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The Effects of Employer and Client Identification on Internal and External Auditors' Evaluations of Internal Control Deficiencies

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SUMMARY: The Public Company Accounting Oversight Board's (PCAOB) Auditing Standard No. 5 (AS5) encourages external auditors to rely on internal auditors to increase the efficiency of lower-risk internal control evaluations (PCAOB 2007). We use post-SOX experimental data to compare the levels and effects of employer (client) identification on the control evaluations of internal (external) auditors. First, we find that internal auditors perceive a greater level of identification with the evaluated firm than do external auditors. We also find some evidence that, *ceteris paribus*, internal auditors are less lenient than external auditors when evaluating internal control deficiencies (i.e., tend to support management's preferred position to a lesser extent). Further, while we support Bamber and Iyer's (2007) results by finding that higher levels of external auditor client identification are associated with more lenient control evaluations, we demonstrate an opposite effect for internal auditors—higher levels of internal auditor employer identification are associated with less lenient control evaluations. Our results are important because we are the first to capture the relative levels of identification between internal and external auditors, as well as the first to compare directly internal and external auditor leniency, both of which are important in light of AS5. That is, we provide initial evidence that external auditors' increased reliance on internal auditors' work, while increasing audit efficiency, also could improve audit quality by resulting in less lenient internal control evaluations, due, at least in part, to the effects of employer and client identification.

Keywords: auditor judgment; organizational identification; internal auditor; external auditor.

Data Availability: Contact the first author.

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INTRODUCTION

This paper examines the levels and effects of internal (external) auditors' employer (client) identification, and its effects on their internal control evaluations.[1] Bamber and Iyer (2007) report that external auditors with higher levels of client identification are more likely to acquiesce to client-preferred positions (i.e., higher identification is associated with greater leniency).[2] Their findings, however, were based on pre-Sarbanes-Oxley Act (SOX) data (U.S. House of Representatives 2002), and they call on researchers to examine the effects of SOX and the Public Company Accounting Oversight Board's (PCAOB) ongoing efforts to promote auditor objectivity and audit quality (e.g., Auditing Standard No. 5 [AS5]) (PCAOB 2007). The distinction in time and regulatory structure between their study and ours is important because SOX (particularly Section No. 404) emphasizes the importance of internal controls over financial reporting. While SOX has improved internal controls, many questioned whether Auditing Standard No. 2 (AS2) (PCAOB 2004) provided sufficient guidance to maintain an appropriate balance between audit effectiveness and efficiency (Goelzer 2005). In response, the PCAOB released AS5, which encourages greater reliance on internal auditors' work (PCAOB 2007).

Despite PCAOB efforts to encourage reliance on internal auditors' work, and the potential variation in internal and external auditors' objectivity resulting from differences in employer and client identification, no study to date examines the effects of employer identification on internal auditor objectivity or how employer (client) identification affects internal (external) auditors' control evaluations. We extend Bamber and Iyer (2007), and contribute to auditing research by examining employer and client identification post-SOX, and also by comparing internal and external auditors' employer and client identification and their effect on control evaluations.

The PCAOB's objectives in AS5 include reducing unnecessary audit procedures, in part by encouraging external auditors to rely on internal auditors, primarily for lower-risk control evaluations (PCAOB 2007). However, internal auditors' objectivity could be impaired by their psychological attachment to their employer (i.e., employer identification). For example, Thompson (1995) suggests that individuals are more willing to protect members of a group with which they identify, and Brewer (1999) contends that once individuals have attached to a group psychologically, they have difficulty objectively evaluating information related to that group. While external auditors are required to evaluate internal auditors' objectivity (PCAOB 2007), the PCAOB, while examining the first-year implementation of AS5, found instances in which external auditors failed to (1) assess the objectivity of company personnel on whose work they were relying, and (2) properly retest and oversee internal auditors' work (PCAOB 2009).

Although internal and external auditors perform similar tasks, several differences exist. Internal auditors' roles are more wide-ranging than those of external auditors. Internal auditors are firm employees, and they establish informal partnerships with management (Bou-Raad 2000), have longer-term employment horizons (Balkaran 2008), and provide more proactive, value-added activities. Alternatively, external auditors do not embed themselves as deeply within their clients' daily operations, do not rely exclusively on one client for employment, and periodically must

[1] Organizational (i.e., social or group) identification is a perceptual cognitive construct measuring individuals' psychological attachment to a specific organization (i.e., the extent to which individuals perceive an organization's successes and failures as their own (Brewer 1999; Bamber and Iyer 2002). Throughout the paper, we also refer to internal (external) auditors' identification with their employing firm (audit client) as employer (client) identification.

[2] In this study's context, "more lenient" refers to auditors being more likely to support client- or management-preferred positions. Specifically, more or less lenient refers to variation in auditors' evaluations of the consequences of a failed control (i.e., the risk of a control failing to prevent or detect a material misstatement in a timely manner).

negotiate their relationship with the client. Given the differences between internal and external auditor presence within a firm, we expect internal auditors' employer identification to be greater than external auditors' client identification.

External auditors develop and maintain client relationships to help ensure that clients do not become dissatisfied and seek a new auditor. Further, external auditors provide objective, high-quality audits with appropriate evaluations of the firm, including its internal controls, while simultaneously resolving issues about which clients have preferred positions. We argue that internal auditors' organizational status positions them to focus primarily on providing objective, value-added feedback to firm owners because internal auditors (1) do not require annual renegotiation of employment contracts and can demand long-term, or even tenured, employment (Balkaran 2008), (2) have fewer concerns about harming social and relationship aspects of their employment than do external auditors, and (3) are affiliated with one employer and, therefore, are more concerned with preserving that organization. Because of these differences, we expect that internal auditors will make less lenient internal control evaluations than will external auditors.

