics or other professional norms.

Perceived objectivity is the EA's perception of the objectivity of the IA described in the scenario.

Past Perception of Typical IA Objectivity is the EA's perception of the objectivity of the typical IA previously encountered in practice.

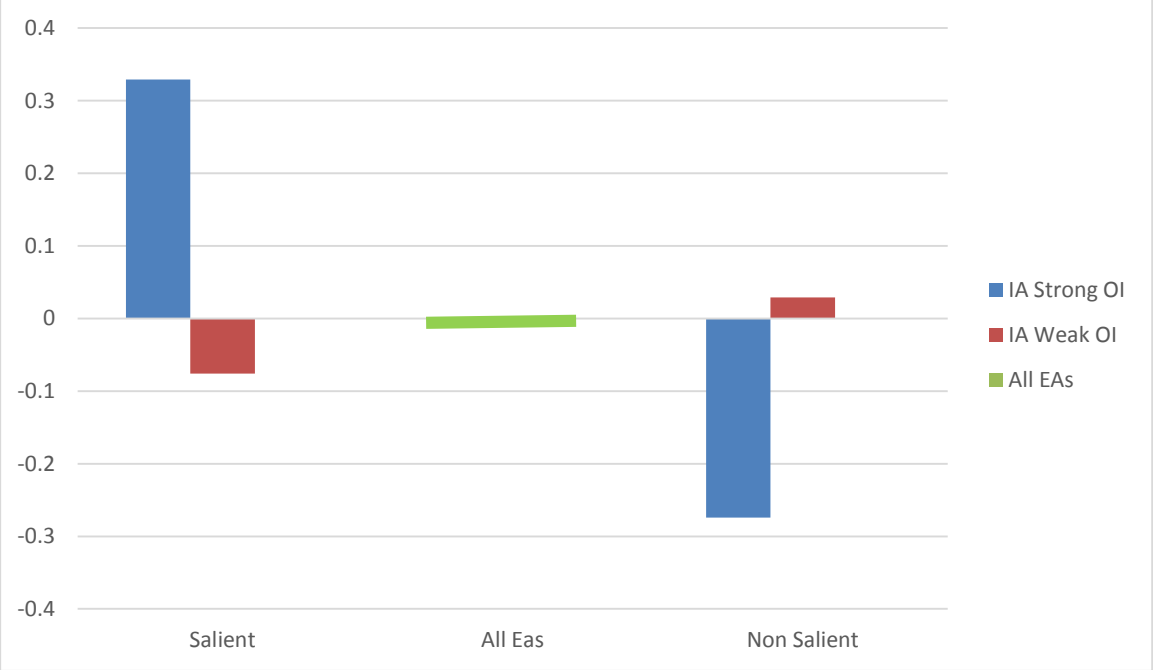
Prior rely is the EA's typical willingness to rely on an IA's internal control assessment.
Scale anchors are 1 = low degree of perceived objectivity or reliance and 7 = high degree of perceived objectivity or reliance.

5.2.3 Descriptive Statistics for Internal and External Auditor Samples

The descriptive statistics for the IA sample are reported in Table 16. Because I intentionally construct each IC weakness to have a different severity level, I mean center each IC weakness based on each ICs overall severity rating. This allows me to eliminate the difference found in severity between each IC and focus on the difference found between auditor types. Therefore, a positive mean indicates a more severe rating than the overall mean and a negative mean indicates a less severe rating than the overall mean of the IC. Also I treat the four IC ratings for each participant as four items on a scale. Therefore, my dependent variable is constructed as a repeated measure of the four IC ratings within each condition and I refer to it as *Severity*. Again, this is done for Study two because unlike in Study one, I am interested in the overall difference in severity assessments between auditor types, rather than the specific differences found in assessments between the four different ICs and depending on auditor type. A graphical representation of the centered means is found in Figure 4. Table 16 reports the overall centered means and standard deviations for each condition.[24]

[24] For simplicity purposes, I report, both in figure 4 and table 16, the overall centered means for all four ICs combined. I also ran overall model using the overall centered means and found similar results to mixed model used in the results section.

FIGURE 4
Mean-Centered Means for Severity of Internal Contral Weaknesses by Experimental Condition



Notes:
Severity is the overall mean-centered mean severity rating of the 4 identified internal control weaknesses (initially rated on a scale of 1 = low severity to 7 = high severity). By construction, a positive value indicates a more severe rating than a negative value.

Internal Auditor OI is strong for internal auditors auditing their own organization and weak for internal auditors auditing a newly acquired division.

Professional Norm Salience is salient when the IA reads the IIA code of ethics and non-salient when the IA reads an unrelated news article and no reference is made to the code of ethics. EA's professional norms not manipulated.

Centered means created by first calculating the overall mean severity rating for each IC and then subtracting it from the mean severity rating for each IC. Next, the mean of the four centered ICs means is taken for each condition.

TABLE 16

Descriptive Statistics for Assessed Severity of Internal Control Weaknesses for Internal and External Auditor Samples

	Centered mean (std. dev.) n	Auditor Group			
		Internal Auditor			
		Strong OI	Weak OI	Overall	EA
Professional Norm Salience	Salient	0.329 (0.502) 22	-0.076 (0.851) 23	0.122 (0.724) 45	0.062 (0.715) 16
	Non-Salient	-0.274 (0.817) 21	0.029 (0.739) 17	-0.138 (0.788) 38	-0.069 (0.628) 18
	Overall	0.034 (0.733) 43	-0.313 (0.797) 40	0.003 (0.761) 83	-0.007 (0.664) 34

Notes:

Centered means created by first calculating the overall mean severity rating for each IC and then subtracting it from the mean severity rating for each IC. Next, the mean of the four centered ICs means is taken for each condition.

Severity is the overall mean-centered mean severity rating of the 4 identified internal control weaknesses (initially rated on a scale of 1 = low severity to 7 = high severity). By construction, a positive value indicates a more severe rating than a negative value.

Internal Auditor OI is strong for internal auditors auditing their own organization and weak for internal auditors auditing a newly acquired division.

Professional Norm Salience for Internal auditors is salient when the IA reads the IIA code of ethics and non-salient when the IA reads an unrelated news article and no reference is made to the code of ethics.

External auditors professional norm awareness means the EA is aware that the IA adheres to the IIA code of conduct while non-salient means the EA unaware and no reference is made to the code of ethics.

5.2.4 Hypotheses Testing

Hypotheses 3a and 4a focus on how IAs with different levels of organizational identity strength will differ in their ratings of the severity of internal control weaknesses, while hypotheses 3b and 4b focus on how IAs with a strong organizational identity and EAs will differ in their ratings of the severity of internal control weaknesses. To test these four hypotheses, I will first focus on the comparison of the IAs (strong OI vs. weak OI) and then focus on the comparison of IAs with strong organizational identity and the EA group.

