The Effects of Situated Client Identity and Professional Identity Salience on Auditor Judgments

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

Recent accounting research suggests that auditor identification or familiarity with their clients may be an additional threat to auditor independence, which may be mitigated by a strong professional identity (King 2002; Bamber and Iyer 2007). However, social identity theory suggests that a strong professional identity will only be effective if it is highly salient and thus readily activated. Yet, professional identity salience is argued to have diminished in recent years (Warren and Alzola 2009). I examine if the level of professional identity salience moderates the positive association between auditor agreement with the client and client identity strength, or the negative association between auditor agreement with the client and professional identity strength.

I address these research questions using two experiments completed by experienced professional auditors. In the first experiment with an ambiguous audit judgment task, I examine client identity strength and professional identity salience at two levels each and measure professional identity strength. Results show that auditors with stronger client identities agree more with the client, but only when professional identity salience is not heightened. I do not find that auditors with stronger professional identities agree less with the client, even when professional identity salience is heightened. In the second experiment with an unambiguous audit judgment task, I examine client identity strength at two levels when professional identity salience is not heightened. Results are inconclusive as to whether auditors with strong client identities differ in their agreement with the client, relative to auditors with weak client identities.

My research contributes to literature on auditor identification and independence by demonstrating the importance of professional identity salience, not just professional identity strength, on auditor judgments. I also show that threats to auditor objectivity can arise from client identity that develops even without a familiar client relationship.

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DEDICATION

To Elaine; my rock and my love.

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CHAPTER 1: INTRODUCTION

Professional regulations define good judgment for auditors as judgments "free of any influence, interest or relationship, in respect of the client's affairs" (Institute of Chartered Accountants of Ontario 2006)[1] and require auditors to be objective and maintain an attitude of professional skepticism or a questioning mind (Statement on Auditing Standards (SAS) 1; Canadian Auditing Standards (CAS) 200). Auditors must be independent in both mind (fact) and appearance (Independence Standards Board (ISB) 2003; CAS 200) but whether either holds has been increasingly questioned since the highly publicized accounting scandals of Enron, WorldCom, and Waste Management.[2] In the United States, the Sarbanes-Oxley Act of 2002 (SOX) was enacted partly in response to perceived failures of the auditing profession. SOX regulations have been predominantly focused on restricting financial influences of the auditor-client relationship to improve independence, which has also been the focus of accounting research (Frankel, Johnson, and Nelson 2002; Ashbaugh, LaFond, and Mayhew 2003; Kinney, Palmrose, and Scholz 2004; Li 2009). However, social identity theory (SIT) suggests that auditors' identification with the client and their identification with the profession also play a role in influencing auditor independence (King 2002; Ashmore, Deaux, and McLaughlin-Volpe 2004; Bamber and Iyer 2007). Consequently, current accounting rules and standards may not adequately safeguard audit judgment against a lack of independence in fact.

The purpose of this study is to investigate the effects of auditors' identification with the norms, values, and attributes of the audit client (client identity) and their identification with the norms, values, and attributes of the accounting profession (professional identity) on audit

[1] This statement is similar to Rule 102 of the *Code of Professional Conduct* of the American Institute of Certified Public Accountants (AICPA; 2005)

[2] Independence and objectivity are commonly linked terms; "[I]ndependence refer[s] to an auditor's ability to make audit judgments objectively (Bazerman, Morgan and Lowenstein 1997, p. 91). Independence refers to the objectivity of the decision being made or the relationship of the groups involved in the decision (Warren and Alzola 2009).

judgment. King (2002) finds that impaired objectivity arising from client familiarity is mitigated when auditors identify with an audit group. Bamber and Iyer (2007) find that auditors with stronger client identities agree with the client more but also find that agreement with the client decreases as professional identity strength increases.[3] I address two broad research questions. First, when does a stronger client identity lead to more agreement with client? Second, when does a stronger professional identity lead to less agreement with client?

Prior audit literature has not examined contextual factors that may moderate the influence of either client or professional identity strength on auditor judgment. SIT suggests that contextual factors are critical to understanding when an individual relies on a particular identity (Haslam and Ellemers 2005). Identity strength represents the degree of association between an identity and an individual's underlying values and attributes (Forehand, Deshpande, and Reed 2002). SIT suggests that whether client or professional identity strength influences auditor judgment will depend critically on the salience of each identity (Ashforth, Harrison, and Corley 2008; LeBoeuf, Shafir, and Bayuk 2010). Identity salience represents the degree to which an identity is activated (Forehand et al. 2002) or stands out among other identities at a given moment and the most salient identity will guide behaviour (Ashforth and Johnson 2001; Haslam and Ellemers 2005). In the auditing context, Warren and Alzola (2009) argue that the likelihood that auditors' professional identity will be most salient has diminished in recent years as the emphasis on client service, relative to serving the public, has increased. Although prior accounting research suggests that a strong professional identity can offset impaired objectivity from a strong client identity (King 2002; Bamber and Iyer 2007), the mitigating effect may be limited if professional identity salience is not sufficiently high. Increasing professional identity salience may be necessary to

[3] In the final chapter I discuss the reasons for differences in results, between my study and these prior studies, with respect to the effect of professional identity strength.

reduce the negative influence of a strong client identity and to increase the positive influence of a strong professional identity.

I assume that a client's identity will generally be highly salient as interactions with client personnel or working papers couched in terms of the client will call attention to the client's identity. Given this assumption, I predict that professional identity salience will moderate the relationship between client identity strength and auditor agreement with the client, such that as client identity strength increases, auditor agreement with the client will increase more when professional identity salience is not heightened versus heightened. Professional identity salience will also moderate the relationship between professional identity strength and auditor agreement with the client, such that as professional identity strength increases, auditor agreement with the client will decrease more when professional identity salience is heightened versus not heightened.

In addition, King (2002) and Bamber and Iyer (2007) have related client identity to having a long or familiar relationship with the client. Other accounting research, including Hackenbrack and Nelson (1996) and Blay (2005) demonstrate impaired auditor objectivity due to financial incentives. However, a strong client identity, and the potential increase in agreement with the client, can occur even when the auditor has minimal history with the client (Rousseau 1998; Meyer, Becker and Van Dick 2006) or is independent of financial influence from the client (Haslam and Ellemers 2005). For example, "situated" client identity is created by situational cues that signal common interests or common fate/goals (Rousseau 1998) and does not require a long time period to develop. Independence frameworks and SOX rules attempt to restrict client-auditor financial incentives and have begun to address concerns about familiarity; however they

do not acknowledge threats to independence that result from an auditor's situated client identity. I examine situated client identity in this study.

I address my research questions using two experiments where professional auditors are asked to evaluate a hypothetical client's going concern assumption by reviewing company financial statements and two additional pieces of audit evidence that either support or refute the assumption. Although the case facts initially create ambiguity, the client believes it satisfies the going concern assumption and wishes to avoid any related note disclosure. Greater auditor agreement with the client, measured both before and after additional evidence is provided, is indicated by a more favourable going concern assessment. In the first study, the additional evidence continues to indicate ambiguity about the appropriate judgment and I compare the effect of (manipulated) low versus high client identity strength and (measured) professional identity strength on auditor judgments, for two different levels of professional identity salience. In the second study, the additional evidence unambiguously indicates that the client's preference is unsupportable and I explore the effect of low versus high client identity strength on auditor judgments, when professional identity salience is not heightened.

Consistent with my predictions, results from Study One show that there is a positive association between client identity strength and initial auditor agreement with the client, but only when professional identity salience is *not heightened*. I do not find support for my prediction that professional identity salience moderates the relationship between professional identity strength and initial agreement with the client. Results of Study One also show that professional identity salience moderates the relationship between client identity strength and final auditor agreement with the client. There is no evidence that the interactive effect between client identity strength and professional identity salience, on agreement with the client, differs across subsequent versus

initial agreement. Results of Study Two are inconclusive as to whether there is an association between client identity strength and subsequent revisions in auditor agreement with the client, in an unambiguous setting.

My research contributes to the literature on social identity effects in auditing (Bamber and Iyer 2002; King 2002; Bamber and Iyer 2007; Suddaby, Gendron, and Lam 2009) as well as research on auditor independence in two ways. First, by separating the constructs of identity salience and strength, I illuminate how the auditor's "independence in mind" is threatened by various dimensions of identification and their interaction. Although prior research demonstrates the importance of client and professional identity strength (King 2002; Bamber and Iyer 2007), the extent to which either of these identities influences auditors depends critically on their relative identity salience (Ashforth et al. 2008). Second, I demonstrate the effects of situated client identity (e.g. immediate but potentially temporary), which is distinct from client identity arising from familiarity and financial influence. While prior audit research has focused particularly on how familiarity and financial influence affect auditor independence, I demonstrate that situated identity can similarly hinder auditor independence.

This research also has practical significance for auditors and audit firms. My results show that even if a professional identity is strong it may not be sufficient to mitigate impairment in objectivity from a strong client identity; the professional identity must also be highly salient. Furthermore, my first experiment demonstrates that the salience of professional identity can be readily heightened and focusing on ways to increase professional identity salience can improve auditor judgments. Finally, by differentiating client identity from familiarity and financial influence, I demonstrate a facet of client identity that has been the subject of little research but may pose a serious threat to auditor objectivity.

My research also contributes to identity research more generally. Few studies to date have examined both the salience and strength of identity (with the exceptions of Forehand et al. 2002; Reed 2004) and even fewer have examined these constructs in the context of multiple identities (LeBoeuf et al. 2010). In particular, I am unaware of any empirical studies that explicitly test a setting in which two strong identities are simultaneously salient.

The remainder of this thesis is organized as follows. In Chapter 2, I use psychology and accounting literature to examine how professional identity salience will moderate the relationships between client and professional identity strength and auditor judgments. In Chapter 3, I develop my predictions and pose three research questions. In Chapter 4, I describe the research design for both studies. In Chapters 5 and 6, I discuss the results of Study one and Study two, respectively. In Chapter 7, I draw conclusions about the results of my thesis.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

In this chapter, I review the existing psychology and accounting literature to examine how auditors' identification with either their clients or the audit profession influences their willingness to support inappropriate or questionable client-preferred accounting treatments. In section 2.2, I introduce theories on identification that provide a basis for client and professional identity. In section 2.3, I contrast between deep structure and situated group identities. In section 2.4, I examine the antecedents and outcomes of group identity strength. In section 2.5, I explore client and professional identity in further detail. In section 2.6, I describe how identity salience moderates the identity strength-behaviour relationship. In section 2.7, I examine how audit context ambiguity affects auditor judgments. I conclude this chapter in section 2.8.

2.2 Social Identity Theory, Self-Categorization Theory, and Organizational Identification

In this section I introduce theories from social psychology and organizational behaviour that provide the basis for prior accounting research and my research on client and professional identity. Social identity theory (SIT) and self-categorization theory (SCT) are closely linked, and both theories argue that it is natural for individuals to view the world as a collection of social groups to which one belongs or does not belong to, in order to cognitively process information and enhance esteem. Organizational identification (OI) research uses SIT to provide organization-specific theory on behaviour in work groups, which more directly applies to the audit setting.

SIT describes a social identity as "that part of an individual's self-concept which derives from their knowledge of a social group (or groups) together with the value and emotional significance of that membership" (Tajfel 1981, p. 255). SCT posits that people have a natural

desire or need to categorize the social environment into meaningful groups to help organize their thoughts and actions (Tajfel 1978). Categorization allows individuals to reduce cognitive effort by generalizing the characteristics of others based on group membership. SIT and SCT argue that by nature individuals "define and evaluate themselves in terms of the groups to which they belong" (Hogg and Abrams 2003, p. 412) and broaden their self concepts by associating or disassociating themselves with these groups (Ashforth et al. 2008).

Prior research argues that individual behaviour is guided by this internal sense of belonging to in-groups and the need to maintain positive value from that social identity (Tajfel 1978; Hogg and Abrams 2003; Ashforth et al. 2008). As will be discussed in greater detail later, research on identity has shown that while it is common to internalize identities, other identities may simply exist through affiliation and association. Identifying with groups is the result of a human desire to enhance self-esteem; "people identify to provide the basis for thinking of themselves in a positive light" (Ashforth et al. 2008, p. 335). Individuals categorize themselves as belonging to groups they perceive to be similar, they view out-groups as those that have dissimilar characteristics, and they use the magnitude of those similarities and differences to enhance the importance of their in-groups and deflate the importance of out-groups (Tajfel 1982) in order to maintain positive self-esteem (Perdue et al. 1990).

OI research, while based on SIT, specifically examines behaviour in work groups as opposed to more general social groups. Seminal research in the organizational behaviour field by Ashforth and Mael (1989) developed the beginnings of OI as distinct from other organization-relevant concepts such as organizational commitment. Over time, OI has shifted away from the SIT-specific focus on inter-group comparisons, of in versus out groups, by also examining intra-group settings (Ashmore et al. 2004). Common organization and work-related groups studied in

the OI literature include the employer organization, divisions or departments of the firm, workgroups, and job/occupation/profession (see Ashforth 2001, p. 33).

2.3 Deep-Structure versus Situated Identities

In this section I describe two general forms of identity, which differ in the way that an individual comes to identify with the group of interest. Deep structure identity is the common form of identity, where an identity is formed and strengthened over time as the individual internalizes the norms and values of a particular group. Situated identity develops more rapidly and does not require internalization; it does, however, require common interests, and often considerable interaction, between individual and group. As will be explained in section 2.5, the latter form may have important implications for auditors and the prevalence of client identities.

Many researchers argue that self-categorization is at the heart of becoming identified (e.g. Turner 1987; Ashforth and Mael 1989; Ashforth 2001; Ashmore et al. 2004; Haslam and Ellemers 2005); that is, an identity does not exist until the individual acknowledges the group as self-defining ("I am X") in some respect (Ashmore et al. 2004). The process of becoming identified is complete when group membership is included in one's self-concept (Meyer et al. 2006). Others argue that the above concept is but one form of becoming identified, which they refer to as self-defining identification (Pratt 1998; Meyer et al. 2006). Also, some researchers note that membership with an identified group does not require acceptance by, or real interaction with, any group members (Ashforth and Mael 1989; Ashmore et al. 2004).

Self-defining identification is identification through emulation (Pratt 1998); an individual emulates prototypical group members and internalizes the group identity into her own self-concept ("I am a part of X – I am becoming like X – I am X"). Another form of becoming identified is self-referential identification, which refers to identification through affinity (Pratt

1998); an individual identifies with a group because he perceives the affiliated group as having common features with his own self-concept ("I am like X"). Identification through emulation and affinity lead to deep structure identity and situated identity, respectively (Rousseau 1998; Meyer et al. 2006).

Deep structure identities are developed over time as the individual internalizes the group's norms and beliefs (Rousseau 1998; Meyer et al. 2006). Situated identities are created by situational or immediate environmental cues that signal common interests and can develop rapidly; however, they are more unstable and fleeting than deep structure identities and persist as long as the cues are present (Rousseau 1998; Meyer et al. 2006; Ashforth et al. 2008).

Situated identities can be strengthened through common interests or common fate/goals (Rousseau 1998; Gaertner et al. 1999), interdependent tasks (Rousseau 1998), by encouraging cooperation and interaction (Gaertner et al. 1999), or by subtle cues/symbols that relate the role of the individual to the organization (Perdue et al. 1990; Rousseau 1998). These cues may include uniforms, a habitual location at the office, swiping a pass-card for office entry, slogans on clothes, and other mediums that promote the "we" of the organization (Rousseau 1998; Ashforth 2001; Meyer et al. 2006). In section 2.5 I return to these concepts and, in particular, I discuss deep-structure professional identity and situated client identity.

2.4 Antecedents and Outcomes of Group Identity Strength

In this section I describe how the strength with which an individual identifies with a particular group can have both positive and negative effects on behaviour or group outcomes. I also use SIT and OI theory to demonstrate that characteristics of the group, such as prestige, success, and image, contribute positively to identity strength. Typically, SIT and OI research refer to the extent to which an individual identifies with a group as the level of identification

(low to high); level of identification is synonymous with a more recent term, identity strength (weak to strong identity) (Forehand et al. 2002).[4]

2.4.1 Identity Strength and Individual Behaviour

Individuals view and treat in-group members more positively than out-group members (in-group bias) and may even discriminate against out-group members (out-group discrimination) (Ashforth and Mael 1989; Ashmore et al. 2004). A stronger identity leads to greater bias toward the in-group or against the out-group (Tajfel 1982). In-group or out-group bias contains both motivational and cognitive elements (Dovidio, Gaertner, and Validzic 1998). First, individuals are motivated to "maintain positive distinctiveness of the in-group relative to out-groups" (Glasford, Dovidio, and Pratto 2009, p. 417; Tajfel and Turner 1979). Second, cognitive processing of information changes (e.g. attention to detail, ease of information recall) as the referent identity changes (Brown, 2000; Maitner, Mackie, Claypool, and Crisp 2010) or as categorization of a group changes from in-group to out-group, or vice-versa (Dovidio et al. 1998; Dovidio, Pearson, and Orr 2008).

Reducing in-group bias or out-group discrimination generally involves changing the categorization or identity of relevant groups. For example, individuals will display out-group discrimination when other group members are perceived to hail from a distinct out-group but will show in-group favouritism to the same group members when they perceive themselves to share a common identity with the other group members (Dovidio et al. 1998). Changing categorization is important because an individual's identity strength is relatively enduring and stable (Forehand et al. 2002); thus, attempting to decrease identity strength is not likely to be successful.

[4] I use the term identity strength, as opposed to level of identification, to avoid confusion with the term identity salience, which I will describe in section 2.6. I also refer to prior research as defined in terms of antecedents and outcomes of identity strength, as opposed to level of identification used by prior researchers; such conceptualization does not change the theory or results demonstrated in prior literature.

Although a stronger group identity leads to greater in-group bias, OI research argues that this bias can be good or bad. Positive organizational outcomes include enhanced support and commitment, cooperation, enhanced positive evaluations of the organization, and adherence to group values and norms (Ashforth and Mael 1989) as well as increased effort, participation, and information sharing (Ashforth et al. 2008). Further, individuals interacting with other perceived group members are not only cooperative but expect the other person to be more cooperative, expect to agree with the other person, and strive to actively reach agreement (Ellemers and Rink 2005; Haslam and Ellemers 2005). However, negative outcomes include unduly extending a benefit of the doubt to the group (Ellemers and Rink 2005), an inability to question the ethicality of organizational behaviour, and behaving unethically on behalf of the organization (Ashforth et al. 2008). Individuals may also perceive less need for intervening in questionable behaviour or suppressing dissenting remarks when group ideas/actions are questionable (Ashforth et al. 2008).