Finally, Bamber and Iyer (2007) suggest that higher client identification increases external auditors' desire to preserve client relationships, which yields more lenient accounting-related decisions. We anticipate that this positive relationship between external auditors' levels of client identification and leniency persists in a post-SOX environment. However, we contend that Bamber and Iyer's (2007) findings with respect to the effect of organizational identification on external auditors' judgments do not generalize to internal auditors. The aforementioned unique nature of internal auditors' employment relationships with their firms allows internal auditors to take a different perspective than external auditors when evaluating controls. Consequently, internal auditors can focus more on preserving the long-term success of the organization by providing less lenient control assessments. Consistent with prior social identity theory research (e.g., Tolman 1943; Ashforth and Mael 1989; Mael and Ashforth 1992) that finds a positive relationship between group identification and group protection (Thompson 1995), we expect internal auditors' identification with their employer to cause them to make decisions that are aligned with the long-term interests of the organization, as opposed to maintenance of their personal relationships. We expect that, compared to external auditors, internal auditors with higher levels of employer identification will be more likely to protect their organization by being less lenient when they assess control deficiencies (i.e., a negative relationship between internal auditors' client identification and control evaluation leniency).

To test our predictions, we conducted a mixed-subjects experiment where 40 internal auditors and 48 external auditors completed a case involving a hypothetical audit situation in which they evaluated an internal control deficiency. Participants assumed that they either were employed by the firm (i.e., internal auditor participants) or provided external audit services to a client (i.e., external auditor participants). We measured identification with the hypothetical firm using a modified version of Bamber and Iyer's (2002) Organizational Identification Scale.

We find that internal auditors' employer identification is greater than external auditors' client identification, and some evidence that internal auditors are less lenient than are external auditors. Further analyses reveal that employer and client identification have opposite effects on auditors' judgments—internal (external) auditors' employer (client) identification is negatively (positively) associated with their control evaluation leniency. Our evidence suggests a psychological attachment between auditors and clients, and that identification affects internal and external auditors differently.

Our study makes three primary contributions. First, we examine the effects of employer and client identification post-SOX, and find that Bamber and Iyer's (2007) findings with respect to external auditors' identification persist, are robust to experience and a different audit task, and exist absent any expressed management preference. Second, we capture the relative levels of employer and client identification for internal and external auditors. Third, we provide initial evidence that

external auditors' reliance on internal auditors' work, as suggested by AS5, can improve audit quality. That is, because internal auditors' employer identification is associated with less lenient audit judgments in internal control evaluation settings, external auditor reliance on their work could have a positive impact on the quality of control evaluations.

LITERATURE REVIEW AND HYPOTHESES

Social Identity Theory and Group Identification

Social identification is an application of social identity theory. Social identity theory asserts that one's self-concept is comprised of an identity, which includes unique individual characteristics such as knowledge, abilities, and interests, and a social identity, involving relevant group classifications (Tajfel and Turner 1985). Social identification is, therefore, one's perception of actual or symbolic membership in a specific group (Mael and Ashforth 1992).

Social identity can be deconstructed into four distinct dimensions: (1) cognitive; i.e., the knowledge of being a member of a certain group, (2) affective; i.e., the emotional attachment to the group, (3) evaluative; i.e., the value provided by the group, and (4) behavioral; i.e., the readiness to stand for and behave in a way that is supportive of the group (Van Dick 2001). Cognitive identification (i.e., recognizing that one is a member of a particular group) is the first step in social identification (Gould 1975; Turner 1982). Johnson and Morgeson (2005, 2) define cognitive identification as "the thoughts or beliefs regarding the extent to which individuals define themselves on the basis of a social referent." Only after cognitive identification has been established can the other dimensions materialize, ultimately allowing individuals to behave as organization members (Van Dick et al. 2004).

Through cognitive association with a group, people become psychologically intertwined with the fate of the group, feel a common destiny with the group, and experience the group's successes and failures as their own (cf. Tolman 1943). Social identity theory also posits that individuals can perceive personally harmful activities as worthwhile if they improve overall group well-being (Staw 1984). Importantly, the cognitive association between individuals and a referent group provides an alternative explanation for individual behavior beyond what may be predicted by economic incentives alone.

Social Identity Theory as an Explanation for Auditor Behavior

There is widespread support for the effect of cognitive-based identification on professionals' behaviors, including auditors. Bamber and Iyer (2007) used social identity theory as the basis for a cognitive-based explanation, in contrast to an economic-dependency explanation, for why external auditors are influenced by their clients. They found that through a cognitive association with clients, external auditors exhibited increased leniency when resolving an accounting issue. In addition, accounting research has investigated the effects of social identity (and identification) on (1) accounting firm alumni's inclination to benefit their former firm (Iyer et al. 1997), (2) external auditor turnover (Bamber and Iyer 2002), and (3) the use of accounting information as incentives in a teamwork environment (Towry 2003).

Comparing Internal and External Auditors' Identification with Audit Clients

In contrast to external auditors, internal auditors are more intertwined in the organization's daily operations (e.g., operational audits). While providing proactive, value-added activities, internal auditors establish informal partnerships with management (Bou-Raad 2000) and audit committees (Carcello et al. 2005), particularly since the enactment of SOX. Knippenberg and Schie (2000) suggest that the types of involvement that occur between internal auditors and other members of the firm are conducive to enhanced group identification.