To analyze hypotheses 3a and 4a, I start by running a repeated measure mixed model with *Severity*, measured as the centered mean severity ratings for each of the four ICs, as the repeated dependent variable, and *Professional Norm Salience* (Salient/Non-Salient) and *Internal Auditor OI* (Strong/Weak) as the independent variables. I find a significant interaction of *Internal Auditor OI* and *Professional Norm Salience* ($F=8.674$, $p=0.002$). This Model is found in Table 17, panel A.

In Hypothesis 3a, I predict that IAs will assess internal control weaknesses less severely when their organizational identity is strong rather than weak. Therefore, to test H3a I focus on the main effect of *Auditor OI* within the model, which is not significant ($F=0.141$, $p=0.355$). This does not provide support for H3a.

Hypothesis 4a predicts that salient professional norms will attenuate the difference in assessment of internal control weaknesses of IAs with strong and weak organizational identities. In other words, I predict that by introducing salient professional norms, internal auditors with strong OI will make judgments of the severity of internal control weaknesses more like internal auditors with weak OI. To test H4a, I use contrast coding (3, -1,-1,-1) to

compare the mean severity ratings in the Strong OI/ Non-Salient norms cell to the mean severity ratings in the Strong OI/Salient norms cell, the Weak OI/Salient norms cell, and the Weak OI/Non-Salient norms cell. As presented in Table 17, panel B, the difference contrast coded test is significant (t=-2.649, p=0.004). This provides support for H4a.

As H3a and H4a combine to predict a significant interaction, which was found, follow-up investigation is required to understand the form of that interaction.[25] I use planned comparisons, first to compare the Strong OI/Non-salient norms cell to the Weak OI/Non-salient norms cell. I find a marginally significant difference in *Auditor OI* (t=1.741, p=0.042) indicating when OI is strong, internal auditors rate internal control weaknesses less severe than when their OI is weak. This provides some support for H3a. See Table 17 panel C for results. Next I compare the difference in severity ratings between Strong OI/Salient norms cell to the Weak OI/Salient norms cell and find it to be significant (t=2.461, p=0.007).

Therefore, the planned comparison results provide some support that the interaction is disordinal, not ordinal as predicted, and highlight that making professional norms salient actually causes internal auditors with strong OI to assess internal control weaknesses more severely than those with weak OI.

[25] It is important to understand the form of the interaction as a disordinal interaction can mask the main effect of the independent variables (Aiken and West, 1991).

TABLE 17

Hypothesis Testing for H3a and H4a [n = 83]

Panel A: Repeated Measure Mixed Model of Severity of Internal Control Assessment

Effect	Mean Square	F	*df*	p-value (one-tailed)
Professional Norm Salience	5.075	3.921	1	**0.025**
Auditor OI	0.215	0.141	1	0.355
*Professional Norm Salience*Auditor OI*	10.287	8.674	1	**0.002**
Error	1.561		328	

Panel B: Contrast coding for H4a

Effect	t	*df*	p-value (one-tailed)
Coding (-3, 1, 1, 1)	2.649	328	0.004
-3: Strong OI/Non-Salient			
1: Strong OI/Salient			
1: Weak OI/ Non-Salient			
1: Weak OI/ Salient			

Panel C: Planned Comparisons to investigate interaction

Effect	t	*df*	p-value (one-tailed)
H3a Non-Salient Professional Norms:			
Strong OI vs Weak OI	-1.741	328	0.042
H4a Salient Professional Norms:			
Strong OI vs. Weak OI	2.467	328	**0.007**

Notes:

Severity is the overall mean-centered mean severity rating of the 4 identified internal control weaknesses (initially rated on a scale of 1 = low severity to 7 = high severity). By construction, a positive value indicates a more severe rating than a negative value.

Internal Auditor OI is strong for internal auditors auditing their own organization and weak for internal auditors auditing a newly acquired division.

Professional Norm Salience is salient when the IA reads the IIA code of ethics and non-salient when the IA reads an unrelated news article and no reference is made to the code of ethics.

p-values are one tailed because the hypotheses are both directional.

Significance for planned comparisions adjusted to 0.025 using bonferroni method.

I now turn my focus to H3b and H4b, which compare how IAs with strong OI and EAs will differ in their severity rating of internal control weaknesses. To analyze hypotheses 3b and 4b, I again start by running a repeated measure Mixed Model with *Severity* (centered mean of four IC severity ratings) as the repeated dependent variable, and *Professional Norm Salience* (Salient/Non-Salient) and *Auditor type* (IA with strong OI versus EA) as the independent variables. I find a main effect of *Professional Norm Salience* (F=7.962, p=.002), and a significant interaction of *Auditor Type* and *Professional Norm Salience* (F=3.526, p=0.033). This model is found in Table 18, Panel A.

TABLE 18

Hypothesis Testing for H3b and H4b [n = 77]

Panel A: Repeated Measure Mixed Model for Severity of Internal Control Assessment

Effect	Mean Square	F	*df*	p-value (one-tailed)
Between:				
Professional Norm Salience	2.561	7.962	1	**0.002**
Auditor Type	0.019	0.342	1	0.281
*Professional Norm Salience*Auditor Type*	1.053	3.526	1	**0.033**
Error	0.453		304	

Panel B: Contrast coding for H4b

Effect	t	*df*	p-value (one-tailed)
Coding (-2, 1, 1)	2.871	305	0.002
-2: Strong OI/Non-Salient			
1: Strong OI/Salient			
1: All EAs			

Panel C: Planned Comparisons to Examine Interaction

Effect	t	*df*	p-value (one-tailed)
H3b Non-Salient:			
IA with Strong OI vs EA	-1.446	305	**0.075**
H4b Salient:			
IA with Strong OI vs EA	2.467	305	**0.007**

Notes:

Severity is the overall mean-centered mean severity rating of the 4 identified internal control weaknesses (initially rated on a scale of 1 = low severity to 7 = high severity). By construction, a positive value indicates a more severe rating than a negative value.

Internal Auditor OI is strong for internal auditors auditing their own organization.

Professional Norm Salience is salient when the IA reads the IIA code of ethics and non-salient when the IA reads an unrelated news article and no reference is made to the code of ethics.

p-values are one tailed because the hypotheses are both directional.

n includes 43 IAs in the Strong OI codition and all 34 EAs.

In hypothesis 3b, I predict that IAs with strong organizational identity will assess internal control weaknesses less severely than an EA would. Therefore, to test H3b I focus on the main effect of *Auditor OI* within the model, which is not found to be significant (F=0.342, p=0.281). This does not provide support for H3a.