2.4.2 Determinants of Identity Strength

As suggested earlier, individuals identify with groups in an effort to enhance self-esteem (Perdue et al. 1990; Ashforth et al. 2008). Accordingly, a particular identity strengthens as the distinctiveness and prestige of the group (Ashforth and Mael 1989), the salience of out-group differences (Ashforth and Mael 1989), or the success of the group (Haslam and Ellemers 2005) increases. Identification can also increase as interpersonal interaction, similarity, liking, proximity (individuals located near each other), shared goals or threats, common history, or perceived shared fate with the group increases (Ashforth and Mael 1989).

2.5 Client Identity and Professional Identity

In this section I describe two specific organizational identities that are relevant to audit research; client identity and professional identity. It is common for an individual to possess

multiple identities in an organizational context. Prior research has demonstrated that client identity and professional identity are important, yet distinct, identities in an audit setting with opposing influences on independent and objective auditor judgments. However, prior accounting research has not closely considered how situated identity applies to the auditor-client relationship, which may expand the circumstances in which auditors develop strong client identities and expose auditors to greater risk of impaired independence. I conclude this section by contrasting the influence and importance of social identity vis-à-vis other factors, such as financial incentives, on auditor judgments.

2.5.1 Multiple Identities

Research in SIT and OI states that it is common for individuals to have multiple identities within a particular category, such as multiple work-related identities (Ashforth 2001; Ashforth and Johnson 2001; Ellemers and Rink 2005; Haslam and Ellemers 2005; Ashforth et al. 2008). Studies that examine multiple workplace identities include: organization versus workgroup (Richter, West, Van Dick and Dawson 2006; Meyer et al. 2006); organization versus profession (Russo 1998; Van Dick, Wagner, Stellmacher and Christ 2005; Brickson 2007); organization versus workgroup versus profession (Johnson, Morgeson, Ilgen, Meyer and Lloyd 2006); or organization versus client (Alvesson 2000). Research in accounting and law has also examined organizational identity versus professional identity (accounting: Iyer 1998; Bamber and Iyer 2002; law: Gunz and Gunz 2007, 2008a) and client identity versus professional identity (accounting: Bamber and Iyer 2007; Suddaby et al. 2009; law: Gunz and Gunz 2008b).

Russo (1998) indicates that having both professional and organization identities is natural for knowledge workers since they are regularly involved in their employer organization's

activities but have gone through extensive education and training in their profession.[5] While client identity has been studied less often, both Alvesson (2000) and Gunz and Gunz (2007, 2008b) highlight that the relationship between service provider (e.g. consultant, lawyer, or auditor) and client can be as close as that of employee and employer and note the similarities between the role of auditor and consultant (Alvesson 2000) or accountant and lawyer (Gunz and Gunz 2007). Recent accounting research that surveyed professional accountants demonstrates that auditors possess both client and professional identities (Bamber and Iyer 2007) and even top level accountants, such as audit partners, have high commitment levels to both client and profession (Suddaby et al. 2009). Overall, this research shows that on average, auditors have a moderately strong client identity and a strong professional identity, and that these identities are distinct from each other.

In this study I focus on client and professional (audit) identity. Client identity is defined as auditors' identification with the norms, values, and attributes of the audit client. This varies by client organization but may relate to factors such as management philosophy and tone at the top, client performance and reputation, client personnel, extent of corporate social responsibility, political affiliations, or industry and product/service attributes. Professional identity is defined as auditors' identification with the norms, values, and attributes of the accounting profession. Professional identification will align the norms, goals, and values of auditors with their professional obligations (Warren and Alzola 2009). The norms or values of the profession may include upholding or maintaining public duty, professionalism and ethics, professional skepticism, or objectivity. I focus on professional rather than audit firm identity because it is

[5] Alvesson (2000) distinguishes between knowledge-intensive firms and professional organizations: the latter encompasses the former but not vice versa since professional organizations contain aspects such as code of ethics not always found in knowledge-intensive firms. Thus, auditors belong to a more specific type of knowledge-intensive firm.

argued that professional affiliation precedes, and is reflected in, organizational affiliation such as audit firm identity (Aranya, Pollock, and Amernic 1981; Bamber and Iyer 2002). Audit firms may endorse a mix of client and professional goals (Warren and Alzola 2009) while professional identity has consistent goals and norms for all auditors that focus on the profession.[6]

2.5.2 Client versus Professional Identity Strength and Auditor Judgments

The main obligation for auditors is to attest that the financial statements of their clients are not materially misleading, which requires objectivity in auditor judgment (Johnstone et al. 2001). The discussion in the previous section suggests that it is desirable for auditors to possess a strong professional identity, in order to reinforce the need for objectivity. At the same time, auditors are best able to make objective audit judgments when they are independent from their clients (Kinney 1999). Although independence standards have not been formally codified, both the Independence Standards Board (ISB 2003) and American Institute of Certified Public Accountants (AICPA 2006) have provided conceptual frameworks for auditor independence, the definitions of which are often cited in academic literature.[7] These concepts of independence require auditors to be independent from clients both in appearance and in mind (sometimes referred to as "in fact"). The former prohibits auditors from having certain financial or non-financial relationships, or undertaking certain activities, with clients, that would lead investors to question auditors' independence in mind. The latter requires auditors to maintain a mental state of independence, even if the factors that threaten independence are not apparent to third parties or auditors avoid the relationships and activities above.

[6] For example, an auditor with an audit firm that stresses efficiency could show bias toward the client by reducing the extent of testing. This would not contradict his or her firm's goal of efficiency, but it could contravene the professional duty to gather sufficient, appropriate evidence. Audit firm identity can also vary by auditor if they derive their identity by comparing their firm to other audit firms. Nonetheless, Suddaby et al. (2009) demonstrate that auditors have moderate to strong organizational (audit firm) identities. Interestingly, auditors in their study with stronger organizational identities exhibited stronger client identities.

[7] Two recent reviews of the literature on auditor independence can be found in Schneider, Church, and Ely (2006) and Gramling, Jenkins, and Taylor (2010).

The auditor is hired by the client but has a professional duty to serve the public interest; client and public interest may differ. Client firms desire financial statements that present the firm as an attractive investment, and information asymmetry between clients and investors can create a conflict of interest (fair presentation versus reporting to make the firm appear successful) for the client to exploit (Johnstone et al. 2001). When client and professional goals do conflict, it is not desirable for auditors to possess a strong client identity (Bamber and Iyer 2007). A strong client identity can exacerbate auditors' conflict between serving their client's self-interest and providing objective attestations about the fairness of financial statements.

Gunz and Gunz (2007) argue that individuals bound by rules of professional conduct, such as lawyers (or accountants; Gunz and Gunz 2008b), are expected to provide advice that is uninfluenced by the nature of the professional-client relationship. Beyond independence frameworks, professional standards require it; International Standards on Auditing (ISA) 200 and 240, SAS 99, CAS 200 & 240 all require auditors to maintain their attitude of professional skepticism regardless of their beliefs about management's honesty and integrity that arise from past experiences with management.[8] Bazerman et al. (1997) argue that, whether through expectations or regulation, the desired objectivity and independence in mind is difficult for an auditor to uphold because all individuals, including auditors, are susceptible to unintentional judgment bias due to self-serving biases. This bias can result from a close auditor-client relationship (Bazerman et al. 1997) or more particularly, a strong client identity (Bamber and Iyer 2007).

However, King (2002) argues that auditors' affiliations with accounting groups (e.g. engagement teams, audit firms, or profession) can protect auditors from this unconscious bias.

[8] SAS 99, ISA 240, and CAS 240 deal specifically with the auditor's responsibilities related to fraud. ISA 200 and CAS 200 deal with the overall responsibilities of an auditor in conducting an audit.

King (2002) uses an experimental economics setting and finds that "auditor" bias due to increased client financial incentives and familiarity with a "client manager" (akin to client identity) is mitigated when they have a strong affiliation with other "auditors" participating in the experiment (akin to professional identity). Bamber and Iyer (2007) also demonstrate that (potentially unwarranted) auditor agreement with the client *increases* as client identity strength increases but *decreases* as professional identity strength increases. Thus, based on prior accounting research, the threat to independence and objectivity from a strong client identity should be mitigated for auditors with a strong professional identity. However, individuals with multiple identities tend to rely more heavily on the strength of one identity versus another, depending on contextual or environmental factors that activate one identity more than the other (Haslam and Ellemers 2005). Thus auditors may be at risk of impaired independence due to a strong client identity, and a strong professional identity may not effectively mitigate this impairment, in certain audit settings. This possibility is discussed further in the next section.

2.5.3 Deep Structure Professional Identity and Situated Client Identity

Professional identity tends to be deep structure in nature since the extensive training and education of the auditor reinforces and internalizes the norms and beliefs of the profession over time (Rousseau 1998; Warren and Alzola 2009). Prior audit research commonly describes client identity in terms of deep structure identity, as it refers to a setting with client familiarity and repeated client interaction over years of audit service (King 2002; Bamber and Iyer 2007; Suddaby et al. 2009).[9] Concerns about negative outcomes arising from deep structure client identity have been raised by regulators and Sarbanes-Oxley (SOX) rules and independence frameworks (ISB 2003) have attempted to address them. Researchers have heavily debated the

[9] Farmer, Rittenberg, and Trompeter (1987) refer to a similar process, acculturation, which includes an identification and internalization stage. However, they suggest that over an auditor's career he or she may internalize client norms as opposed to professional norms; thus, once acculturated, the auditor would have a strong identity with any client.

effectiveness of one SOX rule, mandatory audit partner rotation, but empirical results to date are mixed. Carey and Simnett (2006) find that longer partner tenure leads to lower audit quality, which they attribute to closer partner-client relationships that could be avoided through auditor rotation. However, Chi, Huang, Liao, and Xie (2009) find no evidence that mandatory audit partner rotation enhances actual or perceived audit quality.

However, theory suggests that situated client identity is no less prevalent than deep structure client identity but similarly can lead to impaired objectivity. The audit context may be particularly relevant for the existence of situated client identity given that "the financial statements and the auditor's report are joint products" (Gibbins, Salterio, and Webb 2001; p. 540); situated identities strengthen as common fate/goals or interdependency of tasks increases (Rousseau 1998). Situated identity is also common for individuals that concurrently work for multiple organizations on a regular basis (Rousseau 1998); auditors routinely work for a number of clients.

Client image and importance are also important antecedents of client identity strength (Bamber and Iyer 2007). For situated identities, individuals perceive that the affiliated group's identity has common features with their own self-concepts and may feel or want to be similarly associated with the group, but they do not necessarily internalize the identity (Pratt 1998). An auditor's client identity can fit this form of identification well. An auditor is not likely to feel that he/she is a member of the client organization (internalized) and may not want to be a member of the client organization. However, an auditor may identify with a successful or reputable client in order to be similarly perceived by other individuals as successful and reputable (common interest or values).

2.5.4 Financial Incentives and Auditor Judgments

It is important to acknowledge that in practice, in addition to non-financial factors such as client and professional identity, financial incentives may well influence auditor behaviour. Prior research demonstrates that auditors respond to financial incentives, both to favour the client (e.g. risk of losing client, future business potential, etc.) and to oppose the client (e.g. litigation risk) (Magee and Tseng 1990; Krishnan and Krishnan 1997; Blay 2005). Prior research also shows that auditors respond to social and ethical influences, both to favour the client (e.g. client identification and social pressure) and to oppose the client (e.g. professional identification and moral development) (Sweeney and Roberts 1997; Lord and DeZoort 2001; King 2002; Bamber and Iyer 2007).

Financial incentives may exacerbate the negative implications of client identity; they may also mitigate these negative implications. While interesting, exploring how financial incentives and social identity interact is beyond the scope of this thesis. That said the extant empirical evidence is mixed about the influence of financial incentives on auditor independence. For example, archival audit research has demonstrated that non-audit fees may impair audit quality and independence (Frankel et al. 2002), may not impair independence (DeFond, Raghunandan, and Subramanyam 2002; Ashbaugh et al. 2003) or may even improve audit quality (Kinney et al. 2004). Recent post-SOX archival evidence suggests greater independence in the face of high audit and total fees, which is attributed to reputation preservation and litigation risk avoidance (Li 2009). These mixed results suggest that non-financial factors, such as social identity, likely play an important role in influencing auditor judgments. A recent paper by Hope and Langli (2010) supports this contention; they demonstrate that even in a low litigation and reputation risk

setting, auditors maintain independence as audit fees rise and suggest that ethics and the professionalism of auditors play an important role.

In summary, research demonstrates that the client and audit profession are two organizational groups that auditors are likely to identify with, to varying levels of strength. A strong client identity can impair independence and thereby auditor objectivity but possessing a strong professional identity may be effective in mitigating this impairment. Auditors' professional identities are generally internalized over time through education and training. Client identities can develop over time but may also develop in short time periods, which may increase the exposure of auditors to the threat of client identity. Client and professional identity are important to the study of auditor judgment but their potential interaction with financial incentives, while deserving of research attention, are beyond the scope of this study.

2.6 Identity Salience as a Moderator of the Identity Strength-Behaviour Relationship

In this section, I examine the moderating role of identity salience in the relationship between identity strength and individual behaviour. I distinguish identity salience from the commonly discussed concept of identity strength and demonstrate how low versus high identity salience can moderate the influence of identity strength on behaviour. Since individuals often have multiple identities with conflicting norms or goals, I examine how relative identity salience and identity conflict influence how individuals respond to their multiple identities.

2.6.1 Distinguishing Identity Salience from Identity Strength

Salience represents the degree to which an object stands out relative to other objects in a particular situation. *Identity salience* represents the degree to which an identity is activated (Forehand et al. 2002) or stands out among other identities at a given moment. Identity salience has been described as situation-dependent; identities that are more exclusive (limited

membership), concrete (identity attributes are easily apparent), or proximal (direct impact of identity on individual) are more salient (Ashforth and Johnson 2001).[10] Further, more frequent cues or habitual and routine encounters with an identity relative to other identities will render it more salient (Hogg and Terry 2000). Identity salience also increases with the presentation of identity cues (Forehand et al. 2002); for example, simply mentioning a group can increase its salience (Van Dick et al. 2005).

Identity strength may also determine identity salience (Forehand et al. 2002). *Identity strength* represents the degree of association between an identity and an individual's underlying values and attributes (Forehand et al. 2002). An individual with a strong identity "is more likely to be in a state of identity salience" than an individual with a weaker identity and "it may be easier to elicit identity salience in a strong identifier" (Forehand et al. 2002, p. 1088). This is consistent with Ashforth (2001), who defines identity salience in terms of both subjective importance (identity is internally valued) and situational relevance (others would accept identity as relevant in a given situation). Individuals with strong identities perceive these identities to be relevant in a wider set of circumstances or situations, and thus strong identities may be moderately or highly salient more often than weak identities.

However, "possessing a strong association with an identity does not necessitate identity salience" (Forehand et al. 2002, p. 1088). While identity salience and strength have been intertwined in prior research, Forehand et al. (2002) make clear that they are distinct constructs. Identity salience is the "momentary activation" of an identity and is highly variable; identity strength is the "enduring association between an individual's sense of self and his or her identity" (Forehand et al. 2002, p. 1087). A strong (or weak) identity can range from low to high

[10] These terms are often used to distinguish between lower order identities (more salient) and higher order identities.

salience and a highly salient (or low salience) identity can be strong or weak (Forehand et al. 2002; LeBoeuf et al. 2010).

2.6.2 Influence of Identity Strength in Low versus High Identity Salience Settings

Prior research indicates that if a particular group identity is highly salient, bias in favour of that group increases as the strength of the identity increases (Forehand et al. 2002). If the salience of a group identity is low, identity strength has minimal effect (LeBoeuf et al. 2010). Forehand et al. (2002) suggest that the strength of an identity is *only* important in predicting behaviour when the identity is salient (see also Haslam and Ellemers 2005). Identity salience moderates the relationship between identity strength and behaviour; the higher the salience of an identity, the more likely an individual will be guided by the strength of that identity.

LeBoeuf et al. (2010) examine how identity salience influences consumer behaviour. In one experiment, they measure students' scholar versus socialite identities and alter which identity is made salient. Preferences for the scholarly, relative to social, items increased as the scholar identity increased in strength when the scholar identity was made salient, but not when the social identity was made salient. Similarly, preferences for social, relative to scholarly, items increased as the strength of the social identity increased, but only when the social identity was made salient. Thus, in LeBoeuf et al. (2010), identity salience moderates the influence of identity strength.

2.6.3 Multiple Identities, the Most Salient Identity, and Identity Conflict

The implications studied above generally predict the influence of identity strength on behaviour, as the salience of that identity increases from low to high. However, the research design of LeBoeuf et al. (2010) caused the salience of one identity (e.g. scholar) to be low when the salience of another identity (e.g. social) was high. Nonetheless, their results demonstrate the

importance of relative identity salience; the strength of the more salient identity influenced choice behaviour whereas the strength of the less salient identity did not appear to have any influence on choice behaviour.

SIT and OI research generally conclude that in situations of multiple relevant identities, only the most salient of the multiple identities tends to guide behaviour (Ashforth 2001; Ashforth and Johnson 2001; Ellemers and Rink 2005; Haslam and Ellemers 2005; Ashforth et al. 2008). This is consistent with the experimental findings of LeBoeuf et al. (2010). Individuals who possessed both a strong scholar and strong social identity made choices that were consistent with whichever identity was highly salient. It is also important to note that the choices made when the scholar identity was highly salient were opposite to the choices made when the social identity was highly salient.[11]

Generally, prior research is silent as to whether the strength of a less salient identity has any influence on behaviour. Although not hypothesized, the results of LeBoeuf et al. (2010) imply that the less salient identity has no effect on behaviour but identity theory is unclear about this issue. As an illustration of the possibilities, consider two individuals. The first has two strong identities that have conflicting preferences.[12] The second individual, for the same two identities, weakly identifies with one and strongly identifies with the other. If the most salient identity is the one that both individuals strongly identify with, but the first individual exhibits less biased behaviour towards this group, then it suggests that, ceteris paribus, the less salient identity also influenced the first individual's behaviour. Whether the less salient identity has an influence may

[11] In another experiment using individuals with two strong cultural (deep structure) identities, LeBoeuf et al. (2010) show similar conflicting preferences. The choices made when one cultural identity is highly salient conflict with the choices made when the other cultural identity is highly salient.