External auditors serve audit clients differently; specifically, through the independent assurance function. Consequently, external auditors are not embedded as deeply within clients' day-to-day operations as internal auditors. They perform a smaller range of tasks and their exposure to client management and audit committees is somewhat limited. Beyond differences in their contractual relationship with clients, external auditors contend with what social psychology literature refers to as dual identification (Ouwerkerk et al. 2000). Dual identification occurs when individuals can identify with two distinct entities (e.g., an audit client and an accounting firm), and it often detracts from overall identification with either of the two entities alone, which, in turn, is likely to attenuate their level of client identification (*ID*).

Because of these differences between internal and external auditors in employment relationships, the types of interactions with clients, the frequency of interactions, as well as the potential for external auditors' dual identification, we predict below that internal auditors will exhibit higher levels of identification with employers than will external auditors with clients.

H1: Internal auditors will exhibit higher employer identification compared to external auditors' client identification.

External Auditors' Reliance on Internal Auditors' Work

The relationship between social identification and internal and external auditors' judgments is important, because both types of auditors play important roles in firm governance and because external auditors' reliance on internal audit can affect the nature, timing, and extent of the audit (i.e., reliance can affect audit quality) (Gramling et al. 2004).[3] While external auditors (per SOX) report on public clients' internal controls over financial reporting (U.S. House of Representatives 2002), internal auditors often conduct regular evaluations of the controls.[4]

Both internal and external auditors enhance firm governance and reporting through their (1) adherence to professional standards; i.e., established by the Institute of Internal Auditors' (IIA) *Code of Ethics* (IIA 2000), the American Institute of Certified Public Accountants (AICPA) Code of Professional Conduct (AICPA 1988), and/or the PCAOB (2007), (2) independence from the activities they audit, and (3) knowledge of the company, its industry, and its controls. The IIA's *Code of Ethics*, for example, requires internal auditors to evaluate information objectively, while not being unduly influenced by their own interests (IIA 2000).[5]

In a significant policy change, AS5 encourages external auditors to rely on a client's internal auditors, particularly in control evaluations, to increase lower-risk control evaluation efficiency (PCAOB 2007). Research has examined factors that influence external auditors' reliance on internal auditors' work, including internal auditors' involvement in consulting activities and compensation structure (DeZoort et al. 2001), perceived levels of internal audit objectivity and competence (Krishnamoorthy 2001), and internal audit availability (Felix et al. 2001). Glover et al. (2008)

[3] Prior research has modeled audit quality as a function of auditor attributes (Lim and Tan 2008), firm size (DeAngelo 1981), legal liability (Dye 1993; Palmrose 1988), auditor "shopping" by firms (Lu 2006), and magnitude of nonaudit fees (Lim and Tan 2008). Conceptually, quality is determined by an audit's reliability (i.e., the extent to which disclosure accurately reflects actual events), its comprehensive nature, and the extent to which the audit is conducted objectively, without bias or prejudice. See Bedard et al. (2010) for a summary of the various definitions of audit quality, as well as a discussion of potential audit quality indicators.

[4] Although there is no legal requirement that public companies maintain internal audit departments, formal internal auditing functions are common and have been in place since the 1940s (Moeller 2004). In addition, some entities (e.g., the New York Stock Exchange) require that all companies on its exchange maintain internal audit departments.

[5] Although internal auditors are not required to be independent of the entity as a whole (as are external auditors), the IIA's Standards for the Professional Practice of Internal Auditing (IIA 2009) require a level of independence (e.g., internal auditors are to be independent of functions they audit) when conducting assurance engagements.

propose that external auditors are less likely to rely on in-house than on outsourced internal auditors, especially for subjective tasks. While this research documents external auditors' hesitance to rely on internal auditors' work in many situations, recent practice evidence (e.g., PCAOB 2007, 2009; Archambeault et al. 2008; Reason 2010) suggests that external auditors rely more on internal auditors to increase the efficiency of lower-risk control evaluations, as encouraged by AS5. However, the PCAOB has cited instances where external auditors failed to (1) assess the objectivity of company personnel on whose work they rely, and (2) properly retest and oversee internal auditors' work (PCAOB 2009).

In light of the increased reliance on internal auditors' work, and instances of external auditor oversight failure, we investigate how internal and external auditors evaluate the effectiveness of internal controls. Although researchers have found that internal auditors are more objective when they are IIA members (Harrell et al. 1989) and professionally certified (Berry et al. 1987), internal auditors' incentives, relationships with their employers, and other factors may affect their objectivity and control evaluations in certain situations (e.g., Brody and Kaplan 1996). We investigate employer (client) identification between internal (external) auditors with a firm as a potential source of variation in auditors' internal control evaluations.

Employer/Client Identification and Control Evaluation Leniency

When individuals identify themselves as part of a group psychologically, they have difficulty objectively evaluating information related to the group (Brewer 1999) and are more willing to behave in ways that protect the group (Thompson 1995). Fixed-term independent contractors develop a type of attachment to organizations that causes them to focus on establishing and maintaining relationships with their employers (Millward and Brewerton 2002). Relatedly, external auditors (similar to fixed-term independent contractors) develop attachment with client organizations as they seek to maintain client relationships (Bamber and Iyer 2007).