Hypothesis 4b predicts that the difference in assessments of internal control weaknesses between internal auditors with a strong organizational identity and an EA will be attenuated when professional norms are made salient to the IA group. In other words, I predict that by introducing salient professional norms, internal auditors with strong OI will make judgments of the severity of internal control weaknesses more like EAs do. Therefore, to test H4b I run contrast coding (-2, 1, 1) to compare the mean severity ratings in the IA Strong OI/Non-salient norms cell to the mean severity ratings in the IA Strong OI/Salient norms cell and the entire EA sample.[26] As presented in Table 18, panel B, the contrast coding test is significant (t=-2.871, p=0.002). This provides support for H4b.

Again, H3b and H4b combine to predict a significant interaction, which I do find (F=3.526, p=0.033). I again use planned comparisons to investigate the form of this interaction. First, I compare the mean severity ratings in the IA Strong OI/Non-salient cell to the mean severity ratings provided by the EAs. I find a marginally significant difference in mean severity ratings depending on *Auditor Type* (t=-1.448, p=0.075). This provides some support for H3b by indicating that IAs with strong OI assess IC weaknesses to be less severe

[26] Half of the EA sample was made aware that the IAs adhered to professional norms and the other half was not. This manipulation was specifically used to test hypothesis 5 using the EAs' reliance judgment as the dependent variable, not the severity ratings of ICS. In tests of H3b and H4b, I collapse the EAs across these conditions. A t-test confirms that there is no significant difference in IC severity ratings depending on EA awareness that IA adheres to professional norms (t=0.151, p=0.571).

than would an EA. Results are presented in Table 18, panel C.

. Next, I compare the mean severity ratings in the IA Strong OI/Salient cell to the mean severity ratings provided by the EAs. I find a significant difference in mean severity ratings depending on *Auditor Type* (t=2.467, p=0.007). Therefore, the planned comparison results provide some support for a disordinal interaction, instead of the predicted ordinal interaction. In other words, when professional norms are non-salient internal auditors with strong OI assess internal controls less severely than EAs, but when professional norms are salient internal auditors with strong OI actually assess internal control weaknesses more severely than EAs would. Results are presented in Table 18, panel C.

In summary, I find marginal support for H3a and H4a, that an internal auditor will assess internal control weaknesses less severely when their organizational identity is strong rather than weak and less severely than an EA. I also find strong support for H3b and H4b, that when professional norms are salient to the IA, any difference found in H3a and H4a is not only attenuated, but the IA will actually assess internal control weaknesses more severely when their organizational identity is strong rather than weak and more severely than an EA. Next I focus on hypothesis 5.

The descriptive statistics for Hypothesis 5 are reported in Table 19, panel A. In hypothesis 5, I predict that when the EA is aware that the IA adheres to strong professional norms (operationalized as adherence to the IIA code of ethics), the EA will be more willing to rely on the IA's internal control assessment than when the EA is not aware of the IA's strong professional norms. Therefore, to test hypothesis 5, I focus within the EA participant group and compare those who are made aware that the IA has strong professional norms and those

who are not made aware. The main dependent variable of interest is the EA's willingness to rely on the IAs work (1 = not willing to rely to 7 = very willing to rely). Therefore to test H5, I run a Univariate ANOVA on *Rely* as the dependent variable and *IA Professional Norm Salience* as the independent variable. As discussed in the control section, I did include *Prior Rely* as a covariate, but it is not significant so I do not include it in the final results. I find *Rely* ($F=8.38$, $p=0.003$) to be significant. Results are reported in Table 19, panel B. This result provides support for hypothesis 5. When the EA is aware that the IA adheres to strong professional norms, the EA is more willing to rely on the IAs work as predicted.

For additional analysis, I also collect EAs' perceptions of the usefulness of the IA's assessment when conducting their own assessment (1 = not very useful to 7 = very useful) and the degree of reliance (1= would not even read to 7 = would both read and fully rely). I run a multivariate ANOVA on *Usefulness* and *Level of Reliance* as the dependent variables and *IA Professional Norm Awareness* as the independent variable. I again included *Prior Rely* as a covariate, but again it is not significant and is left out of the final results. I find *Level of Reliance* to be significant ($F=5.976$, $p=0.010$), but *Usefulness* is not significant. Results are found in Table 19, panel C.

I also run a correlation test on *Rely*, *Level of Reliance* and *Usefulness*. I find that *Rely* is significantly correlated with *Level of Reliance* and *Usefulness*, but not strongly (.397, and .421). I also find that the overall mean of *Usefulness* is 5.50. Since *Usefulness* is measured on a 7 point scale, I run a one-sample t-test to determine if the mean of 5.50 is statistically greater than the mid-point of the scale, which is 4.00 (neutral). I find the mean of *Usefulness* is significantly greater than the scale mid-point ($t=5.745$, $p<0.001$). These correlations and the

significant mean of *Usefulness* provide additional support that although EAs typically find the IA to be useful, their level of reliance and their willingness to rely on the IA can be increased through the knowledge of the IA following a code of ethics. Results are found in Table 19.

TABLE 19
Tests of Hypothesis 5

Panel A: Descriptive Statistics – Rely, Usefulness, and Level of Reliance

Mean (std. dev.) n	**Rely**	**Usefulness**	**Level of Reliance**
EA Aware of IA Strong Professional Norms	4.938 (1.12) 16	5.625 (1.50) 16	4.688 (0.60) 16
EA Unaware of IA Professional Norms	3.833 (1.09) 18	5.389 (1.57) 18	4.000 (0.97) 18
Total	4.353 (1.22) 34	5.50 (1.52) 34	4.324 (0.87) 34

Panel B: H5 Univariate ANOVA on Rely

Effect	**Mean Squares**	**F**	***Df***	**p-value (one-tailed)**
Rely	10.32	8.38	1	**0.003**
Error	1.23		32	

Table 19 continued

Panel C: Multivariate ANOVA on Usefulness, and Level of Reliance

Effect	Mean Squares	F	*df*	p-value (one-tailed)
Level of Reliance	4.00	5.97	1	**0.010**
Error	0.67		32	
Usefulness	0.47	0.19	1	0.378
Error	2.37		32	

Panel D: Correlation of Rely, Usefulness, and Level of Reliance

(n=34)	***df***	*Level of Reliance*	*Usefulness*
Rely	1	0.397*	0.421*
Level of Reliance	1		0.215

Panel E: One Sample t-test with *Usefulness* as the Dependent Variable

Source	***df***	**t**	p-**value**
Usefulness	33	**5.745**	**<0.001**

Notes:

*Correlation is significant at the 0.05 level (2-tailed). Pearson Correlation test was used.

Rely is the EA's willingness to rely on this particular IA's internal control assessment measured on a 7 point scale where 1 = not willing to rely to 7 = very willing to rely.

Usefulness is how useful the EA would have found this particular IA's internal control assessment while doing their own assessment measured on a 7 point scale.

Level of Reliance is the level in which the EA would rely on this particular IA's internal control assessment measured on a 7 point scale where 1 = would not even read to 7 = would read and fully rely.