[12] For example, a unionized employee that also works closely with non-unionized management on special projects may have two strong identities that create conflicting preferences during contract negotiation.

be an important distinction in an accounting setting, which I discuss in greater detail in Chapter 3.

In certain cases, multiple *strong* identities may be simultaneously *high* in salience; in such situations individuals suffer identity conflict, which is generally conscious and unpleasant (Ashforth et al. 2008).[13] Individuals often resolve this conflict by serving one of the identities (commensurate with the strength of the identity) and largely or completely ignoring the others (Ellemers and Rink 2005; Ashforth et al. 2008). For example, individuals may defer to the strongest or most important identity, conform to the identity (or in-group) exerting the most pressure, or choose to order the identities sequentially and respond to the needs of one before responding to the needs of the other (Ashforth et al. 2008). Individuals may also resolve identity conflict by partially serving each identity; for example, by compromising between the two identities (Ashforth et al. 2008). However, it is not clear when individuals will choose to invoke a particular strategy for dealing with identity conflict.

In summary, although they are related, identity strength is a concept distinct from identity salience. Identity strength refers to how greatly an individual identifies with a particular group; once developed, identity strength is very stable over time. Identity salience refers to the extent to which an identity (no matter how strong) is evoked or made active; identity salience is highly variable. The higher the salience of an identity, the more likely an individual will be guided by the strength of that identity. However, when individuals have multiple relevant identities – i.e. multiple identities in the workplace – relative salience matters; individuals will respond to the strength of the most salient identity and may not respond, even partially, to less salient identities.

[13] Individuals still suffer identity conflict when two strong identities differ in salience, though it is latent or minor; identity conflict poses a problem when both identities are readily activated/highly salient (Ashforth et al. 2008).

When multiple identities are simultaneously high in salience, individuals suffer identity conflict and often choose to act upon the strength of only one identity.

2.7 Decision Context Ambiguity

In this section, I examine how auditors make audit judgments as the ambiguity about a normatively acceptable or reasonable conclusion increases, regarding an audit issue with a client. Prior auditing literature argues that auditors make "appropriate" decisions when the audit task or client fact situation is unambiguous but when ambiguous, auditors are more likely to agree with the client's preference for resolving the audit issue (Kadous et al. 2003). Prior SIT and OI literature suggests that the influence of identity strength on individuals' judgments is reduced as informational uncertainty regarding a decision increases (Blader 2006). However, SIT and OI research has also found that in-group bias still exists in certain settings despite the existence of unambiguously incorrect (group) behaviour (for a review, see Ashforth et al. 2008).

Prior research in accounting finds that auditors exhibit "bias" toward the client-preferred accounting treatment when the client fact situation and/or accounting standards are ambiguous as to the proper accounting treatment (Hackenbrack and Nelson 1996; Salterio and Koonce 1997; Kadous et al. 2003). However, auditors typically make appropriate, objective decisions in an unambiguous setting (Salterio and Koonce 1997) or remain conservative as engagement risk increases (Hackenbrack and Nelson 1996). Farmer et al. (1987) and Hoffman and Patton (2002) suggest that incentive threats pose less risk when accounting standards specifically define rules for an accounting issue, or are more precise, respectively. As described in Kadous et al. (2003), auditors are bound by reasonableness constraints and despite incentives to side with the client, will not support client preferences that cannot be justified where for example, an audit standard unambiguously prescribes a treatment that opposes the client preference.

Research in SIT and OI also indicates that individuals tend to display in-group bias only when making judgments under informational uncertainty (Ellemers and Rink 2005; Blader 2006). Blader (2006) shows that while judgments are influenced by the evaluator's identity strength when diagnostic cues are unavailable, when explicit cues are available, judgments are consistent with the additional information and not biased by identity. Results reported by Bamber and Iyer (2007) – auditor acquiescence to the (potentially unwarranted) client preferred treatment increases with client identity strength and decreases with professional identity strength – are in the context of an ambiguous task setting.

However, SIT and OI research has found that in-group bias may still exist in certain settings despite the existence of unambiguously incorrect (group) behaviour, although group members tend to exhibit two extremes; strong bias *for* their in-group or strong bias *against* their in-group.[14] A strong identity may lead to *overidentification* (Dukerich, Kramer, and McLean Parks 1998) and failure to question the ethicality of the group or its members' behaviour (Ashforth et al. 2008). It may also lead to *expectancy violation* and in-group punishment (Ellemers and Rink 2005); expectancy violation occurs when behaviour of an in-group clearly deviates from prior expectations. In such cases, individuals will punish an in-group member more severely than an out-group member (Ellemers and Rink 2005). The violation may also tarnish the value of the identity and individuals may choose to disassociate or disidentify with the group in question (Haslam and Ellemers 2005; Glasford et al. 2009). Salterio and Koonce (1997) demonstrate that auditors make appropriate reporting decisions in an unambiguous setting despite client preferences for a particular accounting treatment. However, their experimental setting did not contain explicit factors that further motivated the participants to favour the client

[14] For example, individuals may cover up group mistakes when identities are attached to highly visible or high status roles (Ashforth et al. 2008). Ellemers and Rink (2005) suggest that individuals are more likely to punish in-group members the more strongly they hold prior expectations about group norms or when group disloyalty is shown.

preference. Thus, auditors motivated by a strong client identity may bias their judgments for (overidentification) or against the client (expectancy violation) even in an unambiguous setting.

2.8 Conclusion

This chapter reviewed relevant psychology and accounting research that examines the influence of social identity theory and organizational identification. Furthermore, this chapter examines how client identity strength and professional identity strength specifically apply in an audit context. Overall, the existing literature suggests that client identity strength will impair auditor independence while professional identity strength will help maintain it. Research suggests that these identity effects will persist in an ambiguous setting. When the audit decision context is unambiguous, auditors with strong client identities may not be influenced by the client preference or they may react strongly – negatively or positively – toward the client preference. In addition, the extant SIT and OI literature suggests that *situated* client identity readily applies to the audit context and identity salience may be an important moderator of both the client and professional identity strength-auditor judgment relationship.

CHAPTER 3: DEVELOPMENT OF HYPOTHESES

3.1 Introduction

In this chapter, I use literature from SIT and OI to develop hypotheses about auditors' judgments; in particular, auditors' agreement with the client-preferred outcome for an accounting issue. First, I distinguish between initial and subsequent audit judgments, as prior research provides mixed evidence whether factors that influence initial audit judgments will similarly influence evaluation of additional information and subsequent judgments in a sequential audit judgment process. Second, I examine client and professional identity strength and professional identity salience in an ambiguous audit context, as prior research indicates that auditors are most susceptible to client influences in such a context. My objective is to determine whether the level of professional identity salience, and increasing that level, are important factors in mitigating impaired independence and objectivity from a strong client identity. Third, I examine whether client identity strength can influence auditor judgments in an unambiguous audit context. My objective is to provide more evidence about the behaviour of auditors in an unambiguous context. While it is a widely-held assumption that auditors remain objective in an unambiguous context (Kadous et al. 2003) few prior studies in accounting research have confirmed or disconfirmed this.[15]

Several aspects of my research focus are important to note. First, as explained in the preceding chapter, I focus on situated client identity. Regardless of whether the client identity is situated or deep structure, judgment is more likely to be biased in favour of the client as identity strength increases (Rousseau 1998). Second, as explained in the preceding chapter, I focus on deep structure professional identity because auditors' sense of self will already contain this

[15] Salterio and Koonce (1997) provide evidence that this assumption is valid whereas Hoffman and Patton (2002) demonstrate that bias, while reduced, still persists even when audit standards are more precise (i.e. lower ambiguity).

identity (Warren and Alzola 2009). Third, I examine auditor judgments when client identity salience is high; SIT suggests that auditor objectivity is unlikely to be impaired by client identity strength when client identity salience is low. Fourth, I vary professional identity salience; whether the level of professional identity salience that naturally occurs in an audit setting is low, medium, or high is an open empirical question. But SIT and OI research suggest that professional identity strength should be most influential when professional identity salience is heightened.

This chapter is organized as follows. Section 3.2 differentiates initial from subsequent audit judgments. Section 3.3 examines the ambiguous audit context. First, I develop two predictions regarding the moderating role of professional identity salience on the relationship between both client and professional identity strength and initial audit judgments. Second, I explore two research questions regarding whether client and professional identity strength, as moderated by identity salience, influences subsequent audit judgments in a similar manner to initial judgments. Section 3.4 explores a research question regarding the influence of identity strength in an unambiguous audit context, when professional salience is not heightened. I conclude this chapter in section 3.5.

3.2 Initial versus Subsequent Audit Judgments

In this section, I compare the decision context of initial and subsequent audit judgments. Auditing is a sequential process of iteratively assessing client financial statement assertions and obtaining new evidence to update those judgments, to attest whether or not the client assertions are reasonably supported (Gibbins 1984; Knechel and Messier 1990; Kennedy 1993). For example, Asare (1992) characterizes the going concern decision as a two-stage process (p. 382):

A judgment stage that entails an evaluation task in which the auditor forms an initial belief (anchor) about the client's financial distress or stability and updates this anchor *sequentially* with the acquisition and evaluation of a *short* series of *complex* evidence, and a decision stage in which the auditor decides on the type of report to issue.

As implied by Asare (1992), subsequent going concern judgments are made on the basis of specific, detailed evidence; initial judgments, rather, are typically made with less information or evidence provided to the auditor. For example, initial going concern judgments may be generated by examining preliminary financial statements and viewing changes in balances or key events disclosed. Subsequent judgments would be made after examining specific evidence regarding various accounts or key events that are reflected in the financial statements. As another example, auditors may perform analytical procedures on a specific account (or set of related accounts) to form an initial opinion about whether changes in the account balance(s) are reasonable. Following these procedures, more substantive evidence is collected regarding certain fluctuations and is examined to update initial beliefs about the reasonableness of the changes.

Accounting research tends to focus on subsequent or final judgments; i.e. the judgments made after specific, additional evidence is evaluated. However, even these judgments could be considered initial or interim to the extent that further evidence is collected and requires auditors to update beliefs/judgments made on the basis of the first set of specific, additional evidence.[16] As suggested by Asare (1992), initial judgments are often based on limited evidence. For purposes of this thesis I classify initial judgments as those made by auditors after evaluating background client information or general changes in account balances. I classify subsequent

[16] For example, auditors may form initial going concern assessments on the basis of preliminary financial statements. These assessments may be subsequently updated when the auditor evaluates client documentation and other evidence about specific financial events. At a later date this subsequent assessment may require updating due to information provided by a third party or external party, for example, about whether certain asset values are impaired.

judgments as those made by auditors after searching for, or being provided with, additional evidence that contains specific details about a certain account or set of related transactions. Although in practice auditors likely go through more than one cycle of initial judgments, additional evidence gathering, and subsequent judgments, time constraints in an experiment limit my ability to engage auditors in multiple cycles. I examine one initial judgment and one subsequent judgment, which is also a final judgment.

Prior accounting research has shown that various factors influence initial judgments, and these factors continue to bias subsequent evidence search, evidence evaluation, and in turn, subsequent judgments (confirmation bias) (Kaplan and Reckers 1989; Cloyd and Spilker 1999; Blay 2005). However, prior accounting research has also shown that, in a sequential audit judgment process, initial hypotheses or judgments will not necessarily influence subsequent evaluation and judgments (Trotman and Sng 1989). Rather, a recency bias may influence auditor judgments, causing auditors to rely heavily on the most recent evidence items (Asare 1992).

3.3 Ambiguous Decision Context

In this section I make predictions about auditors' judgments, as influenced by identity strength and identity salience, when faced with an ambiguous audit decision context. As summarized in Chapter 2, individuals tend to display in-group bias, commensurate with identity strength, under informational uncertainty (Ellemers and Rink 2005; Blader 2006). Further, auditors show favour toward the client preference when an accounting issue is ambiguous (Johnson 1993; Salterio and Koonce 1997; Kadous et al. 2003). As discussed in the previous section, it is unclear whether the effects of identity that seem likely to apply to initial audit judgments will be amplified in subsequent audit judgments.

3.3.1 Initial Audit Judgments: Professional Identity Salience as a Moderator of Client Identity Strength and Professional Identity Strength

As discussed in Chapter 2, auditors possess both client and professional identities, each of which can range from weak to strong (Bamber and Iyer 2007; Suddaby et al. 2009). SIT and OI research indicates that a *strong* client identity can lead to undesirable biases toward the client as a result of the auditor actively striving to reach agreement (Haslam and Ellemers 2005), or unduly extending a benefit of the doubt to the client (Ellemers and Rink 2005). A *strong* professional identity can lead to enhanced auditor commitment to the profession and adherence to professional values and norms (Ashforth and Mael 1989), which should engender notions of independence and objectivity and reduce bias toward the client.

Consistent with psychology research, Bamber and Iyer (2007) show that, when an audit issue is ambiguous, auditor agreement with the client *increases* as client identity strength increases and *decreases* as professional identity strength increases. King (2002) constructs an audit trust game and assigns student participants to roles that mimic auditor and client manager. He finds that auditor bias toward the client increases as client identity increases when auditors have a weak professional identity; this bias is mitigated when auditors are induced to have a strong professional identity. If auditors always act on their professional identity, which is generally strong (Bamber and Iyer 2007; Suddaby et al. 2009), then the strength of their client identity may be of little concern, as suggested by the results from King (2002). However, results from Alvesson (2000) indicate that this is unlikely; computer consultants deployed at client locations had both organization and client identities but conflicting goals caused the consultants to become conflicted and unsure where to attach their loyalties. But auditors, unlike consultants, are governed by rules of professional conduct and may not have similar identity conflict.

Alternatively, the literature reviewed in Chapter 2 suggests that the degree to which individuals with multiple identities suffer identity conflict depends on identity salience (Ashforth et al. 2008). In most cases, one identity is more salient than the others and identity conflict is latent or minor such that the individual unconsciously relies on the most salient identity (Ashforth et al. 2008). However, in a few cases, multiple *strong* identities are simultaneously high in salience, which can lead to major identity conflict requiring the individual to consciously choose among these identities (Ashforth et al. 2008). Although this major identity conflict is problematic, the fact that it is conscious bodes well for auditors and the maintenance of objectivity in judgment. Auditors are not likely to consciously bias their judgments in the client's favour (Bazerman et al. 1997; Kadous et al. 2003).

The greater concern for the audit community is when client identity is more salient than professional identity, as theory predicts auditors' client identity will guide their judgments in this case (Ashforth et al. 2008; LeBoeuf et al. 2010). Warren and Alzola (2009) argue that, in practice, professional identity salience and strength is diminishing relative to client identity salience and strength and suggest that this has led to decreased auditor independence. They partially attribute this to a greater focus by audit firms on client service as opposed to serving the public; identity salience is reduced as attributes become abstract or less apparent (Ashforth and Johnson 2001).

Since audit tasks are often couched in terms of the client and not the profession (e.g. client working papers), and client preferences are expressed whereas professional goals are less explicit, the client identity may be more apparent or concrete (i.e. less abstract) and thus highly salient relative to the professional identity. The impact of auditor judgments and decisions on the public, or unknown shareholders, is also more abstract or remote relative to their impact on the

client (Bazerman et al. 1997), which can reduce the salience of professional relative to client identity. Moreover, the client identity will likely become highly salient when the auditor is stationed at the client premises or is surrounded by client cues; offices, personnel, logos, culture, etc. (Rousseau 1998). Therefore, while client identity salience is likely to be high in a routine audit context, as discussed in Chapter 2 and above, relative salience will likely guide behaviour. Thus, heightening the salience of the professional identity (e.g. by focusing on service to the public or employing decision aids that remind auditors of their professional role) increases the likelihood that professional identity is at least as salient as client identity. This gives auditors their best chance at invoking the strength of their professional identity and maintaining objectivity in judgment.

King's (2002) results show that auditors' self-serving client bias can be mitigated but it is unclear whether professional identity salience or strength drives this result. King (2002) strengthens professional identity by promoting a team affiliation but in the weak affiliation condition it appears that participants do not perceive themselves as a group. Thus, his strong affiliation condition both evokes (makes salient) and strengthens the team affiliation. It is unclear whether a similar group of participants that already possess a strong affiliation, but did not require it to be evoked or primed, would similarly show mitigated client bias relative to a weak affiliation group; i.e. identity salience may also play an important role.

Research by Bamber and Iyer (2007) provides a good understanding of client and professional identity strength effects in an audit context. However, their model of client and professional identity suggests that both identities operate simultaneously and independently of each other to influence auditor agreement with the client, and they do not distinguish between identity strength versus salience effects. Research reviewed in Chapter 2 suggests interactive

effects of identity strength and salience, such that a highly salient identity may suppress the influence of other identities (Ashforth et al. 2008). Although Bamber and Iyer (2007) measure identity strength, their method of having auditors think of their largest client may have also made the client identity particularly salient. This may have contributed to client identity having a stronger effect than professional identity strength in their results. However, Bamber and Iyer (2007) do not examine identity salience. Based on the literature reviewed in Chapter 2, heightening professional identity salience may result in a stronger effect for professional identity strength and a weaker effect for client identity strength, thus mitigating potential "bias" from a highly salient client identity.