External auditors must develop and maintain client relationships to ensure that clients do not become dissatisfied and replace them. External auditors also must provide objective, high-quality audits with appropriate evaluations of the firm, including its internal controls. While performing this role, auditors often must resolve issues about which clients have clearly preferred positions. The desire to maintain client relationships can affect external auditors' objectivity (Carcello et al. 2000; Blay 2005; Carey and Simnett 2006) and is positively associated with leniency (i.e., more likely to acquiesce to client-preferred accounting positions; Bamber and Iyer 2007).[6]

As discussed earlier, internal auditors differ from external auditors on several dimensions. For example, differences in the nature of the employment relationship yield less risk to the internal auditors that their employers will seek a replacement if they are dissatisfied with their decisions. Also, with sound governance, internal auditors are well-positioned to focus—more than are external auditors—on delivering objective information directly to owner representatives (i.e., the board of directors), rather than being concerned with maintaining positive relationships with firm management. Finally, internal auditors are affiliated with one employer and, we propose, are more likely to be concerned with the organization's long-term sustainability because the costs associated with seeking and securing new employment are high.

Consistent with the above arguments, and because (1) internal auditors' organizational status positions them to focus primarily on providing objective, value-added feedback to firm owners, as opposed to maintaining the employment relationship, and (2) external auditors are more concerned

[6] Wolfe et al. (2009) find that in certain contexts, client management also can cause external auditors' control deficiency evaluations to be biased toward management's preferred position. However, their study's context is quite different from ours, and it does not provide insights about internal auditors' evaluations.

with preserving client relationships than are internal auditors (which could impair their objectivity), we predict that internal auditors will make less lenient internal control evaluations than will external auditors.

H2: Internal auditors' internal control evaluations will be less lenient than external auditors' internal control evaluations.

Bamber and Iyer (2007) show that external auditors' likelihood of acquiescing to client-preferred positions increases with the level of client identification. They argue that higher client identification increases external auditors' desires to preserve client relationships, which, in turn, yields more lenient decisions. We expect to find the same positive relationship between external auditors' levels of client identification and control evaluation leniency. We contend, however, that Bamber and Iyer's (2007) findings will not generalize to internal auditors. The less-tenuous nature of internal auditors' employment relationships with their firms allows internal auditors to take a different perspective, with less emphasis on maintaining employment relationships than external auditors. Consequently, internal auditors with greater identification can focus more on preserving the organization's long-term interests by making less-lenient control evaluations. This prediction is consistent with social identity theory (e.g., Tolman 1943; Ashforth and Mael 1989; Mael and Ashforth 1992); in particular, research that shows a positive relationship between group identification and protective behaviors (Thompson 1995). We predict that the nature and extent of internal auditors' identification with their employer leads them to make less-lenient decisions (that protect the long-term interest of the organization) than will external auditors.

H3: Internal (external) auditors' employer (client) identification is negatively (positively) associated with their internal control evaluation leniency.

METHOD

Participants

We analyzed responses from 40 internal auditors and 48 external auditors (88 total participants) who completed an online experiment and responded correctly to manipulation checks. We contacted approximately 450 members of a local chapter of the IIA and approximately 130 external auditors via email, with a request to participate in an Internet experiment. Each request contained a hyperlink to the experiment. We obtained total response rates of 10 and 42 percent for internal and external auditors, respectively.[7] Panel A (Panel B) of Table 1 provides demographic information for the internal (external) auditor participants.[8]

IDENTIFICATION IN A HYPOTHETICAL SCENARIO AND MEASURING IDENTIFICATION EXPERIMENTALLY

Identification in a Hypothetical Scenario

When designing our experiment, we carefully considered whether we should utilize an experimental approach with a hypothetical scenario or a methodology similar to that employed by

[7] External auditors were identified from authors' personal contacts with practicing auditors. Although response rates for internal auditors were lower than for external auditors, the internal auditor response rate is consistent with prior Internet-based internal auditor accounting research (Abbott et al. 2010; Kaplowitz et al. 2004; Beeler and Hunton 2002; Greenspan et al. 1994). Also, because data collection occurred over several weeks, we compared early responders to late responders. There were no apparent differences between early and late responders.

[8] Four internal auditors and four external auditors (eight auditors in total) included in the analyses did not answer all demographic questions. Results reported below are similar if we exclude them from analyses.

TABLE 1

Participant Demographics

Panel A: Experience Demographics for Internal Auditors

	Staff	Assistant	Manager	Director	Executive	All
n	9	8	5	3	11	36[a]
Years Exp.	1.44	3.83	6.80	10.00	22.44	9.61
(SD)	(0.53)	(0.98)	(1.10)	(0.00)	(6.50)	(9.19)
IT Audit Familiarity	3.89	4.75	3.80	5.00	4.45	4.25
(SD)	(1.54)	(1.98)	(2.95)	(2.00)	(2.07)	(2.03)
Females	4	3	1	3	5	16
Males	5	3	4	0	4	16

Panel B: Experience Demographics for External Auditors

	Staff	Senior	Manager	Sr. Manager	Partner	All
n	23	9	6	1	5	44[a]
Years Exp.	1.24	3.56	7.40	9.00	14.75	4.17
(SD)	(0.44)	(0.53)	(0.89)	NA	(3.20)	(4.36)
IT Audit Familiarity	4.09	4.33	5.40	3.00	5.20	4.37
(SD)	(2.41)	(2.50)	(1.82)	NA	(2.39)	(2.34)
Females	14	4	5	0	0	23
Males	6	5	1	1	4	17

[a] Four internal auditors and four external auditors (eight auditors in total) did not answer all demographic questions (particularly, gender).