EA Awareness of IA Professional Norms: EAs are either aware that the IA adheres to the IIA code of ethics or is unaware.

p-values are one tailed because the hypothesis is directional.

t-test used to compare mean of *Usefulness* to midpoint of scale at 4. Scale is a 7 point scale.

Chapter 6
Discussion and Conclusion

In this chapter I provide the concluding remarks on my thesis. First, I discuss the main results, from Study one and two, and the implications from these results on the overall audit process. Next, I discuss the limitations found within my thesis and any possibilities of future research that could come from these limitations. Finally, I conclude with an overall conclusion to the thesis.

6.1 Discussion of Results and Implications

In chapter 4, I analyze my results for Study one. Overall, I find support for Hypothesis 1 and 2. Together these findings provide evidence that IAs can obtain more information from employees than EAs, specifically when that information is more severe in nature. In chapter 5, I analyze my results for Study two. I find some support for hypothesis 3a and 3b, but find strong support of hypothesis 4a, 4b and 5. Together Study two's results provide some evidence that IAs may not be biased when assessing IC weaknesses, as some feared. Also, a salient IA professional standard can help to ensure IA objectivity, even making them overly conservative, by ensuring IAs will assess IC weaknesses more severely than EA and that EAs, when aware of IA professional standards are more willing to rely on the IAs. Next, I discuss the results from each study in detail, focusing on specific implications.

6.1.1 Study One

Study one focuses on my first overall research question, which is, does the "employee" identity the IA assumes within the organization allow them the opportunity to discover more internal control weaknesses from their organization than an EA? I predict, in

hypothesis one, that employees of an organization will be willing to share more information about internal control weaknesses with the IA than the EA. This prediction is based on Social Identity Theory, in that strong identification towards the in-group creates a bias that leads to increased information sharing within that in-group (Ashforth et al., 2008). My results support this hypothesis and show that, in general, employees are willing to share internal control weaknesses more with IAs than EAs.

Hypothesis 2 takes this a step further to state that the severity of the internal weaknesses will matter. Specially, as severity of the weakness increases, the difference between the IA and EA will be magnified. This is based on the silence literature, in which the decision to withhold relevant information increases with the intensity of threat that information provides (Kish-Gephart et al., 2009). Therefore, more severe information will cause employees to be silent. Again, identity creates a bias with the in-group over the out-group, therefore silence will be invoked more often for the EA than IA. Results again provide support for hypothesis 2 as I find the difference in information sharing between IAs and EAs is found specifically in the high severity IC weaknesses. Also, I perform a basic mitigation analysis which provides some support for silence as the process in which the IA identity creates the difference in information sharing.

Practically, this demonstrates that it is very important for the EA to use the IA, or the IAs previous work, during the IC assessment process. Due to the IA's status within the organization (part of the organization), the IA has a comparative advantage over the EA to gain information from employees. SOX 404 internal control assessment requires management and EAs to report on the internal controls of an organization (SOX, 2002). Both

management and EAs are expected to report on internal control weaknesses found at three levels; deficiencies (low severity), significant deficiencies (medium severity) and material weaknesses (high severity). Considering the IA's comparative advantage is specifically for high severity information (material weaknesses), it is particularly important for the EA to understand that the IA has an advantage in gathering high severity information.

6.1.2 Study Two

Study two focuses on my second overall research question, which is; once the IA has obtained the internal control weaknesses can the IA readily move from one identity to the other (from the organizational insider to the professional auditor) and assess the internal control information objectively? I predict in hypothesis 3 that an IA with strong organizational identity will assess IC weaknesses less severely than an IA with weak organizational identity or an EA. Again, I rely on social identity theory to make these predictions, as SIT predicts that individuals typically make more positive evaluations of their in-group than their out-group (Ashforth and Mael, 1989; Hogg and Terry, 2000). I find some support that IAs with a strong organizational identity rate the IC weaknesses less severely than both weak organizational identity IAs and EAs. Considering there have been conflicting results in prior literature, the marginally significant result found is not too surprising. Although I expected my results to be similar to field data found in a study by Bedard and Graham (2011), in which the IA typically classifies internal control deficiencies as less severe than they should be, my results are stronger than Stefaniak et al. (2012), in which they found no overall difference between IAs and EAs when making assessments.

In hypothesis 4a and 4b, I predict that salient professional standards will attenuate the

difference in severity rating between the IAs with a strong organizational identity and the IAs with a weak organization identity or the EAs. This prediction is based again on social identity theory and the social norms literature. As an individual becomes more aware of the norms of their professional group they will be more aware of what that professional group expects from them. Considering I found small differences between the three auditor groups in hypotheses 3a and 3b, I expect that making IA professional standards (professional norms) salient to the IA would cause the IA with a strong organizational identity to rate weaknesses more severely. I do find strong support for this hypothesis as salient professional norms do have an impact on strong organizational identity IAs in that they rate IC weaknesses more severely than weak organizational identity IAs and EAs, which means the professional norms may even make the strong organizational identity IAs overly conservative in their assessment.

Hypothesis 5 switches the focus from how the IA reacts to salient professional standards (professional norms) to how the EA reacts to knowing the IA follows these professional standards. Knowing that strong professional norms exist for the IA will help to ease any concerns the EAs has of the IA's objectivity, which will allow the EA to be more willing to rely on the IA. I find strong support for hypothesis 5 as knowing that the IA follows strong professional standards does make the EA more willing to rely on the IA.

Practically, these results again provide support that an IA with a strong organizational identity is a benefit to their own organization, to EAs and to the audit process as a whole. Critics of the IA having this strong organizational identity argue that the relationship the IA develops within the organization will affect their objectivity when asked to assess the organization's internal controls. My results show that this may be the case, but any bias found

can be attenuated. Salient professional standards for an IA will help ensure the IA is objective and will actually cause the IA to be more conservative than EAs in their assessments. Right now in practice IAs are only recommended to follow the IIA's code of ethics. To ensure IA objectivity, in fact and perception, IA functions (IAFs) could make the IIA code of ethics mandatory within their organization. A stronger link with the IIA would make the IA professional standards more salient. Also, by making the EA directly aware of a strong connection with the IIA and their code of ethics, IAs could improve their image of objectivity. This stronger connection with the IIA, based on the results of hypothesis 5, will also lead to EAs relying more on the IA and their work. Organizations would benefit in that audit fees could be reduced due to minimizing of repeated processes by both the IA and EA.

6.2 Limitations and Future Research Opportunities

Limitations in my thesis provide opportunities for future research. Although the results in Study one were as expected, I believe a better understanding is necessary of the result that IAs would actually share more high severity information than low severity information. My study specifically focused on the silence literature, but I believe a better understanding of the voice literature is also needed. Future research could focus specifically on the voice literature to determine why employees would share more high severe information with IAs than low severe information. Future research could also focus on how to improve the information sharing between employees and EAs. Understanding how an EA can gain more information from employees could also help to improve the audit process as a whole.