Research in accounting suggests that client influences are particularly relevant in the context of initial audit judgments. Blay (2005) shows that auditors' directional goals, to agree with or disagree with the client, influence initial going concern assessments. These initial judgments are formed based on ambiguous financial statement information. Other audit research has demonstrated that auditors' willingness to support a client-preferred, aggressive accounting treatment is influenced by financial incentives or motivated reasoning in favour of client preferences (Farmer et al. 1987; Lord 2002; and Kadous et al. 2003). Farmer et al. (1987) and Lord (2002) provide few details about the accounting issue to experiment participants, such that the audit judgment is made with minimal audit evidence, akin to an initial audit judgment.[17]

Research in accounting and psychology suggests that identity effects will also be particularly relevant in the context of initial audit judgments. Bamber and Iyer (2007) ask auditors to assess their willingness to acquiesce to the client's preferred accounting treatment, although the accounting issue is described only as having equal and opposing support for and

[17] However, the study by Kadous et al. (2003) has auditors assess an ambiguous accounting issue, with no further evidence gathering or provision.

against the client preference. Bamber and Iyer (2007) demonstrate that these "initial" judgments are influenced by client identity and professional identity strength. Blader (2006) demonstrates that individuals asked to judge the fairness of a selection process are influenced by their weak or strong identity with the selecting group. However, when additional, specific, diagnostic information is provided to the judges, the effects of identity strength are mitigated. Thus, identity effects appear to be strongest when minimal information is provided, as is typically the case for initial audit judgments.

Therefore, I examine the effect of client identity strength and professional identity strength on initial agreement with the client, when client identity salience is high and professional identity salience is either heightened or not. In this setting, when professional identity salience is *not heightened*, the extent of auditors' initial agreement with a client is likely to be influenced by the strength of their client identity rather than the strength of their professional identity. However, when professional identity salience is *heightened*, professional identity salience should be at least as high as client identity salience. This will lead to a *conscious* identity conflict, leading auditors to choose to conform to their professional identity and obligations. Thus, the extent of auditors' initial agreement with the client should be less influenced by the strength of their client identity and more influenced by the strength of their professional identity. My predictions, when client identity salience is *high*, stated in the alternative form are as follows:

H1: Professional identity salience and client identity strength will interact such that as client identity strength increases, initial auditor agreement with the client will increase more when professional identity salience is *not heightened* versus *heightened*.

H2: Professional identity salience and professional identity strength will interact such that as professional identity strength increases, initial auditor agreement with the client will decrease more when professional identity salience is *heightened* versus *not heightened*.

The nature of the interaction effects in H1 and H2 may be sufficiently strong such that there is no association between client (professional) identity strength and agreement with the client when professional identity salience is heightened (not heightened). SIT does not provide strong enough theory to predict if or when the interaction will lead to no association. Figure 1, Panels A and B, provide a graphical representation of hypotheses 1 and 2, respectively.

3.3.2 Additional Audit Evidence and Subsequent Audit Judgments

Research by Bamber and Iyer (2007) demonstrates the influence of both client and professional identity strength on initial audit judgments. However, the factors that influence initial audit judgments may or may not similarly influence subsequent audit judgments. SIT and OI research also provides mixed theory and evidence about whether the effects of identity will persist in subsequent audit judgments.

Some researchers indicate that information processing depends on the referent identity. For example, as long as client identity is the most salient identity, research suggests that a stronger client identity will result in more biased evaluation of information or evidence, regardless of whether the judgment is initial or final (Ostrom, Carpenter, Sedikides, and Li 1993; Brown 2000; Gramzow, Gaertner, and Sedikides 2001; Maitner et al. 2010). Thus, there is evidence to suggest that the effects of client and professional identity strength on initial audit judgments, as moderated by professional identity salience, will persist for additional audit evidence evaluation and may lead to greater effects for subsequent audit judgments.

Psychology research also indicates that the provision of additional information can diminish the influence of identity strength. Blader (2006) demonstrates that individuals make judgments consistent with their identity strength only when diagnostic information about the situation is unavailable. Regardless of whether the diagnostic information is positive or negative, individuals receiving the information make judgments consistent with the direction of the evidence and their judgments are not influenced by identity strength. Weber et al. (2004) also suggest that the increasing provision of information can change the decision context; the provision of information may cause individuals to better recognize the decision context as typical, even if the decision is unique. They argue that individuals will thus act in a more normative manner – i.e. evaluate the content of the negative and positive evidence equally – and in a manner less consistent with their identities. In a review of audit research, Smith and Kida (1991) find that certain judgment biases are mitigated when experienced or knowledgeable auditors perform the task, since increased knowledge makes the task more familiar and less complex (Kennedy 1995). Thus, a portion of the effect for experienced auditors may be attributed to better knowledge structures but it also can be attributed to recognizing the task as familiar or routine.

However, the research above suggests that the combined effects of additional positive and negative audit evidence will offset each other and do little to resolve ambiguity. Therefore the effects of client and professional identity strength on subsequent audit judgments, as moderated by professional identity salience, will not differ from their impact on initial audit judgments.

As suggested by Gibbins (1984) and Asare (1992) the sequential audit judgment process results in auditors forming implicit or explicit initial judgments. These judgments will be updated

as additional pieces of evidence are provided. Kaplan and Reckers (1989) and Blay (2005) show that auditors' information *search* is also biased in a manner that confirms initial hypotheses or judgments, respectively. Prior accounting research has also found that, in the absence of explicitly provided or formulated hypotheses about the likely outcome, information search is still biased in favour of the client preference (Cloyd and Spilker 1999; Kadous et al. 2008). These studies demonstrate that tax professionals, in low practice risk situations, undertake biased information search in favour of the client preference, which ultimately results in final judgments biased in favour of the client preference. Blay (2005) similarly finds that auditors' biased information search results in biased final judgments. Overall, the results of these studies suggest that factors that influence initial judgments influence evidence gathering and final judgments.

However, consistent evaluation throughout the audit judgment process is not a universal finding. Salterio and Koonce (1997) find that, regardless of whether they were aware of the client's preferred revenue recognition outcome, auditors presented with explicit conflicting evidence provided equivalent overall assessments of the evidence. But they do find that auditors who were aware of the client's preference reached final decisions that were more supportive of that preference. Thus, auditors who knew the client's preference were able to appropriately assess the positive and negative evidence as balanced on the whole but still biased their final judgment towards the client. However, it is not clear from the results of Salterio and Koonce (1997) whether these final judgments differed from initial judgments, which were not measured.

Kida (1984) and Trotman and Sng (1989) find only weak support that auditors seek to confirm initial hypotheses when evaluating additional evidence. In a going concern task they find that all auditors choose more client-failure cues than client-viable cues from the available set of evidence. Even auditors, whose initial hypothesis and evidence framed the client as likely to be

viable, searched for additional evidence that indicated failure and refuted the initial hypothesis. However, this latter group of auditors did select proportionally fewer failure cues relative to the other experimental conditions that initially suggested client failure.

Asare (1992) presents results that indicate that the initial hypothesis frame (fail versus continue) resulted in consistent initial viability assessments (lower assessment in fail and higher assessment in continue condition). However, this initial hypothesis frame had no influence on auditor participants' revisions in assessments (final assessment minus initial assessment). Rather, the order of evidence (negative items followed by positive items, or vice versa) predicted the final assessment outcomes; auditors receiving negative items last had greater downward belief revision and also issued more modified opinions.[18] Since Asare (1992) did not specifically test the influence of initial hypothesis frame, except for its effect on assessment revision, it is unclear from his results whether the final assessment itself, or the audit report choice, was associated with the initial hypothesis frame. That is, it is unclear whether the initial hypothesis frame (i.e. a factor that can affect initial judgments) influenced the subsequent judgments, independent of the recency effect that is due to evidence order. At the very least, the initial frame did not lead to a greater influence on final assessments than its influence on initial assessments.

The manner by which additional evidence is gathered or provided may have important implications. Kadous et al. (2008) suggest that indirect influences of client preference are more likely to persist than direct influences. That is, the auditor unknowingly and indirectly biases conclusions by *searching for* additional evidence consistent with the client preference; although the content of the evidence may suggest supporting the client preference, this conclusion is reached because client-unsupportive evidence is underrepresented. However, when a mix of

[18] Asare (1992) and similar accounting research on recency effects make predictions based on Hogarth and Einhorn's (1992) belief-adjustment model (for reviews, see Nelson and Tan 2005; and Church, Davis, and McCracken 2008).

additional positive and negative evidence is *provided* to the auditor a greater balance may be maintained, which would likely result in subsequent assessments that are consistent with initial assessments, since subsequent evidence provides no further clarity than initial evidence. Alternatively, the most recent evidence may be overweighted and result in biased subsequent judgments consistent with the recency effect.[19]

Therefore, it is unclear how professional identity salience will moderate the relationships between client and professional identity strength and subsequent auditor judgments, relative to its moderating effect on initial auditor judgments. As discussed in section 3.2, initial evidence may be ambiguous because it is limited while additional evidence tends to be explicit and specific (Asare 1992). Each additional evidence item is also more likely to be explicitly positive or negative, since it provides finer details about specific accounts or events; all additional evidence together may still convey an ambiguous conclusion. If, as suggested by Blader (2006), auditors appropriately recognize positive evidence as positive and negative evidence as negative, then they are likely to net the evidence in a normative manner. If so, identity effects will not differ between initial and subsequent auditor judgments.

Alternatively, if, as suggested by Maitner et al. (2010), identity effects lead to subsequent biased evaluation of additional evidence, then auditors with strong client identities are likely to overweight (underweight) positive (negative) evidence and increase the level of agreement with the client in subsequent judgments, when professional identity salience is not heightened. Auditors with strong professional identities are likely to overweight (underweight) negative

[19] Kennedy (1993) demonstrates that whether subsequent judgments suffer recency bias, or appropriately net the positive and negative evidence regardless of evidence order, can depend on auditor knowledge structures and processing modes. Auditors that resort to step-by-step processing (i.e. revising beliefs with each new piece of evidence), including less experienced or knowledgeable auditors, are likely to suffer recency effects. Auditors that can suspend judgment until the end of the entire sequence of evidence will appropriately net the positive and negative evidence.

(positive) evidence and decrease the level of agreement with the client in subsequent judgments, when professional identity salience is heightened. Asare (1992) argues that auditors will suffer recency bias when evaluating subsequent evidence and will not continue to use their initial hypothesis frame for subsequent judgments. Rather, auditors will still recognize positive evidence as positive and negative evidence as negative but judge the evidence, as a whole, more in the direction of the most recent set of evidence. Although Asare's (1992) results demonstrate recency effects, identity may provide a much stronger initial "frame" than his going concern assessment, which was framed simply as "likely to fail" or "continue". Regardless, it is unclear whether both recency and identity effects will influence revisions in auditor assessments, whether neither will, or whether one effect will dominate the other. Overall, prior research provides mixed evidence as to whether my first two hypotheses will apply to subsequent audit judgments. As such, I pose the following two research questions, when client identity salience is *high*:

RQ1: Will professional identity salience and client identity strength interact to influence subsequent revisions in auditor agreement with the client?

RQ2: Will professional identity salience and professional identity strength interact to influence subsequent revisions in auditor agreement with the client?

3.4 Unambiguous Decision Context when Professional Identity Salience is not Heightened

As discussed in Chapter 2, SIT and OI research demonstrates that in-group bias may still exist in certain settings even when the in-group or its members display unambiguously incorrect group behaviour. This may have implications for auditor behaviour when the client desires an accounting treatment that is unambiguously unsupported by accounting standards or the audit evidence available. I examine these predictions when professional identity salience is not

heightened, as auditors are most likely to rely on the strength of their client identity in such a setting.

Auditors with strong client identities may overidentify (Dukerich et al. 1998) and fail to sufficiently scrutinize the accounting issue or underestimate the severity of negative evidence. However, when the accounting issue has an unambiguous correct treatment and the client requests an incompatible treatment, auditors with strong client identities may perceive this as an expectancy violation (Ellemers and Rink 2005) not just a GAAP violation. Thus, auditors with strong client identities may be even more critical of the client than auditors with weak client identities (who perceive it as a GAAP violation only) and therefore be *less* likely to agree with the client. SIT and OI theory is inconclusive as to which of these two outcomes will occur.

Moreover, the widely-held assumption in auditing research is that auditors will correctly interpret audit evidence that is unambiguously unsupportive of the client-preferred accounting position and not be persuaded by the client (Kadous et al. 2003). Evidence from Salterio and Koonce (1997) supports this assumption. Thus, all auditors, regardless of their client identity strength, should provide similar audit judgments when the audit issue is unambiguous. Given this strong assumption, I pose the following research question, when client identity salience is *high*:

RQ3: When additional evidence is unambiguously *against* the client's position, is there a relationship between client identity strength and subsequent revisions in auditor agreement with the client, when professional identity salience is *not heightened*?

3.5 Conclusion

This chapter develops two hypotheses based on theory drawn from psychology and accounting research. My objective for the hypotheses is to determine whether increasing the level of professional identity salience is essential to mitigate impaired independence and

objectivity from a strong client identity. This chapter also poses three research questions drawn from psychology and accounting research that provides competing but unresolved theoretical predictions. My objective for the research questions is to document the behaviour of auditors in making subsequent judgments and, in unambiguous task settings, to provide evidence whether these judgments are also influenced by the effects of identity.

CHAPTER 4: RESEARCH METHOD

4.1 Introduction

This chapter is organized as follows. Section 4.2 describes the case materials, participants, and experimental design for the first of two studies. Section 4.3 describes the participants and modifications made to the materials and experimental design for the second study. Section 4.4 describes the dependent variables. Section 4.5 describes manipulation checks, control and other measured variables. I conclude this chapter in section 4.6.

4.2 Study One

To test my hypotheses and explore my first two research questions, I employ a 2 x 2 factorial design with professional identity (PI) salience (not heightened versus heightened) and client identity (CI) strength (low versus high) as between-subjects measures and an additional measured covariate, PI strength. I control CI salience as high across the four conditions. Participants, assigned the role of in-charge auditor, are presented with a hypothetical audit case and are required to provide initial and subsequent opinions to the partner about the client's going concern assumption. Both the initial and subsequent evidence provided to participants to develop their judgments are ambiguous, on the whole, as to the proper accounting treatment. A fifth (control) group receives the same audit and client information, except for information pertaining to the two manipulations, to provide baseline audit judgments for comparison to the treatment groups.

This section is organized as follows. Subsection 4.2.1 describes the case materials used in the experiment. Subsection 4.2.2 explains the pilot testing performed prior to completion of the final experimental case. Subsection 4.2.3 describes the participants that completed study one. Subsection 4.2.4 explains the experimental design.

4.2.1 Case Materials

Task

The auditing case used in the experiment describes a hypothetical audit client, Highpoint Computer Corporation (Highpoint), that manufactures and sells real-time computer systems and services; the case is adapted from Blay (2005). Each participant is assigned the role of in-charge auditor of Highpoint, a new audit client that was put up for bid as a result of mandatory audit partner rotation.[20] Participants are initially provided background information about the client and the engagement, in addition to excerpts from the current year audit planning memo. This information varies depending on the manipulation of client identity strength; current and past financial success is equivalent across conditions. Participants then complete a recall task about the client information and complete a task unrelated to the audit task but containing the manipulation of professional identity salience.

Following this, participants read about the specific audit issue regarding the company's going concern assumption and are provided with preliminary financial statements in order to make an initial audit judgment. After providing their initial assessment of the going concern assumption, participants are then provided with additional evidence that both supports and refutes the going concern assumption. Participants are requested to evaluate the additional evidence before making final audit judgments. After providing their final assessments, participants are asked to complete a post-experiment questionnaire. The Appendix presents a copy of the case materials used in the experiment (pp. 157-179). Figure 2 provides a diagram that summarizes the timeline of study one.

[20] Highpoint is presented as a new client to show that the effects of identity prevail even when a client is unfamiliar. Fiolleau, Hoang, Jamal, and Sunder (2011) document a real company that put its audit up for tender when its audit partner required rotation, even though audit firm rotation was not necessary. I use a similar situation to avoid Highpoint being a new company but also reduce concerns that the auditor change was due to differences of opinion between prior auditor and client, which could reduce the effectiveness of my client identity strength manipulation.

Going Concern Audit Issue

I request participants to assess the client's going concern assumption because, by nature, this assumption is open to interpretation; issues that allow for alternative interpretations are difficult accounting issues (Johnstone et al. 2001, p. 6). Johnstone et al. (2001) suggest that judgment-based decisions, which include difficult accounting issues, are necessary to study the relationship between independence and auditor judgment quality.[21]

In the case materials, participants are informed that management asserts that Highpoint meets the going concern assumption and asserts that no material uncertainty exists about this assumption. Participants are reminded that GAAP requires note disclosure where material uncertainty exists about the ability to continue as a going concern even if the going concern assumption is generally met. Instructions to participants also indicate that the partner would like their opinion on the appropriateness of management's conclusion. Management indicates that note disclosure would violate its debt covenants, highlighting a client preference for meeting and having no material uncertainty about the going concern assumption.

Initial Audit Judgment

To initially assess the client's going concern assumption, participants are provided with client financial statements that are designed to be ambiguous with respect to the client's ability to meet the going concern assumption. The financial statements are part of the materials provided by Blay (2005), as used in his experiment; he provides a description of his design on p. 770. The financial statements, with slight modifications to the presentation format used by Blay (2005), are included in the case materials in the Appendix (pp. 166-167).

[21] These situations also include audit-conduct decisions or materiality decisions.

Subsequent Audit Judgments

Following initial audit judgments, participants are given two pieces of evidence and asked whether the evidence, individually and combined, supports or refutes the going concern assumption. The evidence is designed to maintain ambiguity as one evidence item supports the client's assertion and the other refutes it; evidence order is counter-balanced within each of the 5 conditions. The additional evidence items, as adapted slightly from Blay (2005), are included in the case materials in the Appendix (pp. 170-172).[22] After rating the extent to which each piece of evidence supports or refutes the going concern assumption, participants: (1) provide a second going concern assessment; (2) assess the appropriateness of the client's conclusion that no material uncertainty about the going concern assumption exists; and (3) rate the importance of working with the client to avoid note disclosure.

4.2.2 Pilot Testing

The final version of the experimental task benefitted from results and comments gleaned from multiple rounds of pilot testing. First, two PhD students (both Chartered Accountants with an average of 4.5 years of public accounting experience) reviewed the case materials for task realism and accuracy. Second, six Masters of Accounting (MAcc) students reviewed the experiment and 78 MAcc students completed a pilot test (average public accounting experience for all students is less than two years) to refine the understandability of terms used for dependent variables, manipulation checks, and other control measures. Third, I used the verbal protocol method with three senior managers from two Big4 audit firms (average of 7.0 years of public accounting experience) to further refine the manipulations and manipulation check measures, and

[22] Blay (2005) provides 24 additional evidence items in an information search task. From this list, I selected each of the two most-viewed negative and positive items, by participants in the Blay (2005) study, that were also clearly rated as negative or positive, in the predicted direction. Based on pilot testing I retained the most negatively and positively rated evidence items.

to verify the appropriateness of the financial statements and audit task (accordance with Canadian GAAP and GAAS). Finally, I conducted a pilot test with 7 seniors, 8 managers, and 5 senior managers from various audit firms (predominantly Big4 with an average of 6.0 years of public accounting experience) to verify the completeness of the case materials, the effectiveness of the PI salience manipulation, and to determine the two additional evidence items to retain in study one.