IT audit familiarity was based on participants' agreement to the statement, "I have reviewed IT general controls," measured on a seven-point Likert-type scale with "1 = Strongly Disagree" and "7 = Strongly Agree."

Bamber and Iyer (2007), who measured external auditors' identification with an actual client and employing firm. Their structured research survey was effective for gathering data examining the effect of identification with an external auditor's "largest client."

We considered carefully all of the relevant issues involved with using a hypothetical scenario involving a specific control-related issue, rather than an actual client/employer setting. Our primary concern with asking participants to consider an actual client or their employer is that we would introduce significant variance on the particular control issue we sought to investigate—a potential internal control deficiency. That is, by asking participants to consider a hypothetical firm, we did not require participants to consider a control state that was potentially different from their client's or firm's actual control state when considering control effectiveness (i.e., we did not ask participants to consider potential deficiencies in IT controls when their own client or employer has strong controls).

Measuring Identification Experimentally

Relatedly, we address the issue of creating and measuring identification in experimental settings. As stated earlier, cognitive identification (i.e., recognition that one is a member of a particular group) precedes social identification (Gould 1975; Turner 1982), and it must be established before other dimensions materialize, with the end result being that individuals behave as organization members (Van Dick et al. 2004).

Research on the effects of social identity on behavior has used artificial groups in experimental settings to support individuals' abilities to readily identify with, and behave in accordance with, group norms. This research shows that social identification is so powerful that researchers can manipulate social identity by changing minimal cues (Mackie and Cooper 1984). For example, researchers have created a sense of social identity by assigning people to groups, providing name badges, assigning people to rooms with different labels (Wilder 1990), assigning people to different "tribes" (Sherif et al. 1961), having people wear the same color lab coat (Worchel et al. 1998), and even when grouping humans with computers (Nass et al. 1994).

Of particular relevance to our study, experiments in other settings investigating social identification theory have demonstrated participants' ability to join experimental groups; in particular, when the group is natural for the participant. For example, Abrams and Hogg (1990) state that when participants are able to place themselves in familiar situations (i.e., a natural group), identification forms readily. We ask participants to assume the same role as they do in their natural setting—as an internal or external auditor. In summary, creating a hypothetical company allowed us to leverage participants' abilities to place themselves in a familiar/natural group (i.e., Abrams and Hogg 1990; Mullen et al. 1992), and control the experimental setting.

Experimental Task

We determined auditor type (*TYPE*) based on participants' indication of whether they were currently employed as an internal or external auditor.[9] We instructed internal (external) auditor participants to assume that they were employed by (engaged to perform external audit services for) Tango Sierra, a hypothetical, publicly traded prescription drug manufacturer. Also, because Bamber and Iyer (2007) found that experience reduces identification's influence, we control for experience by measuring participants' number of years of employment as an auditor.

We provided participants with information about Tango Sierra's operations and then asked them to evaluate a specific internal control over financial reporting.[10] We indicated that Tango Sierra's internal control policy states that users should have their access to its network and applications revoked within five days of the user's termination. However, during testing, the audit team discovered that a few terminated users with access (including remote login) to the accounts payable system had not had access to the network and applications revoked within five days. Tango Sierra's IT Director explained that access was not revoked because the human resources department did not send termination notifications to the IT department on a timely basis, but that user privileges were revoked immediately after receiving the delinquent termination notifications.[11] We examined user network access termination in order to elicit control evaluations that provide sufficient judgment variance among auditors (i.e., to avoid ceiling and floor effects associated with obviously insignificant or severe deficiencies).

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[9] We elicited demographic information at the beginning of the case so that we could direct participants to treatment conditions based on auditor type (i.e., internal or external, their natural group).

[10] Our analyses collapse an additional independent variable, client business risk (*RISK*), because it did not approach significance in any of the hypothesis tests reported in the next section. We initially investigated *RISK* because prior research indicates that client business risk can affect auditors' judgments and decisions, including client acceptance (Johnstone 2000), audit planning (Houston et al. 1999), audit fees (Bell et al. 2001), and the amount of audit evidence collected (Beaulieu 2001). Although evidence indicates that we successfully manipulated *RISK*, because the manipulation did not significantly affect any variables of interest, we exclude *RISK* from reported analyses.

[11] Recent court rulings have found that it is a corporation's responsibility to rescind terminated users' access. If the employer has not rescinded terminated users' access, the former employee would "have no reason to know that making personal use of the company computer in breach of a state law fiduciary duty to an employer would constitute a criminal violation" (*LVRC Holdings LLC v. Christopher Brekka* 2009).

Primary Dependent Variables and Measuring Employer/Client Identification

After participants reviewed information concerning the control issue, they rated the likelihood that Tango Sierra's access controls could not prevent or quickly detect a material misstatement (*MAT_MSTMNT*), our primary dependent variable. We use this variable (measured on a seven-point Likert-type scale, with 1 = "Very Low" and 7 = "Very High") as a proxy for leniency, where a higher (lower) response for *MAT_MSTMNT* indicates less (more) lenient evaluations. This measure corresponds with common language describing internal control deficiencies (e.g., see the *GAIT for IT General Control Deficiency Assessment* [IIA 2008]).