In Study two, results of hypothesis 3a and 3b were not as strong as expected. There are two possible explanations for this. The first explanation is that the IA is fairly objective in

their assessments, as found in Stefaniak at el. (2012). The second explanation is that the strong organizational identity manipulation was not strong enough, as was also a concern within the Stefaniak et al. (2012) study. My manipulation check of organizational identity was only found to be marginally significant between the strong organizational identity IA and the weak organizational identity IA. To investigate this further, future research could focus on strengthening this manipulation. Creating a significant difference of strong and weak organizational identity could help to improve our understanding if IAs do have an in-group bias when making assessments, as found in Bedard and Graham (2011); or if the bias does not exist, as found in my results and the Stefaniak et al. (2012) study.

Also in Study two, I test whether EAs will rely on IAs more when the EAs are made aware of the IAs' professional standards. I find support for this prediction, but there could be a concern that the manipulation of professional norms awareness is too strong. By specifically telling the EA that "…the internal auditors at XYZ, Inc. are required to follow the code of ethics", may make the EA believe the company XYZ, Inc. has taken extra care to guarantee the objectivity of the IA. Therefore, future research could focus on re-examining this hypothesis while reducing the strength of the manipulation. Also, the overall question of EA reliance on IAs is a complex topic and should be reviewed in much more depth. My study provides a mechanism which can increase the EAs reliance on IAs, but future research could focus on understanding the pros and cons of relying more on the IA and the boundaries in which this reliance will and should occur.

6.3 Conclusion

Overall, my thesis demonstrates that a strong organizational identity is a benefit to the

IA, as the IIA and their others believe. The strong identity an IA has with their organization can help the IA obtain more information from employees than would be possible from an outsider, such as an EA or an outsourced IA. The concern from critics, that IAs with a strong identity will be less objective, was only slightly substantiated within my thesis. An IA with a strong organizational identity may have an in-group bias, but having a salient professional standard for the IA would not only ensure the any bias would not affect their objectivity, but would also cause the IA to be even more conservative in their assessments. I also found in my thesis that EAs should be more willing to rely on the IA. This reliance could help to lower audit costs, by limiting duplicate work and improve the overall audit process. Overall, a strong organization identity and salient professional standards for the IA will provide more pertinent information to the audit process, ensure IA objectivity and increase EA reliance on the IA, which can only improve the audit process as a whole.

Appendix A
Study One Instrument

Please note this is a summary of the actual instrument used. Subheadings in bold italics are provided to guide the reader through the instrument and to allow the reader to make a connection between the material provided in this appendix and the main body of the dissertation.

Prescreen: (used on Amazon MTurk to ensure proper participants)

Are you either an internal or an external auditor? Yes No (must answer no)

Do you work in an office setting? Yes No (must answer yes)

Have you ever had an interaction with an auditor? Yes No (must answer yes)

If yes, how many?

Is your organization subject to SOX 404 requirements? Yes No

Auditor Identity Manipulation:

Introduction for all participants

In the following scenario you will be asked to play the role of yourself within a hypothetical organization, in which you will interact with an **internal (external)** auditor. Before you start the hypothetical scenario, in a couple of sentences please briefly discuss your most recent actual interaction with an **internal (external)** auditor.

Once you hit next you will not be able to go back to previous pages, so please pay attention to the background information.

High Auditor Identity

You are an employee within the accounting department of XYZ, Inc. and have been for some time. XYZ, Inc. as an organization has been consistently profitable during your time there and the organization has had no major financial or public relation issues to speak of. Overall, you are happy in your current position and you have no serious complaints about your manager or co-workers. Your organization is about to go through its annual internal control assessment.

This assessment has occurred every year since you started working here and your involvement is fairly regular. This particular assessment will be conducted by your organization's **internal audit department, not the external auditor.** This internal control assessment is used to fulfill **management's** SOX 404 requirements. Although the IA is performing the internal control assessment, they report to the Audit committee, ensuring their independence. Your organization's internal audit department's main function is to monitor and improve the internal controls of your organization.

The internal audit department is structured similar to and is located in the same building as your own department, located 2 floors down. The internal auditors within the department have a similar pay and benefit structure as yourself. You have been in training sessions with many of the internal auditors, but do not know any of them personally. Also, in the past the IA has been assessed by the external auditor as being competent and objective.

Low Auditor Identity

You are an employee within the accounting department of XYZ, Inc. and have been for some time. XYZ, Inc. as an organization has been consistently profitable during your time there and the organization has had no major financial or public relation issues to speak of. Overall, you are happy in your current position and you have no serious complaints of your manager or any co-workers. Your organization is about to go through its annual internal control assessment.

This assessment has occurred every year since you started working here and your involvement is fairly regular. This particular assessment will be conducted by your organization's **external audit firm**. This internal control assessment is used to fulfill **the external auditor's** SOX 404 requirements. The external audit firm is one of the 'big 4' accounting firms and is a reputable organization (3rd party organizations typically hired by the audit committee to perform an overall audit of your organization's financial statements). The external auditor's main function is to assess the overall accuracy of the financial statements. In doing so, they are typically required to express an opinion on the overall effectiveness of your organization's internal controls, which will be included in their overall audit report.

Employees from the external audit firm typically come in for a week or two a year, but their main office is located on the other side of town and they are paid directly by their own firm. The external auditor reports directly to their 3rd party organization and is completely independent. You typically don't have much contact with the external auditor and each year it is a different external auditor that shows up to conduct the assessment.

Comprehension Check:

Please answer the following questions about the previous information:

Note: you will need to respond correctly to continue. You will receive multiple attempts until you do answer correctly.

High Auditor Identity

1) Who employs the internal auditor?
   a) My organization (correct)
   b) A 3rd party organization
   c) The government

Low Auditor Identity

1) Who employs the external auditor?
   a) My organization
   b) A 3rd party organization (correct)
   c) The government

Internal Control Assessment Explained:

You have been informed, via email, that the **internal auditor (external auditor)** will be conducting this internal control assessment next week. The **internal auditor (external auditor)** has randomly selected a number of employees to interview and you have been selected. The **internal auditor (external auditor)** is looking for any internal control concerns that exist within your organization[27].

Provided on the next page is a list of internal control concerns you are aware that have occurred during the previous year. Although the **internal auditor (external auditor)** doesn't know you have this information, the **internal auditor (external auditor**) may find out about these concerns from other employees being interviewed. The **internal auditor (external auditor)** is interested in all internal control concerns, regardless of severity or materiality.

[27] The word "Concerns" is used throughout the instrument in place of "Weaknesses" to avoid biasing the participants into assuming they should all be considered "Weaknesses".