4.2.3 Participants

The participants included in study one are 105 auditors (60 seniors, 29 managers, and 16 senior managers) from multiple offices of three Big 4 audit firms. I contacted the national offices of these audit firms and one national office leader from each firm sent an email to the requested staff levels, in various offices, endorsing the study and encouraging participation. The leaders also provided a link to the experiment website for their staff to access at their convenience.[23] Twelve auditors that completed the study had less than three years of experience and are excluded from the final sample, leaving me with 93 usable responses.[24] The final sample of auditors has an average of 5.4 years of public accounting experience (range 3-13 years); mean experience by rank is 3.7 years for seniors, 5.6 years for managers and 10.1 years for senior managers.

Most participants (81 percent) reported being involved in audit engagements where substantial doubt existed about the going concern assumption. The number of such engagements (mean = 3.1) does not differ by experimental condition (F (4,87) = 0.79, p = 0.535) but differs by

[23] 186 auditors accessed the website link resulting in a response rate of 56 percent; the true response rate, while unknown, is lower than 56 percent since not all auditors that received an email from their firm accessed the website.
[24] Pilot testing revealed that auditors with less than two years of public accounting experience had little experience with going concern issues and thus I did not seek auditors at more junior levels. Further, comments from two Big 4 senior managers that provided guidance on the design of the experimental materials indicated that auditors below the senior level (generally, two years or less experience) would not typically be involved in any stages of a going concern matter. Results of the experiment are qualitatively unchanged when the sample is expanded to auditors with at least 2 years of experience (n = 104).

rank (F (2,89) = 2.72, p = 0.071).[25] Senior managers reported significantly more experience with going concern doubt than seniors and managers combined (4.9 versus 2.8, t_{90} = 2.35, p = 0.021), which is consistent with senior managers having more years of public accounting experience; there is no difference between managers and seniors on this measure (2.8 versus 2.8, t_{74} = 0.01, p = 0.992). Two-thirds of participants reported at least one audit engagement where going concern note disclosure was required and on average, 50 percent of the audits involving going concern doubt resulted in note disclosure. Overall it appears that participants had sufficient experience dealing with going concern issues to meaningfully complete the experiment.

In addition, the task informs participants that they will make recommendations to a hypothetical partner, who will use this information in making her conclusions regarding the going concern assumption. Thus, the task requirements closely match participants' typical audit roles. Although auditor conclusions regarding going concern are generally made by partners, prior auditing research has shown that supervisors' decisions are influenced by subordinate judgments (Ricchiute 1999) even when supervisors intervene prior to their subordinates' judgment-making (Peecher, Piercey, Rich, and Tubbs 2010).

4.2.4 Experimental Design

I employ a 2 x 2 factorial design with PI salience (two levels) and CI strength (two levels) as between-subject factors and an additional, measured covariate, PI strength. Figure 3 illustrates the experimental design. Upon accessing the website containing the experimental case, participants are randomly assigned to one of the four treatment conditions or the control condition described in the following sections.

[25] One senior auditor reported having experience in 90 engagements with going concern issues; regardless of whether this is an error it will skew the mean reported experience. I exclude this observation from the statistics reported above; however, tests of my hypotheses were unaffected by the inclusion or exclusion of this observation.

Client Identity Strength

The first independent variable is CI strength. Participants are randomly assigned to an audit task containing client and engagement information that weakens or strengthens CI. To manipulate CI strength, I vary antecedents of identity discussed in prior literature. In the high CI strength condition participants read that the Highpoint audit is more prestigious than most audits conducted by the firm and the partner communicates the general plan for coordination with the client to complete the audit field work, using words such as "we" to emphasize it as a joint task between the audit team and the client.[26] Further, Highpoint is praised for its environmental responsibility, community involvement, and treatment of current and former employees.[27]

In the low CI strength condition participants read that the Highpoint audit is less prestigious than most of their firm's audits and the partner communicates coordination with the client to complete the audit field work, using words such as "they/them" to emphasize it as a task of the audit team independent from the client. Further, Highpoint is criticized for its lack of environmental responsibility, community involvement, and treatment of current and former employees. The actual wording of these manipulations can be found in the Appendix (pp. 160-161).

The number of cues provided across the two conditions is equal, but opposite in direction and thus I expect equivalent CI salience, but varying CI strength. The presence of cues primes an identity while the direction of cues influences identity strength. Therefore, by providing all participants with client identity cues as part of the CI strength manipulation, I control CI salience at a high level across all treatment conditions.

[26] Visibility of prestige within audit firm increases client importance, which strengthens identity (Bamber and Iyer 2007). Perdue et al. (1990) show that using words like "we" rather than "they" result in feelings of a shared identity.
[27] Client identity strength increases as client image increases (Bamber and Iyer 2007).

After viewing the client information, including identity cues, participants are asked to respond to eight multiple choice questions to ensure they properly understand the case facts. Four of these questions refer to client identity factors and serve to reinforce the low or high identity of Highpoint. The questions in this recall task are equivalent across treatment conditions and are presented in the Appendix (p. 162).

Professional Identity Salience

The second independent variable is PI salience. Participants are randomly assigned to an audit task containing verbal and visual cues (Forehand et al. 2002) that either heighten PI salience (prime PI) or do not heighten PI salience (prime an unrelated identity). After the recall task, described in the previous section, participants are asked to respond to a brief survey/quasi-advertisement before proceeding to the audit task. This survey contains the verbal and visual cues for the two PI salience conditions.

In the heightened PI salience condition, participants are provided with cues about the Chartered Accountant (CA) profession; this is designed to increase the prime without altering PI strength. These cues include: logos, information, and questions regarding CA magazine; information and a question about the CICA's website; and a question asking participants to respond to the recent decision to allow the Certified General Accountant (CGA) profession to issue audit opinions (a role primarily served by CA's in Canada). The information in this last question represents a threat to the in-group (CA) identity; threats to a group's identity have been shown to be powerful mechanisms to increase identity salience (Dovidio et al. 1998; Glasford et al. 2009).

In the unheightened PI salience condition, participants are provided with cues about Tourism Canada, which should have no effect on PI salience. These cues include: logos,

information, and a question regarding Tourism Canada and its website; questions about the participant's use of vacation time; and a question asking participants to respond to stricter travel laws to the US and implications this has for travel to Canadian destinations. The "surveys" used for these manipulations are presented in the Appendix (pp. 163-164).

Professional Identity Strength

The third independent variable is PI strength; however, this variable is measured, unlike the first two independent variables. I use the *Inclusion of Others in the Self Scale* (Aron, McLaughlin-Volpe, Mashek, Lewandowski, Wright, and Aron 2004). I provide participants with 7 images of two overlapping circles (self and accounting profession) ranging from no overlap (weakest identity) to near-eclipse (strongest identity); this provides a 7-point scale similar to a Likert scale. This measurement scale is presented in the Appendix (p. 175, question 5).

Control Condition

To determine a baseline level for auditor judgments (i.e. the level of agreement with the client), without the effects of client identity strength or professional identity salience, I include a control condition in the experimental design. The purpose of this condition is to examine whether the level of agreement with the client when CI strength is high is greater than what would be expected from an auditor uninfluenced by client identity, which provides stronger evidence of biased judgment. Participants in the control condition do not receive any information with respect to the client identity nor do they receive cues priming any identity.[28]

My expectation is that auditors with strong client identities will demonstrate levels of agreement that are not only higher on average than auditors with weak client identities but higher than auditors in a control condition, where client identity is not manipulated. This is consistent

[28] Participants in the control condition proceed from background information (absent identity factors) to the details on the going concern audit task; no alternative filler tasks are employed.

with theory that suggests a strong identity induces bias in favour of the group. Differences between auditors with weak and strong client identities may indicate that strong identifiers show *more* bias *toward* the client but it may also indicate that strong identifiers show *less* bias *against* the client relative to weak identifiers. However, it is not clear that the difference between auditors with strong client identities and auditors in a control condition will result when professional identity salience is heightened. The greater the moderating effect of professional identity salience, the less change in agreement with the client as client identity strength increases (i.e. auditor level of agreement is more normative). Also, I do not expect that auditors with weak client identities will demonstrate levels of agreement that are, on average, different than auditors in a control condition. Individuals that possess a weak identity are not necessarily "against" the group but may simply not identify with the group (Ashforth 2001) and thus not show favouritism or discrimination. Therefore auditors with weak client identities, regardless of professional identity salience, may not necessarily exhibit lower levels of agreement with the client than auditors in a control group (where client identity strength is niether increased nor decreased).

4.3 Study Two

To test my third research question, I manipulate CI strength, between-subjects, at two levels (low versus high) and measure PI strength as a covariate. As with Study One, I control CI salience as high across the two conditions. Participants examine the same case and are assigned the same role as in Study One, with the following two exceptions: professional identity salience is not manipulated; and the subsequent evidence provided to participants unambiguously supports an accounting treatment that conflicts with the client's preference. I do not manipulate professional identity salience since auditors are most likely to agree more with the client as client identity strength increases when professional identity salience is not heightened. I did provide a

manipulation in Study One where professional identity salience was not heightened. However, I did this to balance the content and length of time of this condition with the condition in Study One where professional identity salience is *heightened*. It is not necessary to balance conditions or manipulate professional identity salience in Study Two since there is only one level of professional identity salience, which is "not heightened".

This section is organized as follows. Subsection 4.3.1 describes the modifications made to the case materials used in this second experiment relative to the first experiment. Subsection 4.3.2 describes the participants that completed Study Two. Subsection 4.3.3 explains the modifications to the experimental design in Study Two relative to Study One.

4.3.1 Modifications to Case Materials from Study One

Participants in the second experiment also receive the Highpoint audit case. The case details are equivalent to those of the first experiment until completion of the recall task about client information. Following the recall task, participants read about the company's going concern audit issue; they do not complete an unrelated audit task containing the manipulation of professional identity salience. No alternative filler task is included. Participants in Study Two receive the same information about the client's going concern assumption and the same preliminary financial statements are used to make an initial audit judgment.

However, after providing their initial assessment of the going concern assumption, participants are provided with two pieces of additional evidence, each of which refutes the going concern assumption. Thus, unlike Study One, the evidence is designed to unambiguously refute the client's preferred accounting position.[29] After rating the persuasiveness of evidence, Study Two proceeds as Study One, with participants providing final audit judgments and completing

[29] The first *negative* evidence item is the same as is used in Study One. The second *negative* evidence item was used in pilot testing when two items in each direction were provided.

the same post-experiment questionnaire. The case materials that have been modified in Study Two are presented in the Appendix (p. 180).

4.3.2 Participants

The participants included in Study Two are 17 auditors (13 seniors and 4 managers) from multiple offices of a Big 6 audit firm. Participants were solicited in the same manner as in study one.[30] Two auditors that completed the study had less than three years of experience and are excluded from the final sample, leaving me with 15 usable responses.[31] The final sample of auditors has an average of 5.2 years of public accounting experience (range 3-15 years); mean experience by rank is 4.0 years for seniors and 8.5 years for managers.[32]

As in Study One, most participants (80 percent) reported being involved in audit engagements where substantial doubt existed about the going concern assumption. Kruskal-Wallis analyses of variance indicate that the number of such engagements (mean = 4.3) does not differ by experimental condition ($K = 0.00$, $p = 0.953$) or by rank ($K = 0.53$, $p = 0.468$). 80 percent of participants reported at least one audit engagement where going concern note disclosure was required and on average, 46 percent of the audits involving going concern doubt resulted in note disclosure. Overall it appears that participants in Study Two had sufficient experience dealing with going concern issues to meaningfully complete the experiment and had similar experience as participants in Study One.

[30] 35 auditors accessed the website link resulting in a response rate of 49 percent; the true response rate, while unknown, is lower than 49 percent since not all auditors that received an email from their firm accessed the website.
[31] Results of the experiment are qualitatively unchanged when the sample is expanded to auditors with at least 2 years of experience ($n = 17$).
[32] Experience of participants in Study Two is comparable to participants in Study One except that no senior managers completed Study Two and managers in Study Two are older than managers in Study One. However, mean experience of managers in Study Two is comparable to the mean of managers and senior managers in Study One (7.2 years).

4.3.3 Modifications to Experimental Design from Study One

I employ a two-condition design with CI strength as the only factor manipulated between-subjects, and an additional measured covariate, PI strength. Figure 4 illustrates the design of the experiment. Upon accessing the website containing the experimental case, participants are randomly assigned to one of the two treatment conditions.

The first independent variable, CI strength, is manipulated in the same manner as Study One. Unlike Study One, PI salience is not manipulated; therefore, participants are not asked to respond to a survey prior to completing the audit task nor is an unrelated identity primed.[33] The second independent variable, PI strength, is measured in the same manner as Study One.

4.4 Dependent Variables

The dependent variables measured in Study One and Study Two are equivalent. For all measures outlined in this section, higher values indicate greater agreement with the client. Importantly, greater agreement with the client when client identity strength is high versus low may indicate greater bias or impairment in auditor judgment.[34] The actual questions posed to participants for these variables appear in Table 1.

4.4.1 Assessment of the Going Concern Assumption

The main dependent variable of interest is each auditor's assessment of the likelihood (0-100%) that the client meets the going concern assumption, and will be able to continue to exist for the foreseeable future (similar to measures used in Asare 1992; and Blay 2005). I first measure this variable when participants have only ambiguous financial statement information

[33] In Study One, participants are provided with an unrelated identity prime (vacation in Canada) in the *unheightened* PI salience condition in an attempt to maintain equivalent volume of information and time across it and the *heightened* PI salience condition. This is less of a concern in Study Two; thus, no unrelated identity prime is used.
[34] Individuals that possess a weak identity are not necessarily "against" the group but may simply not identify with the group (Ashforth 2001). In the latter case, audit judgments of auditors with low client identity strength do not represent out-group discrimination. Audit judgments of auditors with high client identity strength represent in-group bias and thus a difference in judgment between low and high conditions may indicate impaired judgment. However, a stronger test of impairment is to compare audit judgments between high client identity strength and control groups.

available to make their assessments (*GC1*). I measure this variable again (*GC2*) after providing participants with two additional pieces of audit evidence. Higher initial or final assessments indicate greater agreement with the client's assertion that it meets the going concern assumption.

4.4.2 Evaluation of Additional Evidence

I also examine participants' ratings of the two additional pieces of evidence (*Pers1*, *Pers2*). After each piece of evidence participants are asked to rate how strongly the evidence refutes or supports the client's preferred position (Salterio and Koonce 1997); that is, that the going concern assumption is met. Participants are also asked to provide an overall rating of the combined evidence (*PersTot*). Responses for all three measures are collected using a 7-point Likert scale ranging from -3 (Strongly refutes) to +3 (Strongly supports).

4.4.3 Assessment of Appropriateness of Client Conclusion

Auditors' going concern assessments do not require them to commit to a final decision on the inclusion of note disclosure in Highpoint's financial statements regarding the going concern assumption. However, note disclosure results in violation of Highpoint's debt covenants, which management prefers to avoid. Prior audit literature (e.g. Asare 1992; Joe 2003; Blay 2005) stresses the importance of examining both auditor judgments and final choices (e.g. auditor report opinions). Thus, I measure a final decision variable (*Approp*) that has more direct consequences for Highpoint's financial statements. I ask auditors to evaluate the appropriateness of Highpoint's conclusion that no going concern note disclosure is needed. Responses are collected using a 7-point Likert scale ranging from -3 (Highly inappropriate) to +3 (Highly appropriate).

I do not ask participants to respond "yes" or "no" as to whether they will require note disclosure nor do I ask participants whether they will issue a clean, modified (note disclosure

required), or adverse audit opinion. Pilot testing demonstrated that binary choice variables of this type provide insufficient variation; the majority of participants exhibited moderately conservative preferences and chose to require note disclosure rather than require an adverse opinion (or require no further action).

4.5 Other Measured Variables

4.5.1 Manipulation Checks

I use two methods to assess my manipulation of PI salience. Following Forehand et al. (2002), I use the spontaneous self-description method and ask participants to "Tell me about yourself in your own words". Free association permits any response but participants should be more likely to mention their profession when PI salience is high versus low. Forehand et al. (2002) advocate this method for examining unconscious effects on identity salience, as is the case with my manipulation. I construct a variable equal to one if participants mention the accounting profession in their response, and zero otherwise. I construct a similar variable equal to one if participants refer to their actual client base, and zero otherwise in order to measure CI salience and verify that CI salience level is equivalent across CI strength conditions.

I also adapt a continuous measure of PI salience from Reed (2004). Participants are asked to what extent the information in the experiment made them think about the accounting profession and the values they possess as a member of the profession. Responses are collected using a 7-point Likert scale ranging from 1 (Gave it little thought) to 7 (Gave it much thought). Both of the dichotomous and continuous measures are presented in Table 2.

To assess my manipulation of CI strength, I use the *Inclusion of Others in the Self Scale* (Aron et al. 2004). This is the same scale used to measure PI strength; however, the 7 images of overlapping circles provided to participants are of self and client (Highpoint). As a reminder, the

images range from no overlap (weakest identity) to near-eclipse (strongest identity). This measurement scale is presented in the Appendix (p. 175, question 4).

I also determine whether my manipulation of CI strength results in greater perceptions that the task was a joint one between the participant and Highpoint. Recall that the case materials used language indicating a shared identity in the high CI strength condition but not in the low CI strength condition. I ask participants whether the nature and timing of audit field work (including reporting) was a joint task with Highpoint. Responses are collected using a 7-point Likert scale ranging from -3 (Strongly agree) to +3 (Strongly disagree). However, differences in wording may also cause participants to perceive the client as having different pressure to meet reporting deadlines, which may influence audit judgments. To evaluate this possibility I ask participants to respond as to whether the client appeared to be under pressure to meet tight reporting deadlines; responses are collected using a 7-point Likert scale ranging from -3 (Strongly agree) to +3 (Strongly disagree).