Participants completed a modified version of Bamber and Iyer's (2002) Organizational Identification Scale. Their scale consisted of five questions, but confirmatory factor analysis caused them to omit two questions. We used the remaining three questions, modifying them as appropriate to measure employer and client identification with Tango Sierra. The internal (external) auditor scale consists of (1) "If I worked for (audited) Tango Sierra, I would take criticism of Tango Sierra personally," (2) "If I worked for (audited) Tango Sierra, I would be interested in what others think about Tango Sierra," and (3) "If I worked for (audited) Tango Sierra, I would take compliments of Tango Sierra personally" (responses on seven-point Likert-type scales with 1 = "Strongly Disagree" and 7 = "Strongly Agree"). The aggregate score from the three questions comprises employer (client) identification (*ID*).[12]

RESULTS

Manipulation Checks

To examine whether participants attended to the *TYPE* assignment, they indicated the role they were assigned. Of 100 total respondents (46 internal and 54 external auditors), 88 (88 percent) passed the *TYPE* manipulation check. We excluded from statistical analyses participants who failed the manipulation check, leaving 88 participants (40 internal and 48 external auditors) for hypothesis testing.[13] Participants also indicated whether the company's controls over timely revocation of user access were operating effectively (1 = "Strongly Disagree" and 7 = "Strongly Agree"). Auditors perceived the control as operating ineffectively (mean = 2.01, SD = 1.14; less than scale midpoint at $p < 0.01$), indicating a perceived control failure. Also, participants viewed the scenario as realistic (mean = 5.37, SD = 1.31 [1 = "Not at all realistic" and 7 = "Very realistic"]; greater than the scale midpoint at $p < 0.01$).[14]

Primary Analysis

H1 predicts that internal auditors will perceive a greater level of employer *ID* compared to external auditors' client *ID*. Table 2 presents descriptive statistics for the components of *ID* and total *ID* scores. We find that, consistent with H1, *ID* is significantly greater for internal (mean = 14.85) than for external auditors (mean = 9.35, $p < 0.001$).[15]

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[12] The scale's Cronbach Alpha is 0.80, equal to the suggested threshold (Cohen 1983; Peterson 1994). We did not measure external auditors' level of identification with their firm because external auditors' perceived identification with their employer does not influence their audit judgments with respect to their clients (Bamber and Iyer 2002).

[13] We found no significant difference in failure rates for internal and external auditors (Pearson Chi-square = 0.089, $p = 0.767$). Also, results yield the same conclusions when we include participants who failed manipulation checks.

[14] We found no difference in perceived control operating effectiveness or task realism (both $p > 0.62$) for internal versus external auditors. Additional analyses indicate that results are not influenced by various demographic variables, including education level, professional certification, and gender.

[15] Internal auditors perceive higher levels for each of the three *ID* questions than do external auditors (all $p < 0.001$).

TABLE 2

Internal and External Auditor Employer and Client Identification Test of H1

ID Question[a]	Internal Auditors[b]	External Auditors[b]	t	p-value[c]
"If I worked for (audited) Tango Sierra, I would take criticism of Tango Sierra personally."	3.90 (1.95) [7.00] {1.00}	2.35 (1.45) [6.00] {1.00}	4.26	<0.001
"If I worked for (audited) Tango Sierra, I would be interested in what others think about Tango Sierra."	6.05 (0.88) [7.00] {4.00}	4.48 (1.64) [7.00] {1.00}	5.45	<0.001
"If I worked for (audited) Tango Sierra, I would take compliments about Tango Sierra personally"	4.90 (1.45) [7.00] {1.00}	2.52 (1.56) [6.00] {1.00}	7.37	<0.001
Total ID	14.85 (3.48) [21.00] {8.00}	9.35 (3.74) [19.00] {3.00}	7.08	<0.001

[a] Measured on a seven-point Likert-type scale with 1 = "Strongly Disagree" and 7 = "Strongly Agree."
[b] Mean, (Standard Deviation), [Maximum], {Minimum}.
[c] p-values are one-tailed.

Panel A of Table 3 presents the descriptive statistics for *MAT_MSTMNT*. Panel B presents comparisons of *MAT_MSTMNT* to the "neutral" scale midpoint of 4 using one-sample t-tests. We find that the mean internal auditor *MAT_MSTMNT* is significantly higher than the scale midpoint (mean = 4.45; t = 2.07, p = 0.045), but external auditors' *MAT_MSTMNT* does not differ significantly from the scale midpoint (mean = 4.00; t = 0.00, p = 1.00).

Panel C of Table 3 presents the independent-sample t-tests for *MAT_MSTMNT*. Consistent with H2, we find marginal support that internal auditors' internal control evaluations (mean = 4.45) are less lenient than external auditors' (mean = 4.00, t = 1.358, p = 0.089). However, this result should be interpreted in light of H3, which predicts that employer and client *ID* differently influence internal and external auditors' internal control evaluations.

To test H3, Table 4 includes the results of three regression analyses, presented in three panels. First, we investigate the effects of *TYPE* and *ID* using the following model:

$$MAT\_MSTMNT = b_0 + b_1 ID + b_2 TYPE + b_3 TYPE \times ID + b_4 EXP + e_0, \quad (1)$$

where *ID* is the total *ID* measure, *TYPE* is equal to 0 (1) if participant is an external (internal) auditor, and *EXP* is participant experience measured in years as an auditor.

In H3, we predict that the level of internal (external) auditors' employer (client) *ID* is negatively (positively) associated with internal control deficiency evaluation leniency. The results of the regression, presented in Panel A of Table 4, show a significant interaction between *ID* and *TYPE* (t = 3.05, p = 0.002, one-tailed), even after controlling for experience.[16] To investigate the interaction, we examine the simple main effect of *ID* for each auditor type (i.e., internal and external) using the following equation for each type:

[16] Results are qualitatively the same if we exclude experience as a control variable.