Provided List of 4 Known IC Weaknesses:

High severity:
IC1. Employees with password protected access to confidential client information stores their password on a sticky note underneath their keyboard. Client information includes credit card numbers and Social Insurance numbers.
IC2. Sales personnel frequently make unauthorized modifications to the terms of the company's standard sales contracts and there is not a review process in place to approve these changes. The nature of the modifications can greatly affect the timing and amount of revenue recognized. Individual sales transactions are frequently significant to the entity, and the gross margin can vary significantly for each transaction.
Low severity:
IC5. Salespeople gave discounts to customers and failed to record them on the customer order. In most instances, minor adjustments to revenue were made without contacting these salespeople.
IC6. The company has a written policy outlining when it is appropriate to provide meals to employees and requires a list of all attendees. Many times documentation supporting these meals and refreshment expenses at large company meetings does not generally show who attended these meetings or why attendees required food and refreshments to conduct business.

Dependent Variable and Process Measure:

Please answer the following questions for <u>each internal control concern</u>:

1C1 (E*xample – same process was followed for all four internal control weaknesses)* An employee with password protected access to confidential client information stores their password on a sticky note underneath their keyboard. Client information includes credit card numbers and social insurance numbers.

How comfortable would you be to share this information during the interview with the auditor? (1=Not very comfortable, 7=Very comfortable)

1	2	3	4	5	6	7
Not Very Comfortable						Very Comfortable

Please state the reason behind your selected comfort level:

_____

_____

_____

How likely is it that you **would** share this information during the interview? (1=**NOT** Likely I would share the information, 7=**Likely** I would share the information)

1	2	3	4	5	6	7
Likely						Likely
Not to share						to share

Please state the reason for level of willingness to share the weakness:

_____
_____
_____

Reason for Silence Question:

On a scale of 1 to 7 please rate the likelihood of the following statements being the reason that you might hold back information (1=Least likely the reason I might hold back information, 7=Most likely the reason I might hold back information.)

A) I do not believe I can make a difference.

B) I am fearful of the repercussions that could occur from providing this information

C) I do not want to provide information that may hurt my organization.

Measure Organizational Identification: (covariate)

[1 = Strongly Agree; 7 = Strongly Disagree]

(1) When someone criticizes my organization, it feels like a personal insult.

(2) I am very interested in what others think about my organization.

(3) When I talk about my organization, I usually say "we" rather than "they"

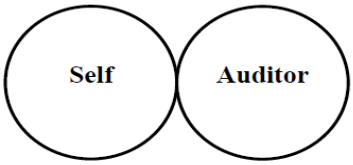
(4) My organization's successes are my successes.

(5) When someone praises my organization, it feels like a personal compliment.

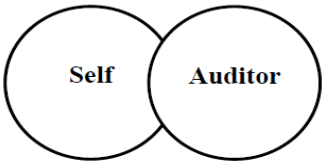
(6) If a story in the media criticized my organization, I would feel embarrassed.

Organizational identity covariate:

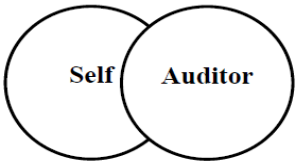
Select the picture below that best describes how your personal attributes, qualities, and values align or overlap with the attributes, qualities, and values of the internal (external) auditor.



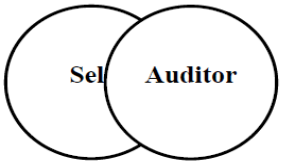
[1]



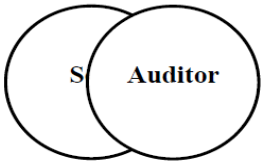
[2]



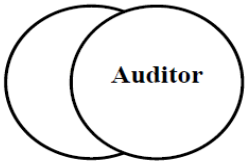
[3]



[4]



[5]



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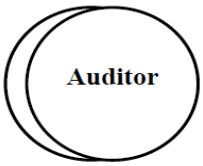


[7]

Demographic Questions:

These questions are to help describe the study sample and are optional. You may leave blank.

Age Range: 20-30 31-40 41-50 >50

Sex: M F

Years of work experience: 1-3 4-6 7-9 10+

Have you ever been involved in an internal control assessment: Y N

Appendix B
Study Two Instrument

Please note this is a summary of the actual instrument used. Subheadings in bold italics are provided to guide the reader through the instrument and to allow the reader to make a connection between the material provided in this appendix and the main body of the dissertation.

Professional Norm Salience Manipulation:

Salient Professional Norm Condition

External Auditor Information:

Below is a summary version of the Institute of Internal Auditors code of ethics principles, **which the internal auditors at XYZ, Inc. are required to follow.** (XYZ, Inc. is your hypothetical client throughout the following scenario). Please carefully review this document and answer the questions related to it on the following page.

Internal Auditor Information:

Below is a summary version of the Institute of Internal Auditors code of ethics principles. Please carefully review this document and answer the questions related to it on the following page.

CODE OF ETHICS

Principles

Internal auditors are expected to apply and uphold the following principles:

1. Integrity

The integrity of internal auditors establishes trust and thus provides the basis for reliance on their judgment.

2. Objectivity

Internal auditors exhibit the highest level of professional objectivity in gathering, evaluating, and communicating information about the activity or process being examined. Internal auditors make a balanced assessment of all the relevant circumstances and are not unduly influenced by their own interests or by others in forming judgments

3. Confidentiality

Internal auditors respect the value and ownership of information they receive and do not disclose information without appropriate authority unless there is a legal or professional obligation to do so.

4. Competency

Internal auditors apply the knowledge, skills, and experience needed in the performance of internal audit services.

*These principles are recommended for all Internal Auditors and required for all IIA members.

Related Questions:

Are these code of ethics principles mandatory for all internal auditors? Yes No

Is the document easy to read? Yes No

Is the document easy to understand? Yes No

(Following only for internal auditor salient Professional Norm condition)

Are these principles similar to your own code of ethics principles? Yes No

Please list any major differences.

Do you adhere to similar principles? Yes No

(Following only for external auditor salient Professional Norm condition)

Are these code of ethics principles required to be followed by XYZ, Inc. internal auditors? Yes No

Non-Salient Professional Norm Condition

(EAs and IAs receive the same information)

Below is an article discussing the decrease in PC's sales as tablets rise in popularity. Please carefully read this article and answer the questions related to it:

News Article

> Here we go again. The San Jose Mercury News is reporting that IDC (Intl. Data Corp) predicts 2013 will bring more bad news for the PC. The de facto barometer of consumer markets has revised its latest estimate for yearly PC sales downward. What was expected to be a 1.3% decline has now been projected to be more like 7.8%.
>
> The blame is placed squarely on an increase in tablet sales. With 229.3 million expected this year IDC has gone so far as to predict tablet sales to outpace the entirety of the PC market by 2015.
>
> Unfortunately, the news is both obvious and misplaced.
>
> Comparing sales of the Galaxy Note to a laptop is akin to comparing a fine wine to a 44 ounce fountain drink.
>
> Tablets are consumer devices more on par with their Smartphone cousins than any laptop. In a market sense they are disposable. Conversely, laptops and the PC market in general operate on a much longer replacement cycle. It's not uncommon, for

example, for the average tech savvy consumer to purchase 2 tablets during the lifespan of one laptop.