Finally, I measure the degree of ambiguity in the audit task perceived by participants and ask them to what extent they agree that the going concern issue had a clear right answer (*RightAns*). Responses are collected using a 7-point Likert scale ranging from -3 (Strongly agree) to +3 (Strongly disagree).

4.5.2 Comprehension Checks

As described in subsection 4.2.4, I provide participants in the treatment conditions (of Study One and Two) with a recall task after they read the background client information. Participants are asked 8 multiple-choice questions that both reinforce the client identity strength manipulation and measure whether participants correctly interpreted the client facts; four questions are identity-related and four questions relate to other facts about the client. To assist

them with this task, participants are able to access the prior client information when responding to these questions. The questions and answers are presented in the Appendix (p. 162).

I also measure participants' understanding of the client's preference to avoid going concern note disclosure. In the post-experiment questionnaire, participants are asked to indicate whether disclosure of going concern uncertainty by Highpoint would result in a covenant violation. Participants were permitted three responses: "yes"; "no; and "I am not sure".

4.5.3 Identity Process Measures

A successful manipulation of CI strength, as indicated by my manipulation check measure in subsection 4.5.1, will help establish that differences in audit judgments across CI strength conditions are indeed due to the effects of CI strength. To provide further evidence that identity strength is the process leading to differences in judgments, I ask auditors to assess the client on a number of factors that SIT and OI research has shown to be positively associated with identity strength. First, individuals perceive in-group members to be more likely to cooperate and these perceptions are related to the level of trust the individual has for in-group members (Haslam and Ellemers 2005). Second, competence is a key determinant of organizational trust (Mayer, Davis, and Schoorman 1995). Finally, individuals that have a strong identity strive to actively reach agreement with group members (Haslam and Ellemers 2005).

Thus, I employ four measures to capture these constructs and ask participants to rate: (1) how cooperative the client would be in providing documentation for an unrelated task (*Coop*); (2) the degree to which the client is trustworthy (*Trust*); (3) the degree to which the client is competent (*Comp*); and (4) the importance of working with the client to avoid note disclosure (*Avoid*). Responses to all four measures are collected using a 7-point Likert scale with higher values indicating higher ratings of the client (or importance). The measurement scale for the first

question ranges from 1 (Very uncooperative) to 7 (Very cooperative). The measurement scale for the second and third questions range from -3 (Strongly agree) to +3 (Strongly disagree). The measurement scale for the fourth questions ranges from -3 (Not very important) to +3 (Very important). These questions are presented in Table 3.

4.5.4 Control Variables

To control for any differences in accounting experience or knowledge that may influence results, I ask participants to disclose: the number of years they have worked in public accounting; the number of audits they participate in per year, whether they have participated in the audit of a public company; the accounting firm they work for; and their current rank in the accounting firm. I also ask participants to disclose whether they have an industry specialization and whether they were familiar with the industry/business facts described in the case materials.[35]

To control for any differences in task-specific (i.e. going-concern) experience or knowledge that may influence results, I ask participants to disclose: the number of prior audits they participated in where the client's going concern was in doubt; the percentage of those prior audits that resulted in note disclosure; the percentage of those prior audits that resulted in a qualified opinion; and whether they felt they had sufficient experience dealing with going concern issues.[36] To control for differences in perceptions about the company's risk, I ask participants to assess the company's risk of material misstatement. Responses are collected using a 7-point Likert scale ranging from 1 (Low risk) to 7 (High risk).[37]

[35] I measure responses to this last question (familiarity with case facts) using a 7-point Likert scale ranging from -3 (Strongly disagree) to +3 (Strongly agree).

[36] I measure responses to this last question (going concern experience) using a 7-point Likert scale ranging from -3 (Strongly disagree) to +3 (Strongly agree).

[37] Perceptions of risk may be influenced by CI strength as individuals with stronger client identities may provide lower risk assessments. But risk perceptions may also influence audit judgments as auditors that assess risk higher may lower their assessment that the client meets the going concern assumption. In sections 5.9 and 6.5, I examine participants' perceptions of the company's risk of material misstatement and attempt to rule them out as competing explanations for the results I find in Study One and Two.

To evaluate whether various perceptions about the case materials or dispositional characteristics of participants influenced results, I ask participants whether the task was realistic, challenging, and whether they felt motivated to complete it. Responses are collected using a 7-point Likert scale ranging from -3 (Strongly agree) to +3 (Strongly disagree). I also ask participants to assess their confidence in their ability to complete the audit task; further, I ask participants to assess their confidence in each audit judgment/evaluation made (including risk of material misstatement). Responses to these confidence questions are collected using a 7-point Likert scale ranging from -3 (Not very confident) to +3 (Very confident).[38]

4.6 Summary

I employ two studies to test whether client and professional identity strength influence audit judgments (i.e. level of agreement with the client) and whether these relationships are moderated by professional identity salience. I control client identity salience as high in both studies. In the first experiment, when the audit decision task is *ambiguous*, I employ a 2x2 between-subjects design where client identity strength and professional identity salience vary, and professional identity strength is measured. In the second experiment, when the audit decision task is *unambiguous*, I vary client identity strength but do not alter professional identity salience; professional identity strength is measured. A summary of the design and expectations for auditor agreement with the client is presented in Table 4.

[38] There is a possibility that individuals will rate confidence higher as information within a condition is perceived to be more consistent (Joe 2003). It may be the case that the information for either the low or high client identity conditions is perceived as more consistent with the remaining audit evidence, and thus has a greater influence on audit judgments. Although prior auditing studies have measured participants' confidence in their judgments, studies such as Joe (2003) and Blay (2005) do not find that confidence ratings differed across experimental conditions.

CHAPTER 5: RESULTS OF STUDY ONE

5.1 Introduction

This chapter provides results of Study One. Section 5.2 reports demographic information about the participants. Section 5.3 examines the manipulation checks and section 5.4 examines the comprehension checks. Section 5.5 reports the analysis of the control variables. Section 5.6 examines a number of identity process measures to validate the manipulation of client identity strength. Section 5.7 tests the moderating effect of professional identity salience on the relationship between both client and professional identity strength and initial audit judgments, in an ambiguous decision context. Section 5.8 explores whether these moderating relationships are maintained for subsequent audit judgments, in an ambiguous decision context. Section 5.9 provides additional analysis to help validate the main results. I conclude this chapter in Section 5.10.

5.2 Demographic Information about Experimental Participants

As indicated in subsection 4.2.3, the final sample of participants in this study consists of 93 auditors that have at least three years of audit experience. Seventy-three of these auditors are assigned to one of the four treatment conditions; unless otherwise noted, the analysis reported in this chapter uses the sample of 73 auditors.[39] On average, participants spent 30 minutes on the task.[40] Table 5 provides background information about the participants.

On average, participants had 5.5 years of public accounting experience and participate in approximately 8 audits per year; years of experience and number of audits do not vary significantly between treatment conditions (experience: $F(3,69) = 0.11$, $p = 0.953$; audits: $F(3,69)$

[39] Further, unless otherwise noted, there are no qualitative differences in the results of analysis performed in this section if the sample is expanded to include the 20 auditors in the control condition.
[40] Participants in the control condition spent 18 minutes on the task, on average; they received less information and did not complete a recall task.

= 0.66, p = 0.580). Eighty-two percent of participants have participated in the audit of a public company on multiple occasions; this frequency does not vary significantly between treatment conditions (chi-square = 1.18, p = 0.757). In total, 36 seniors, 23 managers, and 14 senior managers completed the study; distribution of auditor rank does not vary significantly by treatment condition (chi-square = 1.86, p = 0.932). The auditors' employer firm also does not vary significantly between conditions (chi-square = 11.62, p = 0.236).[41] Only 4 percent of participants reported specializing in the technology industry, the same industry as the hypothetical client; the most common single industry specializations reported were financial services (14 percent) and manufacturing (21 percent). Auditor industry specialization does not vary significantly between treatment conditions (chi-square = 13.94, p = 0.530).

On average, participants indicated that they are slightly unfamiliar with the industry/business facts described in the case materials (mean = -0.34, on a -3 to +3 scale). Further analysis reveals that these perceptions differed between treatment conditions (F(3,69) = 3.12, p = 0.032) with only participants in the high CI strength, heightened PI salience condition indicating that they were familiar with the case facts (mean = 0.55). However, I do not find that this variable is significantly associated with the main dependent variables and my main results are qualitatively similar whether it is included or excluded as a covariate; thus, I exclude it from reported results.

As indicated in subsection 4.2.3, where I report task-specific experience for all participants, participating auditors in the treatment conditions appear to have sufficient experience dealing with going concern audit issues. Seventy-eight percent of participants reported being involved in audit engagements where substantial doubt existed about the going concern assumption and the number of such engagements (mean = 2.9) does not differ by

[41] 30, 18, and 23 auditors from three of the Big 4 audit firms participated; 2 auditors did not disclose their audit firm.

condition (F (3,68) = 0.63, p = 0.595).[42] On average, 55 percent of the audits involving going concern doubt resulted in note disclosure; on average, only 8 percent of the audits involving going concern doubt resulted in a qualified opinion. Neither frequency differed across treatment conditions (note disclosure: F(3,52) = 0.48, p = 0.695; qualified opinion: F(3,52) = 1.30, p = 0.285). On average, participants felt that they have sufficient experience with going concern issues (mean = 0.74, on a -3 to +3 scale) and average sentiments do not differ by treatment condition (F(3,68) = 1.01, p = 0.394).

In general, characteristics of the participants appear to be randomly distributed across treatment conditions, reducing the likelihood that differences between conditions are attributable to these characteristics. However, to the extent that these characteristics have equivalent but significant effects on auditor judgments across all conditions, they will need to be controlled for to isolate the treatment effects. I perform an analysis of pair-wise correlations between participant characteristics and my dependent variables (untabulated) and find little evidence that these variables are related to the dependent variables of interest. Only one variable is significantly correlated with more than one dependent variable ($p < 0.10$, two-tailed). The number of audits conducted per year (*Audits*) is positively correlated with both *GC1* and *GC2*.[43] The positive association suggests that as auditors take on more client engagements, their going concern assessments tend to increase. To address this potential relationship, I include *Audits* as an additional covariate in all analyses.

[42] Again, I exclude the auditor who reported having experience in 90 engagements with going concern issues.
[43] *Audits* is significant at $p < 0.05$, with the dependent variables *GC1*, *GC2*, and *Approp*, when the control condition is included in the analysis. A few variables are correlated, at $p < 0.05$ or 0.10, only with *Approp*. I defer discussion of these variables until my analysis of *Approp*; they are otherwise not included as a covariate in any tests.

5.3 Manipulation Checks

As discussed in Section 4.5, I employ two measures to test whether my manipulation of PI salience is effective. Table 6, Panels A and B, show the results for my main method, using a dichotomous variable based on the method by Forehand et al. (2002). Panel A confirms that participants are more likely to mention their accounting profession when PI salience is heightened (35 percent) versus not (19 percent), although Panel B indicates weak statistical significance (Fisher exact test: $p = 0.107$, one-tailed; chi square = 2.26, $p = 0.133$, two-tailed). However, Panels C and D corroborate these findings using a continuous measure of PI salience adapted from Reed (2004); the mean rating of PI salience is significantly higher when PI salience is heightened (4.76) versus not (4.19) ($t_{62} = 1.72$, $p = 0.045$, one-tailed). An untabulated analysis of variance demonstrates that the continuous measure of PI salience is not influenced by the manipulation of CI strength ($F = 0.18$, $p = 0.672$).

Theory suggests that salience may be associated with strength; in an untabulated analysis I find that the mean of PI strength is higher when PI salience is heightened (5.46) versus unheightened (4.58) ($t_{66} = 2.72$, $p = 0.008$). Although this suggests that my manipulation of PI salience is affected by PI strength, by including both variables in subsequent tests, I control for the effect of one variable when evaluating the effect of the other on going concern assessments. Overall, the manipulation of PI salience appears to have worked as intended with respect to increasing the salience of professional identity. However, increasing PI salience also appears to increase the strength of professional identity.

I also verify that the level of CI salience is equivalent across CI strength conditions; a chi-square test (untabulated) confirms that the likelihood of auditors referring to their actual client base does not differ when CI strength is manipulated as high (22 percent) versus low (22

percent) (chi-square = 0.00, p = 0.951). Further, mean ratings of CI strength (untabulated) do not differ for auditors that mentioned their client base (3.38) versus those that did not (2.86) (t_{71} = 1.42, p = 0.160); in addition, mean ratings of CI strength do not differ between auditors that did or did not mention their client base, within either the low CI strength condition or the high CI strength condition.

As discussed in Section 4.5 and shown in the Appendix (p. 175, question 4), I use a measure with overlapping circles representing self and client (adapted from Aron et al. 2004) to test that the manipulation of CI strength is effective. In Panel A of Table 7, I compare the means from the circle-overlap scale when CI strength is manipulated as high (3.54) versus low (2.39) and a t-test in Panel B confirms that the mean is higher in the high CI strength condition (t_{67} = 4.25, p < 0.001, one-tailed). An untabulated analysis of variance demonstrates that the measure of CI strength is not influenced by the manipulation of PI salience (F = 0.01, p = 0.908). Contrary to my expectation, I do not find that perceptions that the task was joint between participant/auditor and client are higher in the high versus low CI strength condition. Panel D of Table 7 shows that the means reported for question 1 in Panel C are statistically indistinguishable (t_{71} = -0.21, p = 0.837). However, Panels C and D also show that perceptions of client pressure to meet reporting deadlines are statistically indistinguishable (t_{69} = 0.55, p = 0.587), which alleviates concerns that the language in the CI strength conditions caused different perceptions of pressure that could influence auditor judgments.

Finally, I verify that the task was consistently perceived as ambiguous across treatment conditions. Untabulated analyses demonstrate that on average, participants found the task ambiguous as they disagreed that the going concern issue had a clear right answer (mean = -1.34, on a -3 to +3 scale); their responses are significantly less than the scale midpoint of 0 (t_{72} = 7.73,

$p < 0.001$) and do not differ by condition ($F(3,69) = 1.02$, $p = 0.390$).[44] In addition, I find that *RightAns* is negatively correlated with my dependent variables and thus I include it as a covariate in my main analyses. This association is consistent with prior literature (e.g. Peecher et al. 2003), which argues that auditors are more likely to be influenced by client preference (i.e. no going concern problem) as ambiguity about the audit issue increases.

5.4 Comprehension Checks

As described in subsections 4.2.4 and 4.5.2, I employ a recall task consisting of 8 multiple-choice questions to reinforce the client identity strength manipulation and measure whether participants correctly interpreted the client facts. Sixty-eight of the 73 auditors in the treatment conditions (93 percent) correctly answered the four identity-related questions; 64 (88 percent) answered all eight questions correctly. Excluding those participants who did not correctly answer the questions from the sample does not qualitatively change the results for the CI strength manipulation or the tests of hypotheses; thus, I retain them in my analyses.

As described in subsection 4.5.2, I measure whether participants understood that going concern note disclosure would cause Highpoint to violate its debt covenant. Four of the 73 auditors (5 percent) answered incorrectly. A further 18 (25 percent) were unsure of the correct answer.[45] Although a little more than two-thirds of participants answered this question correctly, its purpose is to measure whether participants understood the client preference to assert that it meets the going concern assumption. Prior audit research shows that auditor judgments are influenced in the direction of client preference; including auditors who were uncertain about

[44] Mean responses in the control condition (-0.55) were also less than 0 ($t_{19} = 1.27$, $p = 0.109$, one-tailed) but significantly higher than mean responses across the four treatment conditions ($t_{91} = 1.98$, $p = 0.051$). Recall that participants in the control condition do not receive client information influencing client identity strength. Perhaps because they had less information to evaluate overall, regardless of what the information pertained to, participants in the control condition perceived the going concern issue to be less ambiguous.

[45] The proportion of auditors that were unsure of the answer did not differ across the four treatment conditions.

client preferences would bias against finding results and thus I include these observations in my sample.

5.5 Control Variables

I defer discussion of participants' perceptions about the risk that the financial statements are materially misstated until section 5.9, where I perform supplementary analysis. Participants' perceptions about the case materials, and their self-efficacy at completing the experimental task, are summarized in Table 8. Descriptive statistics in Panel A of Table 8 demonstrate that, on average, participants found the case materials to be realistic (mean = 0.96, on a -3 to +3 scale) and somewhat challenging (mean = 0.64, on a -3 to +3 scale); participants also felt motivated to complete the task (mean = 0.81, on a -3 to +3 scale) and were confident in their ability to do so (mean = 1.30, on a -3 to +3 scale).[46] Panel B of Table 8 shows that the first three measures are significantly correlated; thus, to examine perceptions by treatment conditions, I perform a multivariate analysis of variance (MANOVA) for the first three variables and an analysis of variance (ANOVA) for the confidence measure.

As shown in Panel C of Table 8, the perceptions of task characteristics do not vary significantly between CI strength and PI salience conditions. However, Panel D of Table 8 shows that participants' confidence in their ability to complete the task varied between PI salience conditions ($F = 5.16$, $p = 0.026$). Untabulated analyses indicate that, on average, confidence is higher for participants in the heightened (mean = 1.59) versus unheightened (mean = 1.00) PI salience condition but both means are significantly greater than the scale midpoint of 0 (p-value < 0.001, either condition). Further, overall confidence is not significantly associated with the

[46] All means reported are greater than the scale midpoint of 0.

main dependent variables and my main results are qualitatively similar whether it is included or excluded as a covariate. Thus, I exclude overall confidence from reported results.[47]

5.6 Identity Process Measures

I ask auditors to assess the client on a number of factors that SIT research has shown to be positively associated with identity strength. Individuals perceive in-group members to be more likely to cooperate and these perceptions are related to the level of trust the individual has for in-group members (Haslam and Ellemers 2005); competence is a key determinant of organizational trust (Mayer, Davis, and Schoorman 1995). Finally, individuals that have a strong identity strive to actively reach agreement with group members (Haslam and Ellemers 2005). I employ four measures to capture these constructs, which include ratings of: (1) how cooperative the client would be in providing documentation for an unrelated task (*Coop*); (2) the degree to which the client is trustworthy (*Trust*); (3) the degree to which the client is competent (*Comp*); and (4) the importance of working with the client to avoid note disclosure (*Avoid*). All four measures use a 7-point Likert scale with higher values indicating higher ratings of the client (or importance).