TABLE 3

Descriptive Statistics, One-Sample, and Independent Comparisons of *MAT_MSTMNT* for Internal and External Auditors

Panel A: Descriptive Statistics of *MAT_MSTMNT*

	External Auditors	Internal Auditors	Full Sample
Mean	4.00	4.45	4.20
SD	1.68	1.38	1.55
Max	7.00	7.00	7.00
Min	1.00	1.00	1.00

Panel B: One-Sample t-tests of Internal and External Auditor *MAT_MSTMNT*

Auditor Type	Mean	SD	Scale Midpoint	t	p-value[a]
Internal	4.45	1.37	4.00	2.07	0.045
External	4.00	1.67	4.00	0.00	1.000

Panel C: Independent t-tests of Internal and External Auditor *MAT_MSTMNT*

Mean Difference	t	df	p-value[b]
0.45	1.358	86	0.089

[a] p-values are two-tailed.
[b] p-value is one-tailed, as predicted by H2.
MAT_MSTMNT is measured on a seven-point Likert-type scale: "The likelihood that Tango Sierra's access controls could not prevent or quickly detect a material misstatement is: "1 = Very Low" and "7 = Very High."

$$MAT\_MSTMNT = b_0 + b_1 ID + b_2 EXP + e_0. \quad (2)$$

Consistent with H3, Panels B and C show that *ID* has opposite effects on internal and external auditor internal control evaluation leniency. Specifically, for internal auditors, the coefficient on b_1 is positive and significant ($t = 2.25$, $p = 0.015$, one-tailed), indicating that internal auditors' employer *ID* is associated with less lenient evaluations (i.e., an increased evaluation of the likelihood that Tango Sierra's access controls could not prevent or quickly detect a material misstatement). Conversely, for external auditors, the coefficient on $b_1$is negative and significant ($t = -1.82$, $p = 0.037$, one-tailed), indicating that external auditors' employer *ID* is associated with more lenient evaluations.

Supplemental Analysis

To further understand how differences in *ID* affect auditor judgments, we analyzed participants' perceived ability to influence decisions made by Tango Sierra's management (1 = "Very Low" and 7 = "Very High"). Internal auditors (mean = 4.75) perceived a greater ability to influence management than did external auditors (mean = 3.52, $t = 4.49$, $p < 0.001$, two-tailed). We observed a significant positive correlation between internal auditors' *ID* and their perceived ability to influence management ($r = 0.50$, $p = 0.001$, two-tailed), but did not find this relationship for external auditors ($r = 0.22$, $p = 0.13$, two-tailed). These results indicate that as internal auditors' *ID* increases, they perceive a greater ability to influence management, which could provide them with the confidence to be less lenient in their evaluations.

TABLE 4

Regression Analyses of the Relationship between Identification and Internal and External Auditor Internal Control Deficiency Evaluations

Panel A: Test of *MAT_MSTMNT* Complete Model[a]

$$MAT\_MSTMNT = b_0 + b_1ID + b_2TYPE + b_3TYPE \times ID + EXP + e_0. \quad (1)$$

Variable	Estimated Coefficient	t-statistic	p-value[e]
Constant	5.231	8.703	<0.001
ID[b]	−0.129	−2.084	0.041
TYPE[c]	−3.090	−2.354	0.021
TYPE × *ID*	0.305	3.043	0.002
EXP[d]	−0.031	−1.066	0.290

Panel B: Test of *MAT_MSTMNT* Internal Auditor Subsample (*TYPE* = 1)

$$MAT\_MSTMNT = b_0 + b_1ID + b_2EXP + e_0. \quad (2)$$

Variable	Estimated Coefficient	t-statistic	p-value[f]
Constant	2.119	2.029	0.051
ID	0.179	2.247	0.015
EXP	−0.033	−1.083	0.286

Panel C: Test of *MAT_MSTMNT* External Auditor Subsample (*TYPE* = 0)

$$MAT\_MSTMNT = b_0 + b_1ID + b_2EXP + e_0. \quad (3)$$

Variable	Estimated Coefficient	t-statistic	p-value[f]
Constant	5.231	7.917	<0.001
ID	−0.131	−1.824	0.037
EXP	−0.027	−0.446	0.658

[a] *MAT_MSTMNT* is measured on a seven-point Likert-type scale: "The likelihood that Tango Sierra's access controls could not prevent or quickly detect a material misstatement is: "1 = Very Low" and "7 = Very High."
[b] *ID* is the composite *ID* score from three questions reported in Table 2.
[c] *TYPE* = dummy variable for auditor type: 0 = external auditor, 1 = internal auditor.
[d] *EXP* is years of experience as an auditor.
[e] p-value *TYPE* × *ID* interaction is one-tailed (H3 prediction); all other p-values are two-tailed.
[f] p-values for *ID* are one-tailed (H3 prediction); all other p-values are two-tailed.
Model (1) is significant at 0.02 and has an R^2 of 0.14, Model (2) is significant at 0.09 and has an R^2 of 0.13, and Model (3) is significant at 0.10 and has an R^2 of 0.10.