These days nobody would seriously consider paying upwards of $1000 for a laptop just to browse the web and check their email when a $300 tablet will do. It's a given that such mundane mobility tasks have been ceded to the smart device market.

As such, the decline of PC market share is to be expected but isn't quite the death knell the tech punditry keeps drumming on about. Rather it's a realignment of markets defined by their functionality instead of their volume and that's as it should be.

A Surface Pro is not a competitor to any iPad even though both claim a tablet form factor. Their purposes are distinct and so are their customers.

In a sense, the cheap, underpowered laptop of yesterday is the progenitor of the today's tablet which now occupies it's place in the market. A classic case of technological evolution and natural selection if ever there was one.

Related Questions:

Is this article easy to read? Yes No

Is the article easy to understand? Yes No

Is this article related to your line of work? Yes No

Internal Auditor Scenario Introduction:

Prime Organizational Identity

In the following scenario you will be asked to play the role of yourself, an internal auditor within your particular organization. You will be presented with a hypothetical situation and some of the details may not exactly match to how your organization operates, but this is to ensure consistency across all participants. Please provide us with the following information about your organization:

1) Please list 3 qualities of your organization that make it a worthwhile employer.

1.
2.
3.

Measure Organizational Identification: (co-variate)

[1 = Strongly Agree; 7 = Strongly Disagree]

(1) When someone criticizes my organization, it feels like a personal insult.
(2) I am very interested in what others think about my organization.
(3) When I talk about my organization, I usually say "we" rather than "they"
(4) My organization's successes are my successes.
(5) When someone praises my organization, it feels like a personal compliment.
(6) If a story in the media criticized my organization, I would feel embarrassed.

External Auditor Scenario Introduction:

In the following scenario you will be asked to play the role of yourself, an external auditor. You will be presented with a hypothetical situation in which you will be part of an internal control assessment at one of your clients, XYZ, Inc. Some of the details may not exactly match to how your firm operates, but this is to ensure consistency across all participants.

The XYZ, Inc. has an internal audit function. This internal audit function has just finished completed their own internal control assessment. This assessment was prepared on management's behalf as per SOX 404 requirements. Your firm has assessed the internal audit function of XYZ, Inc. as being competent. Your firm agreed to use the assistance of XYZ's internal auditors in past and it has been assessed as high quality. The audit committee of XYZ has recently placed pressure on your firm to reduce audit fees so your internal control assessment will need to be performed efficiently.

Organizational Identity Manipulation:

High organizational identity

Your organization is conducting an overall internal control assessment. This assessment will be used to fulfill management's SOX 404 requirements. You have recently conducted many interviews with employees of your organization and have obtained a list of 4 internal control concerns within your organization. On the following page is the list of the 4 concerns that were shared with you.

Low organizational identity

Your organization has recently purchased another firm, XYZ Inc. This firm will continue to operate on its own, but at this time they do not have an internal audit department. Management has decided to outsource your internal audit department to XYZ Inc. until such time as they create their own internal audit department. You have been asked to help assess the overall internal controls of this other organization. You have conducted many interviews with the XYZ Inc.'s employees and have obtained a list of 4 internal control concerns within XYZ, Inc. On the following page is the list of the 4 concerns that were shared with you.

External auditor

To start the internal control assessment process you have conducted many interviews with the XYZ Inc.'s employees and have obtained a list of 4 internal control concerns that have occurred at XYZ, Inc. On the following page is the list of the 4 concerns that were shared with you.

List of 4 Known IC Weaknesses:

High severity:
IC1. Employees with password protected access to confidential client information stores their password on a sticky note underneath their keyboard. Client information includes credit card numbers and Social Insurance numbers.
IC2. Sales personnel frequently make unauthorized modifications to the terms of the company's standard sales contracts and there is not a review process in place to approve these changes. The nature of the modifications can greatly affect the timing and amount of revenue recognized. Individual sales transactions are frequently significant to the entity, and the gross margin can vary significantly for each transaction.
Low severity:
IC5. Salespeople gave discounts to customers and failed to record them on the customer order. In most instances, minor adjustments to revenue were made without contacting these salespeople.
IC6. The company has a written policy outlining when it is appropriate to provide meals to employees and requires a list of all attendees. Many times documentation supporting these meals and refreshment expenses at large company meetings does not generally show who attended these meetings or why attendees required food and refreshments to conduct business.

Comprehension Check Question:

Please answer the following question about the previous information read:

Note: you will need to respond correctly to continue. You will receive multiple attempts until you do answer correctly.

What organization are you conducting an internal control assessment for?

a) Your own organization

b) XYZ, Inc.

c) A competitor

d) The government

Dependent Variables:

Please answer the following questions for each internal control concern:

Please select whether you believe it this internal control concern to be a material weakness, significant deficiency or neither.

Material Weakness

Significant Deficiency

Neither

Please rate this internal control concern based on your opinion of its overall level of severity (1 being low severity to 7 being high severity).

1	2	3	4	5	6	7
Low Severity			Medium Severity			High Severity

(External auditors only)

Please indicate how useful it would have been to have the organization's internal control assessment (conducted by the internal auditor) when conducting your own assessment (1 being not very useful to 7 being very useful).

1	2	3	4	5	6	7
Not Useful						Very Useful

Please indicate your willingness to rely on the organization's internal control assessment (conducted by the internal auditor) based on information provided about the internal audit function. (1 not willing to 7 very willing).