I expect that auditors will provide higher ratings in the high versus low CI strength conditions.[48] The descriptive statistics in Panel A of Table 9 show that each of the 4 measures is higher in the high CI strength conditions. The correlation analysis in Panel B shows that the ratings of *Coop*, *Trust*, and *Comp* are highly correlated with each other (all $p < 0.011$) but none of the measures are highly correlated with *Avoid*. Thus, I use a 2 x 2 MANOVA model (Table 9, Panel C) to jointly test the first three measures. The results indicate a significant main effect of

[47] In addition, unless otherwise reported in subsequent analyses, participants' confidence in their specific audit judgments is not significantly associated with the audit judgment and is therefore excluded from reported results.
[48] The associations may be weaker when PI salience is high versus low, similar to my main predictions. However, PI salience may have no influence on these perceptions because professional standards such as ISA/CAS 200 or SAS 99 require auditors to be skeptical about client financial statements, but not necessarily about clients themselves.

CI strength ($F = 7.12$, $p < 0.001$) and no effect for the CI strength by PI salience interaction ($p = 0.667$). However, there is also a significant main effect of PI salience ($F = 2.25$, $p < 0.091$). Univariate results (untabulated) show that the mean ratings of *Coop* and *Comp* are significantly higher in the high CI strength condition and no other effects are significant. However, while the mean rating of *Trust* is significantly higher in the high CI strength condition, there is also a significant main effect for PI salience ($p \leq 0.050$). Examining this result further, I find that trust is in fact higher when PI salience is heightened (0.38) versus not heightened (-0.17). This unexpected result is also opposite to what might be expected, as participants' audit judgments are expected to be less client-favourable when PI salience is heightened. It is not clear why this result occurred. However, trust is higher when CI strength is high versus low, both when PI salience is heightened and not heightened.

I use a 2x2 ANOVA model (Table 9, Panel D) to test the fourth measure; results provide no evidence that ratings of *Avoid* are higher when CI strength is high versus low ($p \leq 0.285$) and no other effects are significant. In general, these results are consistent with theory, which predicts that individuals that have stronger identities will exhibit more favourable perceptions of group members (e.g. trustworthiness, cooperativeness, competence). I do not find that individuals with stronger identities more actively strive to reach agreement with those members (i.e. feel it is important to assist the client in avoiding note disclosure).

In untabulated analyses I also find that ratings in the high CI strength conditions are significantly higher than the control condition for the first three measures ($F = 3.78$, $p < 0.016$) but not for the fourth measure ($F = 0.46$, $p < 0.502$). This is generally consistent with my finding, reported later in Subsection 5.7.2, that participants had stronger client identities in the high CI strength conditions versus the control condition. However, I do not find that ratings in the low CI

strength conditions are significantly different from the control condition for the first three measures ($F = 0.37$, $p \leq 0.774$) or the fourth measure ($F = 0.10$, $p \leq 0.757$). Thus, although participants in the low CI strength conditions had weaker client identities than participants in the control condition (see Subsection 5.7.2), there is insufficient evidence to conclude that this difference is related to other perceptions of the client.

5.7 Initial Audit Judgments in an Ambiguous Decision Context

5.7.1 Professional Identity Salience as a Moderator of Client and Professional Identity Strength (Tests of Hypotheses 1 and 2)

In hypothesis 1, I predict that the influence of CI strength on auditors' initial agreement with the client is more positive when PI salience is not heightened versus heightened. In hypothesis 2, I predict that the influence of PI strength on auditors' initial agreement with the client is more negative when PI salience is heightened versus not heightened. To test these hypotheses, which are reported in Table 10, I examine the effect of PI salience (PI_{Sa}), CI strength (CI_{St}), and the measured variable of PI strength (*PI_Str*) on auditors' initial assessment of the likelihood that Highpoint meets the going concern assumption (*GC1*). Higher values for *GC1* indicate greater agreement with the client. As explained previously, I also include the covariates *RightAns* (perceived task ambiguity) and *Audits* (number of actual audits participated in per year) in an Analysis of Covariance (ANCOVA).

The ANCOVA results in Panel B of Table 10 show a significant interaction effect between CI_{St} and PI_{Sa} ($p \leq 0.090$, two-tailed); no other main or interaction effects are significant. Therefore, there appears to be no support for hypothesis 2. However, the covariate-adjusted means in Panel A indicate that the pattern of the interaction between CI_{St} and PI_{Sa} is consistent with hypothesis 1. There is a greater increase in *GC1* as CI_{St} increases, when PI_{Sa} is not

heightened (low CI_{St} Mean = 47.40; high CI_{St} = 59.31) versus heightened (low CI_{St} Mean = 53.69; high CI_{St} = 48.30). Test of simple effects in Panel C of Table 10 show that these differences in means are significant when PI_{Sa} is not heightened ($p \leq 0.050$, one-tailed) but not significant when PI_{Sa} is heightened ($p < 0.441$). Therefore, initial agreement with the client increases as CI strength increases, but only when PI salience is not heightened.

I examine the effect of PI strength further in Table 11. Panel A suggests a negative trend in *GC1* as *PI_Str* increases but the difference between auditors with the lowest PI strength (rating < 4) and highest PI strength (rating = 7) is not statistically significant. Panel B further suggests that the negative trend exists when PI salience is heightened but not when it is unheightened, as predicted, but there is insufficient statistical power to conclude that this pattern is significant.[49]

Overall, I find results consistent with hypothesis 1 but not with hypothesis 2. The evidence shows that initial agreement with the client increases as CI strength increases from low to high, when PI salience is not heightened but not when PI salience is heightened. Conversely, there is no evidence to suggest that initial agreement with the client decreases as PI strength increases, even when PI salience is heightened.

5.7.2 Control Condition

The results in the previous subsection indicate that auditors' initial judgments are more aligned with client preferences when CI strength is high (versus low), although only when PI salience is not heightened. It is unclear from these previous results, however, if the level of client agreement exhibited by auditors with high CI strength is unacceptably high. To examine this issue, I compare the level of agreement in my treatment conditions to my control condition.

[49] The statistical power of this test is 0.574. Further analysis indicates that approximately 7 (13) more participants with relatively low PI strength (rating of 4 or less) are needed in the sample to provide statistical power of 0.8 (0.9).

I first examine whether the mean rating of the variable *CI_Str*, in the control condition, differs from those of the low and high CI strength conditions. If CI strength in the control condition is not significantly different from either of the manipulated conditions then any differences in audit judgments cannot be attributed to CI strength. As indicated in Section 5.3, my manipulation of CI strength is successful as the mean rating of *CI_Str* is higher in the high versus low CI strength conditions. I also find that the mean rating of *CI_Str* is higher in the high CI strength condition versus the control condition (untabulated; $t_{43} = 2.15$, $p < 0.019$, one-tailed). Further, I find that the mean rating of *CI_Str* is lower in the low CI strength condition versus the control condition (untabulated; $t_{35} = -1.53$, $p < 0.067$, one-tailed).

Panel A of Table 12 shows that, for auditors in the control condition, initial agreement with the client was, on average, 49 percent. Although not formally hypothesized, recall from subsection 4.2.4 that I expect initial agreement to exceed the control group baseline when CI_{St} is high and PI_{Sa} is not heightened. Panel C of Table 12 demonstrates that this pattern is weakly significant (difference = 10.31; $p < 0.096$). As indicated by the results in Panel C, I do not find that auditor agreement with the client differs from this baseline when CI_{St} is high and PI_{Sa} is heightened ($p < 0.927$). I also do not find that auditor agreement with the client differs from the control condition baseline when CI_{St} is low ($p < 0.822$). Thus, results appear to be consistent with expectations from identity theory.

5.8 Subsequent Audit Judgments in an Ambiguous Decision Context

5.8.1 Professional Identity Salience as a Moderator of Client and Professional Identity Strength (Exploration of Research Questions 1 and 2)

In research question 1, I explore whether the moderating influence of PI salience on the relationship between agreement with the client and CI strength affects revisions in subsequent

relative to initial auditor agreement. Further, in research question 2, I explore whether the moderating influence of PI salience on the relationship between agreement with the client and PI strength affects revisions in auditor agreement. To explore these questions, I use a repeated-measures (RM) ANCOVA model to examine whether identity effects influenced any changes in subsequent versus initial going concern assessments that may have occurred. I use the same variables as used in the ANCOVA model in Section 5.7; however, I also examine whether the presentation order of additional evidence affects auditor judgments. Recall that all participants receive one piece of evidence that supports the going concern assumption ("positive") and one piece that refutes it ("negative"). The variable *Order* is equal to 0 if the negative item is presented last and equal to 1 if the positive item is presented last; order is counterbalanced within treatment conditions.[50]

Evaluation of Additional Audit Evidence

Before subsequently assessing the going concern assumption, auditor participants evaluate the evidence itself. As expected, the mean rating of the positive item (*Pers1*; 0.65) is greater than zero ($t_{71} = 4.22$, $p < 0.001$, one-tailed) and the mean rating of the negative item (*Pers2*; -0.89) is less than zero ($t_{72} = -5.55$, $p < 0.001$, one-tailed). An untabulated ANCOVA indicates that neither rating is influenced by presentation order of evidence. However, there is a significant negative relationship between PI strength and the rating of evidence; auditors with higher PI strength rate the positive item less positively and the negative item more negatively. This relationship is not moderated by PI salience. No significant relationships are present between evidence ratings and CI strength, regardless of PI salience.

[50] Although order of additional evidence may influence subsequent judgments and should not influence initial judgments, an order effect would lead to a within-subjects difference in judgments as participants that receive negative (positive) information last would decrease (increase) their subsequent relative to initial judgments.

How participants rate the evidence overall will likely be important for how they revise their going concern assessments. Prior research has shown that when auditors evaluate subsequent evidence in a manner consistent with their initial goals, subsequent audit judgments are increasingly biased relative to initial judgments (Kadous et al. 2003; Blay 2005). The mean overall rating of evidence (*PersTot*; -0.21) is not statistically different from zero (t_{72} = -1.20, p = 0.234). I examine the influence of identity effects and evidence order on *PersTot* in Table 13; the results demonstrate a significant interaction effect between CI_{St} and PI_{Sa} (p = 0.055). An untabulated contrast indicates that there is a greater increase in *PersTot* as CI strength increases when PI salience is not heightened versus heightened (t = 1.96, p = 0.055). Table 13 also demonstrates a significant effect of PI strength ($p \leq 0.073$) and an interaction effect between PI strength and *Order*; *PersTot* is not significantly related to *Order* (p = 0.196).[51] An untabulated analysis of the regression coefficients indicates that there is a significant negative relationship between PI strength and *PersTot* when negative evidence is presented last (coefficient = -0.24, $p \leq 0.08$). PI strength is not associated with *PersTot* when positive evidence is presented last (coefficient = -0.18, $p \leq 0.422$). Overall, these results suggest that as CI strength increases, participants more strongly believe that the combined audit evidence supports the client's assertion that the company will continue as a going concern (*PersTot*), when PI salience is not heightened. This interactive effect of CI strength and PI salience may further influence subsequent going concern assessments, if the observed interactive effect for evidence evaluation adds to the observed interactive effect for initial assessments. Next, I examine whether the interactive effect of CI strength and PI salience is replicated for subsequent going concern

[51] I do not include all interactions between *Order* and my five identity variables in Table 13. The model presented is the most parsimonious; the interactions that are excluded from this model are highly insignificant and reduce the overall fit of the model.

assessments. It is not clear whether the presentation order of evidence will also have an influence on revisions in going concern assessments.

Subsequent Going Concern Assessments

After evaluating the additional audit evidence auditors are asked to make a final judgment about the likelihood that the client meets the going concern assumption (*GC2*). I explore my first two research questions using a RM ANCOVA that includes identity variables and additional covariates, which may influence both *GC1* and *GC2*. I also examine evidence order and its interaction with certain identity effects, as the analysis reported in Table 13 suggests that evidence order may also influence *GC2*.[52] The repeated measure in this analysis is the auditors' going concern assessment (*Assess*) which encompasses the initial and the final going concern assessment.

Table 14 shows the covariate-adjusted means for both *GC1* (Panel A) and *GC2* (Panel B); the values reported in Panel A are duplicates of those reported in Table 10. Panel B demonstrates a similar pattern of means as Panel A. However, in Panel B, the positive difference between low and high CI strength when PI salience is not heightened is smaller, and the negative difference between low and high CI strength when PI salience is heightened is larger, relative to the results in Panel A. Examining the RM ANCOVA in Panel C of Table 14 provides further insights. The within subjects results show that there are no significant interaction effects between the repeated measure, *Assess*, and the main independent variables that capture the effects of identity. This indicates that neither CI strength nor PI strength, regardless of the level of PI salience, has a significant influence on subsequent agreement with the client, relative to initial agreement with the client. In response to my first research question, a stronger client identity did not lead to a

[52] Again, I do not include all interactions between *Order* and my five identity variables in an effort to retain the most parsimonious model. The order effects included in the repeated measures analysis are not the same as those included in the ANCOVA for *PersTot*. However, the retained interactions provide the best overall model fit.

greater positive change in agreement with the client when professional identity salience was not heightened. In response to my second research question, a stronger professional identity did not lead to a greater negative change in agreement with the client when professional identity salience was heightened.

The pattern of means in Panel A of Table 14 were previously shown to demonstrate a significant moderating effect of PI salience on the relationship between CI strength and initial agreement with the client, as predicted in hypothesis one. However, Panel C of Table 14 does not show a significant between subjects effect for the two-way interaction of CI strength and PI salience. This suggests that this interaction effect is not as strong for subsequent agreement with the client. Panel C of Table 14 does demonstrate a significant within subjects *Assess* x *Order* effect ($p = 0.002$). Since the additional evidence was presented after the initial going concern assessment was made, it appears that the presentation order of evidence had an influence on final going concern assessments. Untabulated analysis indicates that *GC2* is significantly lower than *GC1* when the negative evidence item is presented last (mean = -9.40) versus when the positive evidence item is presented last (mean = 4.61) ($t = 3.57$, $p < 0.001$). This is consistent with the recency effect. The results of Table 14 may suggest that subsequent going concern assessments are influenced by recency effects but not by identity effects.

To explore this possibility further, I examine only *GC2* using an ANCOVA model similar to the model used in the between subjects portion of the RM ANCOVA in Table 14.[53] Untabulated results show an insignificant difference in *GC2* as CI_{St} increases, both when PI_{Sa} is not heightened (low CI_{St} Mean = 48.25; high CI_{St} = 42.41; $p < 0.524$) and heightened (low CI_{St} Mean = 46.46; high CI_{St} = 44.65; $p < 0.839$) when negative evidence is presented after positive evidence. However, when positive evidence is presented after negative evidence there is a

[53] However, I include all interactions between *Order* and my five identity variables.

greater increase in *GC2* as CI_{St} increases, when PI_{Sa} is not heightened (low CI_{St} Mean = 48.18; high CI_{St} = 63.61) versus heightened (low CI_{St} Mean = 53.41; high CI_{St} = 43.12). These differences in means are significant when PI_{Sa} is not heightened ($p < 0.038$, one-tailed) but not significant when PI_{Sa} is heightened ($p < 0.231$). These results suggest that recency effects did not completely dominate identity effects for subsequent assessments; the moderating effect of PI salience on the relationship between CI strength and agreement with the client persisted, but only when positive evidence was presented last.

5.8.2 Assessment of the Appropriateness of Client Conclusion

After providing a final going concern assessment auditors are asked to assess the appropriateness of the client's conclusion that no going concern note disclosure is needed (*Approp*). Extant audit literature has examined final choices by requesting recommendations for the appropriate audit opinion (Asare 1992, Joe 2003; Blay 2005). I depart from prior literature by measuring final choices using a continuous measure (7-point Likert scale) in an effort to avoid categorical variables that may have insufficient variation.[54] I do not include this analysis in my main examination of research questions one and two since I do not ask participants to revise their conclusions. Therefore I cannot explore how the effects of identity lead, or do not lead, to changes in final choices. Nonetheless, the results herein may provide insight into how the effects of identity strength and salience influence subsequent/final audit judgments.

I examine whether evidence order influenced *Approp* using an ANCOVA model. I include an additional covariate *Public* that equals 1 if the participant has had experience, on more than one occasion, with a public company audit, and zero otherwise. As discussed in section 5.2, pairwise correlation analysis revealed significant associations between the variable *Approp* and a

[54] As mentioned previously, pilot testing revealed a preference by participants for one of three audit opinions: note disclosure required. This may represent a compromise between the other choices: no action; and adverse opinion.

few auditor characteristics. However, only the variable *Public* is significantly related to *Approp* after controlling for my independent variables; the inclusion or exclusion of the other variables does not qualitatively change results and thus I exclude them from the analysis.

Table 15 demonstrates that evidence order again influenced the judgments made by auditors. Although there is no main effect for *Order*, there is a significant interaction effect between *Order* and *PI_Str* ($p \leq 0.075$) and a significant three-way interaction effect between *Order*, CI_{St}, and PI_{Sa} ($p \leq 0.011$). An untabulated analysis indicates that participants who receive the negative evidence item last agree less with the appropriateness of the client's conclusion as PI strength increases, relative to participants that receive the positive evidence item last. I examine the significant three way interaction effect more closely in Panels B and C of Table 15 (discussed below). Overall, participants appear to disagree that the client's conclusion is appropriate, regardless of whether the evidence order presents the negative item last (-1.31) or the positive item last (-1.13).[55] Regardless of evidence order, I find that participants agree less with the client when PI salience is heightened relative to not heightened ($p \leq 0.055$). Unexpectedly, I find that the association between PI strength and agreement with the client becomes more negative when PI salience is *not* heightened, relative to heightened ($p < 0.09$). However, I do not find a significant association between PI strength and agreement with the client when PI salience is not heightened ($p = 0.791$) or when PI salience is heightened ($p = 0.196$).