CONCLUSION

In this study, we examine whether internal and external auditors' perceived relationship with an organization affects their objectivity, which is important given the ramifications of AS5. Bamber and Iyer (2007) use pre-SOX data to investigate the effects of employer and client identification (*ID*), but only consider external auditors, and call for researchers to examine the effects of SOX and the PCAOB's ongoing efforts to promote objectivity and audit quality (e.g., AS5). We use

post-SOX experimental data to provide evidence of the existence of a psychological attachment between auditors and their employers/clients, and how this attachment differentially affects internal and external auditors' control evaluations. We find that internal auditors perceive a greater level of employer *ID* compared to external auditors' client *ID*. In addition, we find that internal auditors are less lenient when evaluating internal control deficiencies than are external auditors. However, this result should be interpreted in light of our finding that *ID* has a differential influence on internal and external auditors' internal control evaluations. Specifically, internal auditors' employer *ID* is related to less lenient control evaluations; conversely, and consistent with Bamber and Iyer (2007), external auditors' client *ID* is associated with more lenient evaluations, even without an expressed management preference.

AS5 encourages increased audit efficiency for lower-risk control evaluations through increased external auditor reliance on internal auditors. This reliance could place external auditors in something of an oversight role in the control evaluation process mandated by SOX Section 404. To our knowledge, researchers have yet to investigate the impact of AS5 on audit quality; specifically, the effects of increased external auditor reliance on internal auditors.

The primary implication of our study is that external auditors' reliance on internal auditors' work, as suggested by AS5, can improve audit quality. That is, because internal auditors' employer *ID* is associated with less lenient audit judgments, if external auditors follow AS5 guidance encouraging reliance on others (specifically, internal auditors), this reliance could have a positive impact on the quality of control evaluations. We recognize, as do Bamber and Iyer (2007), that the impact of cognitive-based *ID* with a client is difficult to identify and address in a practical setting. However, given our results, external auditors should be encouraged to rely more on internal auditors, because internal auditors' *ID* with their employing organization appears to positively influence the quality of their work.

Limitations and Future Research

Whereas this study provides additional insights into the effects of employer and client *ID* on auditor judgments, the results should be considered in light of its limitations, which provide opportunities for future research. We note several limitations. First, while our results were robust to participant experience, our internal auditor participants have a significantly higher level of experience than external auditor participants. Future research could analyze particular auditor positions (e.g., senior, manager, supervisor), rather than simply auditor type (i.e., internal or external). Similarly, while prior literature suggests that professional *ID* moderates organizational *ID*, we did not capture professional *ID*. Future researchers could investigate whether internal auditors' professional *ID* moderates the effects of *ID* similar to the way external auditors' professional *ID* moderates the effects of client *ID* (e.g., Bamber and Iyer 2007).

Second, because we analyze only one audit task, future research could examine other tasks to investigate whether our results are generalizable across task type and/or complexity (e.g., Abdolmohammadi 1999). For example, researchers could investigate whether our results hold for more complex tasks, and how reliance on internal auditors might affect overall audit quality. Likewise, future research may consider using other investigative methodologies to analyze the effect of employer and client *ID*. Specifically, researchers might consider qualitative analyses (e.g., interviews with internal and external auditors, accounting executives, and audit committee members) that could complement our experimental study by providing a better understanding of the underlying processes that influence auditors' judgments across levels of task complexity.

Third, accounting research has examined *ID* using structured research questionnaires (e.g., Bamber and Iyer 2007). To our knowledge, we are the first to investigate *ID* experimentally in an accounting setting. While we observe similar results as prior research (e.g., Bamber and Iyer 2007)

and believe that measuring *ID* in experimental settings is justified, our methodology still presents a potential limitation. For example, while our results, as well as those obtained by research in other settings, suggest that identification can be created in experimental settings, in actual settings, identification also develops over time. Future researchers could investigate whether our findings hold when utilizing other methods.

Fourth, while the regressions we analyzed that split our participants into subsamples of internal and external auditors provided significant results, they both involve relatively small sample sizes. Future researchers could consider obtaining larger samples of internal and external auditors to provide a better understanding of the relationships we examine in this paper.

Fifth, external auditor participants perceived a level of client identification with the hypothetical firm below the scale midpoint, indicating relatively low identification. In light of Bamber and Iyer's (2007) finding that external auditors' client identification is above the scale midpoint (in a setting in which participants considered their largest client), future researchers should (1) carefully develop their experiments to maximize external auditors' client identification, and/or (2) examine whether our results reflect the possibility that there is a ceiling effect on such identification in experimental settings (and if so, why there is such a ceiling effect). This research would be useful to those considering whether to manipulate client identification experimentally or measure it based on actual clients. Although we offer evidence from other domains suggesting that identification can be manipulated experimentally, it may be difficult to create high levels of client identification in audit experimental settings.

Future research also could investigate the level of *ID* for outsourced internal auditors, and also how dual *ID* influences judgments (e.g., the extent to which external auditors identify with both their clients and their audit firm) and how this relationship influences auditor judgments. Likewise, internal auditors often perform consulting and/or assurance tasks. Future research could investigate whether the internal auditor's primary role (i.e., consulting versus assurance) influences the response to deficiencies. In addition, the possibility exists that internal auditors' evaluations are less lenient because of the possibility that they anticipate external auditor review of these judgments—future research can examine whether internal auditors' judgments differ based on the likelihood of external auditor review.[17] Finally, research could examine how judgments of internal auditors with substantive prior external audit experience differ from those without similar experience, and whether these internal auditors behave more similarly to external auditors than do internal auditors with less external audit experience.

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[17] Such behavior would be consistent with the theory of prospective rationality (Staw 1980), in which decisions could be influenced by the possibility that they would have to be defended in the future.

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