1	2	3	4	5	6	7
Not Willing			Somewhat Willing			Very Willing

Please rate your level of reliance on the organization's internal control assessment (conducted by the internal auditor). (1 would not even read the assessment to 7 would rely fully on the assessment)

1	2	3	4	5	6	7
Would not even read			Would read, but not rely on			Would read and fully rely

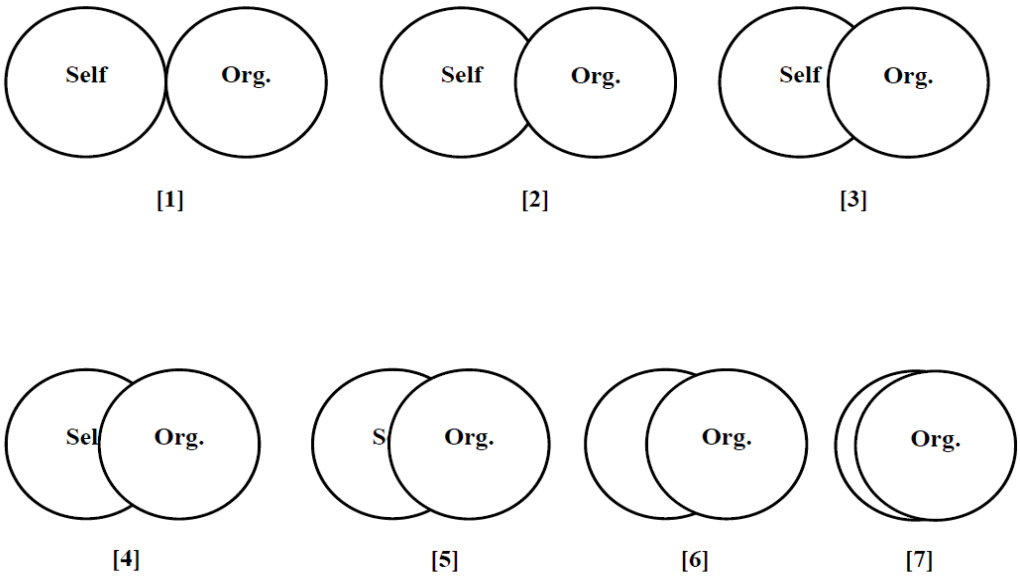
Please indicate why/why not you would be willing to rely on the organization's internal control assessment (conducted by the internal auditor)?

Manipulation Check Questions:

Organizational Identity manipulation

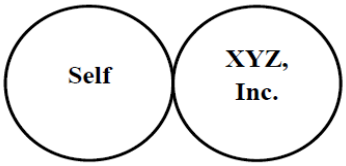
(High Organizational Identity Internal Auditors Only)

1) Select the picture below that best describes how your personal attributes, qualities, and values align or overlap with the attributes, qualities, and values of your organization.



(Low Organizational Identity Internal Auditors Only)

1) Select the picture below that best describes how your personal attributes, qualities, and values align or overlap with the attributes, qualities, and values of XYZ, Inc.



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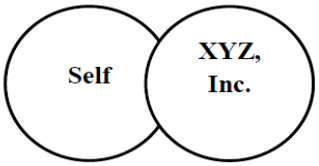

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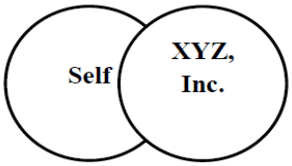

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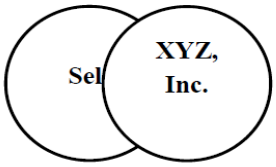

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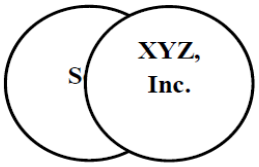

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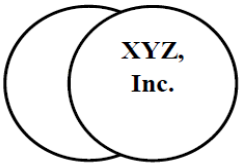

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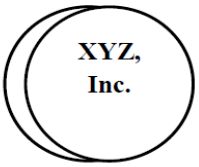

[7]

Professional Norm Salience Manipulation

(I*nternal auditors only*)

2) To what extent has the information in this experiment made you think about the accounting profession and the values, attributes, and qualities you possess as a member of this profession?

1	2	3	4	5	6	7
Gave it little thought			Neutral			Gave it much thought

(External auditors only)

2) Based on the information in this experiment, please rate how objective you perceive the internal auditor to be. (1 being not very objective to 7 being highly objective).

1	2	3	4	5	6	7
Not very objective			Neutral			Highly objective

Control Questions:

(External auditors only)

Please rate the degree to which **your organization** typically relies on your client's internal audit work. (1 typically does not rely on work to 7 typically relies on the work heavily).

1	2	3	4	5	6	7
Does not Rely			Somewhat Rely			Heavily Rely

Please rate the degree to which **you personally** typically rely on your client's internal audit work. (1 typically does not rely on work to 7 typically relies on the work heavily).

1	2	3	4	5	6	7
Do not Rely			Somewhat Rely			Heavily Rely

In the past, how objective do you typically perceive internal auditor functions to be. (1 being not very objective to 7 being highly objective).

1	2	3	4	5	6	7
Not very objective			Neutral			Highly objective

Demographic Questions:

These questions are to help describe the study sample and are optional. You may leave blank.

Age Range: 20-30 31-40 41-50 >50

Sex: M F

Years of audit experience: 1-3 4-6 7-9 10+

Years of Internal audit experience: 1-3 4-6 7-9 10+

Select highest level of education: Undergrad Grad PhD

Select any certifications: CPA CGA CMA CIA CA

Have you ever been involved in an internal control assessment: Y N

Appendix C:

11 Original Internal Control Weaknesses Used in Pilot Testing

1. An employee with password protected access to confidential client information stores their password on a sticky note underneath their keyboard. Client information includes credit card numbers and Social Insurance numbers.

2. A lack of segregation of duties over the company's shipping and receiving and the inventory record-keeping functions have been noted. This resulted in underreporting of inventory levels and an understatement of company-wide net income by 3.8%. The misstatement was detected by management and corrected prior to issuing external financial reports.

3. New customers who do not meet the client's minimum credit standard have been granted credit in the past. Also, new customers were added without proper credit approvals.

4. Near the end of the year, the electronic approval by the credit manager was missing for several customer orders that exceeded the credit limit. These orders were still processed without the proper approval.

5. Salespeople gave discounts to customers and failed to record them on the customer order. In most instances, once the adjustments to revenue were made salespeople were not contacted about this issue.

6. A salesperson's laptop was stolen. It contained a stored password that allowed a sales order to be downloaded to the system. Several bogus orders had been placed before the password was disabled.

7. Detailed reconciliations of intercompany accounts are not performed on a timely basis, and differences in intercompany accounts are frequent and significant. Management does not perform any alternative controls to investigate significant intercompany account differences.

8. Sales personnel frequently modify the terms of the company's standard sales contracts and there is not a review process in place to approve these changes. The nature of the modifications can affect the timing and amount of revenue recognized. Individual sales transactions are frequently significant to the entity, and the gross margin can vary significantly for each transaction.

9. There seems to be a level of undue bias or lack of objectivity by those responsible for accounting estimates. For example, consistent understatement of expenses or overstatement of allowances at the direction of management has occurred.

10. Due to high turnover, the person responsible for the accounting and reporting function lacks the skills and knowledge to apply generally accepted accounting principles in recording the entity's financial transactions and preparing its financial statements.

11. The company has a written policy outlining when it is appropriate to provide meals to employees and requires a list of all attendees. Many times documentation supporting these meals and refreshment expenses at large company meetings does not generally show who attended these meetings or why attendees required food and refreshments to conduct business.

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