The covariate-adjusted means of *Approp* in Panel B of Table 15, when the negative evidence item is presented last, show an unexpected result. Agreement with the client appears to *decrease* as CI_{St} increases, when PI_{Sa} is not heightened (low CI_{St} = -0.46; high CI_{St} = -1.56; p <

[55] An untabulated analysis indicates that participants with less public company audit experience agreed significantly less with the client's conclusion than auditors with more public experience (Table 15; $p < 0.024$).

0.079) while there is an insignificant increase in agreement with the client as CI_{St} increases, when PI_{Sa} is heightened (low CI_{St} = -1.95; high CI_{St} = -1.25; p < 0.651). This is opposite to the predictions in hypothesis one for initial audit judgments; thus, the effects of identity are not consistent for this subsequent judgment. This unexpected pattern of means may be driven by the results of the low CI_{St}, unheightened PI_{Sa} condition. Untabulated analyses indicate that participants in this condition had higher average ratings of *Approp* than the other three conditions combined (t = 2.07, p < 0.049) and none of the average ratings in the other conditions were significantly different from each other (all p > 0.248). It is not clear why average ratings in this one condition were less negative than the others. However, due to the small treatment cell sizes, caution is warranted in interpreting the results of the analysis in this Subsection.

The covariate-adjusted means for *Approp* in Panel C of Table 15, when the positive evidence item is presented last, indicate a similar pattern as was found for initial audit judgments. There is a greater increase in *Approp* as CI_{St} increases, when PI_{Sa} is not heightened (low CI_{St} = -1.16; high CI_{St} = -0.90) versus heightened (low CI_{St} = -0.70; high CI_{St} = -1.78). An untabulated contrast indicates that this pattern is not significant (p = 0.158).

Overall, the pattern of results for *Approp* is generally inconsistent with results for going concern assessments, regardless of whether the order of evidence created a negative or positive frame. As I stated earlier, this may be due to my use of a final choice variable that is inconsistent with prior research. It was not clear, ex-ante, how auditors would respond to the measure and thus whether certain aspects of the various conditions led to unintended differences.

5.8.3 Control Condition

The results in this section suggest that the moderating role of professional identity salience, on the relationship between agreement with the client and client identity strength, did

not lead to revisions in audit judgments. However, recency effects due to the order of additional evidence resulted in revisions to initial going concern assessments. Participants in the control condition may also have exhibited a recency bias. I examine whether revisions in going concern assessments differed between treatment conditions and the control condition. In particular, I am interested whether auditors with high CI strength, when professional identity salience is not heightened, revised their judgments in a different manner than auditors in the control condition, since these two conditions exhibited the largest difference in initial judgments (as expected).

Regarding the evaluation of additional evidence, participants in the control condition provided similar ratings as participants in the treatment conditions. In the control condition, the mean rating of the positive item (*Pers1*; 0.70) is greater than zero ($t_{19} = 2.40$, $p \leq 0.013$, one-tailed), the mean rating of the negative item (*Pers2*; -0.85) is less than zero ($t_{19} = -3.10$, $p < 0.003$, one-tailed), and the mean overall rating (*PersTot*; -0.25) is indistinguishable from zero ($t_{19} = -0.75$, $p < 0.460$). None of the mean ratings are significantly different from the mean ratings of the treatment conditions (all $p > 0.886$). Thus, to the extent that there are differences in the revision in going concern assessments between participants in the treatment versus control conditions, it is not likely due to differences in evidence evaluation.

I examine revisions in going concern assessments using a RM ANCOVA, which uses *Assess* as the repeated measure (as in the analysis in Table 14). The main between subjects variable is *Control*, which is equal to 1 if a participant is in the control condition, and 0 if a participant is in the treatment group of interest. As in Table 12, I compare the control condition to three treatment conditions: high CI strength and unheightened PI salience; high CI strength and heightened PI salience; and low CI strength. Table 16 shows the covariate-adjusted means for both *GC1* (Panel A) and *GC2* (Panel B); the values reported in Panel A are duplicates of

those reported in Table 12. Panel C of Table 16 demonstrates the results of the repeated measures analysis when comparing the control condition to the treatment condition where CI strength is high and PI salience is unheightened. Results for comparisons to the other treatment conditions are qualitatively the same and thus, I do not report any further results.

The results of the within subjects variables in Panel C Table 16 show a significant *Assess* x *Order* effect ($p < 0.001$) but no three-way interaction of *Assess* x *Order* x *Control* ($p = 0.667$). These results suggest that the effect of evidence presentation order does not differ between the control condition and the treatment condition. Untabulated analyses also reveal that *GC2* is statistically indistinguishable between the control condition and the high CI strength and unheightened PI salience condition both when the negative evidence item is presented last (control: 38.90; treatment: 42.92; $p < 0.707$) and when the positive evidence item is presented last (control: 59.12; treatment: 62.64; $p < 0.764$). These results suggest that even when positive evidence is presented last and professional identity salience is not heightened, auditors with strong client identities (who are influenced by both identity and recency effects) demonstrate no greater subsequent agreement with the client than auditors in the control condition (who are influenced only by recency effects).

5.9 Supplementary Analyses

Although the results thus far suggest that auditors agree more with the client when they have a stronger client identity and professional identity salience is not heightened, in this section I attempt to rule out potential competing explanations for the experimental findings.

5.9.1 Identification with Audit Firm

In Subsection 2.5.1, I differentiate between professional and audit firm identity. As alluded to earlier, and argued by Warren and Alzola (2009), audit firm identity could be related

to either professional or client identity. For example, before its collapse part of Arthur Andersen's strategy was to immerse itself in its clients' businesses. Thus, it could be argued that part of the Andersen audit firm identity was to internalize its various client identities. Regardless, different audit firms have different identities, which may be more in line with their clients or the audit profession. While it is unclear, ex-ante, which identity any particular firm is more aligned with, it may be the case that differences in audit firm identity influenced the association between client or professional identity strength and auditor agreement with the client.

While I do not ask participants to rate the strength of their audit firm identity I do ask participants to indicate the firm they work for. As indicated in Section 5.2, audit firm does not differ by treatment condition; further, distribution of audit firm does not differ across conditions if the control condition is included (chi square = 12.04, $p < 0.442$). An untabulated ANOVA also demonstrates that audit firm is unrelated to ratings of CI strength ($p \leq 0.297$) and PI strength ($p < 0.522$), even after controlling for manipulated independent variables. I further examine whether responses to the dependent variables differ by audit firm. First, audit firm does not load significantly when it is included as a between subjects factor in any of the ANCOVA models. Second, while the significance levels of my independent variables are reduced, as the inclusion of audit firm reduces power by using another three degrees of freedom, results remain qualitatively the same. In fact, the general pattern of means across treatment conditions that is evident, for example in Panel A of Table 10, is consistent across each of the three audit firms. Thus, it does not appear that the participants' audit firm or audit firm identities had any significant influence on results.

5.9.2 Perceived Risk of Material Misstatement

Differences in information among the various manipulated conditions may have given rise to different opinions on the risk of material misstatement of the client. For example, participants in the low (versus high) CI strength conditions may have perceived the client to be of greater risk and therefore provided less favourable going concern assessments and audit judgments. After viewing the client's financial statements but before providing their initial going concern assessments, I ask participants to provide an assessment of the company's risk of material misstatement (*MRisk*). Overall, participants believed the client to be of somewhat high risk as the mean response for *MRisk* of 5.3 is significantly greater than the scale midpoint of 4.0 ($t = 11.85$, $p < 0.001$) and the scale point of 5.0 ($t = 2.74$, $p < 0.010$).

An untabulated ANOVA indicates that *MRisk* is not associated with CI strength, PI salience, or their interaction (all $p > 0.155$). Furthermore, additional analysis indicates that participants' perceptions of risk have an insignificant influence on their audit judgments. Participants' risk perceptions are not associated with initial going concern assessments ($F = 0.04$, $p \leq 0.842$) or final going concern assessments or evaluations of client conclusions, regardless of negative evidence order (*GC2*: $F = 0.03$, $p < 0.855$; *Approp*: $F = 1.62$, $p < 0.213$) or positive evidence order (*GC2*: $F = 0.11$, $p \leq 0.742$; *Approp*: $F = 0.53$, $p < 0.471$).

5.10 Summary

This chapter provides results obtained from my tests of hypotheses and examination of two research questions. Generally, when the audit decision context is ambiguous, professional identity salience is shown to moderate the relationship between agreement with the client and client identity strength. Professional identity salience does not similarly moderate the relationship between agreement with the client and professional identity strength (nor do I show

a consistent effect of professional identity strength on agreement with the client). As client identity strength increases, auditors' initial agreement with the client increases more when professional identity salience is not heightened versus heightened (Hypothesis 1 is supported). As professional identity strength increases, auditors' initial agreement with the client does not decrease more when professional identity salience is heightened versus not heightened (Hypothesis 2 is not supported).

Increasing client identity strength, when professional identity salience is not heightened, continues to influence auditors' subsequent agreement with the client more than when professional identity salience is heightened but only if subsequent positive evidence is presented after negative evidence. However, these identity effects do not lead to greater subsequent agreement with the client, relative to initial agreement with the client (i.e. response to Research Question 1 is "no"). There continues to be no moderating effect of professional identity salience on the relationship between agreement with the client and professional identity strength and thus this effect is no greater for subsequent agreement with the client than initial agreement with the client (i.e. response to Research Question 2 is "no"). Therefore I fail to find evidence that professional identity strength influences subsequent agreement with the client, regardless of the level of professional identity salience.

CHAPTER 6: RESULTS OF STUDY TWO

6.1 Introduction

This chapter provides results of Study Two. Section 6.2 reports demographic information about the participants. Section 6.3 examines the manipulation checks and section 6.4 examines the comprehension checks. Section 6.5 reports the analysis of the control variables. Section 6.6 examines a number of identity process measures to validate the manipulation of client identity strength. Section 6.7 provides a further test of the relationship between both client and professional identity strength and initial audit judgments, in an ambiguous decision context when professional identity salience is not heightened. Section 6.8 explores whether these relationships are maintained for subsequent audit judgments, however, in an unambiguous decision context. I conclude this chapter in Section 6.9.

6.2 Demographic Information about Experimental Participants

As indicated in Subsection 4.3.2, the final sample of participants in this study consists of 15 auditors that have at least three years of audit experience; all participants are from the same Big 6 audit firm. Due to the small sample size, most tests in this chapter are performed using non-parametric techniques. On average, participants spent 30 minutes on the task. Table 17 provides background information about these participants.

On average, participants had 5.2 years of public accounting experience and participate in approximately 11 audits per year; years of experience do not vary significantly between treatment conditions ($K = 0.01$, $p = 0.906$). However, reported number of audits is significantly higher in the low versus high CI strength condition (low: 14, high: 8; $K = 4.34$, $p = 0.033$). Nonetheless, I do not find that this variable is significantly associated with the main dependent variables and my main results are qualitatively similar whether it is included or excluded as a

covariate; thus, I exclude it from reported results. Forty-seven percent of participants have participated in the audit of a public company on multiple occasions; this frequency does not vary significantly between treatment conditions (chi-square = 1.23, p = 0.542).

In total, 11 seniors and 4 managers completed the study; distribution of auditor rank does not vary significantly by treatment condition (chi-square = 1.03, p = 0.310). No participants reported specializing in the technology industry, the same industry as the hypothetical client; the most common single industry specializations reported were not-for-profit (13 percent) and manufacturing (13 percent). Auditor industry specialization does not vary significantly between treatment conditions (chi-square = 5.76, p = 0.330). On average, participants indicated they are slightly unfamiliar with the industry/business facts described in the case materials (mean = -0.67, on a -3 to +3 scale); these perceptions did not differ between treatment conditions (K = 0.13, p = 0.722)

Similar to participants in Study One, participating auditors in the treatment conditions appear to have sufficient experience dealing with going concern audit issues. Eighty percent of participants reported being involved in audit engagements where substantial doubt existed about the going concern assumption and the number of such engagements (mean = 4.3) does not differ by condition (K = 0.00, p = 0.953). On average, 53 percent of the audits involving going concern doubt resulted in note disclosure; on average, only 14 percent of the audits involving going concern doubt resulted in a qualified opinion. Neither frequency differed across treatment conditions (note disclosure: K = 0.43, p = 0.514; qualified opinion: K = 0.00, p = 1.000). On average, participants felt somewhat strongly that they have sufficient experience with going concern issues (mean = 0.93, on a -3 to +3 scale) and average sentiments do not differ by treatment condition (K = 0.01, p = 0.905).

In general, characteristics of the participants appear to be randomly distributed between the two treatment conditions, reducing the likelihood that differences between conditions are attributable to these characteristics. However, to the extent that these characteristics have equivalent but non-zero effects on auditor judgments between conditions, they will need to be controlled for to isolate the treatment effects. I perform an analysis of pair-wise correlations between participant characteristics and my dependent variables (untabulated) and find little evidence that these variables are related to the dependent variables of interest. Only one variable is significantly correlated with more than one dependent variable ($p < 0.05$, two-tailed). The percentage of clients with a going concern issue that received a qualified audit opinion (*Qualified*) is negatively correlated with *GC1* and *GC2*; the negative association suggests that auditors have lower going concern assessments (i.e. make more conservative judgments) as they experience increasing numbers of clients that require qualified audit opinions due to going concern issues. To address this potential relationship, I include *Qualified* as an additional between-subjects factor in all analyses.

6.3 Manipulation Checks

As discussed in Section 4.5 and shown in the Appendix (p. 175, question 4), I use a measure with overlapping circles representing self and client (adapted from Aron et al. 2004) to test that the manipulation of CI strength is effective. In Panel A of Table 18, I compare the means from the circle-overlap scale when CI strength is manipulated as high (3.29) versus low (1.88) and a Mann-Whitney U-test in Panel B confirms that the mean is higher in the high CI strength condition ($U = 2.05$, $p < 0.020$, one-tailed). Contrary to my expectation, I do not find that perceptions that the task was joint between participant/auditor and client are higher in the high versus low CI strength condition. Panel D of Table 18 shows that the means reported for

question 1 in Panel C are statistically indistinguishable (U = -0.18, p = 0.857). Panels C and D also show that perceptions of client pressure to meet reporting deadlines are statistically indistinguishable (U = 0.78, p = 0.439), which alleviates concerns that the language in the CI strength conditions caused different perceptions of pressure that could influence auditor judgments.

I also verify that the level of CI salience is equivalent across CI strength conditions; a chi-square test (untabulated) confirms that the likelihood of auditors referring to their actual client base does not differ when CI strength is manipulated as high (14 percent) versus low (25 percent) (chi-square = 0.27, p = 0.605).

As discussed in Section 4.2, I do not manipulate PI salience in Study Two but I expect that the level of PI salience in this study to be comparable to the unheightened PI salience condition in Study One. Recall that in the unheightened PI salience condition, I provide cues unrelated to the accounting profession. The purpose of the cues is not to influence PI salience but to balance the task and information content with the heightened PI salience condition in Study One.

Participants appear more likely to mention their profession in Study Two (47 percent) than in the unheightened PI salience condition in Study One (19 percent), which may cause concern that PI salience was reduced beyond the normal level in Study One. However the frequency in Study Two is also higher than in the heightened PI salience condition in Study One (35 percent) and the control condition in Study One (15 percent). The control condition, like Study Two, also does not have a PI salience manipulation and is comparable in frequency to the unheightened PI salience condition in Study One. Further, the mean rating of the continuous measure of PI salience is not significantly different (U = 0.94, p = 0.348) when comparing

participants in Study Two (3.73) to those in Study One when PI salience is not heightened (4.19). Thus, it does not appear that PI salience was unintentionally lowered in the unheightened PI salience condition in Study One. Rather, it appears that auditors from non-Big 4 firms (Study Two) may be more likely to describe their profession when describing themselves than auditors from Big-4 firms (Study One).

The perceived level of ambiguity of the task was consistent across treatment conditions. Untabulated analyses demonstrate that on average, participants neither agreed nor disagreed that the going concern issue had a clear right answer (mean = -0.43, on a -3 to +3 scale). A Wilcoxon signed-rank test indicates that these responses are not significantly different from the scale midpoint of zero ($W = -0.90$, $p < 0.371$); responses also do not differ by condition ($U = 0.59$, $p = 0.554$). An additional Wilcoxon signed-rank test indicates that the responses of participants in Study Two were significantly higher than those of participants in Study One ($W = 1.80$, $p < 0.072$), which suggests that, as intended, participants in Study Two found the task relatively less ambiguous. In Study One, I found that *RightAns* is negatively correlated with the dependent variables, which is consistent with prior literature (e.g. Peecher et al. 2003). However, in Study Two I find a positive correlation between *RightAns* and my dependent variables. That is, auditors are more likely to agree with the client as ambiguity about the audit issue decreases. It may be the case that in Study Two, auditors who believed that there was a right answer believed it was consistent with the client being able to satisfy the going concern assumption whereas, in Study One, auditors appeared to believe that the right answer was that the client did not satisfy the going concern assumption. Regardless, I include *RightAns* as a covariate in my main tests.

6.4 Comprehension Checks

As described in subsections 4.2.4 and 4.5.2, I employ a recall task consisting of 8 multiple-choice questions to reinforce the client identity strength manipulation and measure whether participants correctly interpreted the client facts. Thirteen of the 15 auditors (87 percent) correctly answered the four identity-related questions and all eight questions combined. Excluding those participants who did not correctly answer the questions from the sample does not qualitatively change the results for the CI strength manipulation or the tests of hypotheses; thus, I retain them in my analyses.

As described in subsection 4.5.2, I measure whether participants understood that going concern note disclosure would cause Highpoint to violate its debt covenant. Four of the 15 auditors (27 percent) answered incorrectly while one further participant (7 percent) was unsure of the correct answer. Although only two-thirds of participants answered this question correctly, its purpose is to measure whether participants understood the client preference to assert that it meets the going concern assumption. Prior audit research shows that auditor judgments are influenced in the direction of client preference; including auditors with uncertainty about client preference would bias against my expected results and thus I do not exclude these observations from my sample.

6.5 Control Variables

Participants' perceptions about the case materials, and their self-efficacy at completing the experimental task, are summarized in Table 19. Descriptive statistics in Panel A of Table 19 demonstrate that, on average, participants found the case materials to be realistic (mean = 1.20, on a -3 to +3 scale) and somewhat challenging (mean = 0.67, on a -3 to +3 scale); participants also felt motivated to complete the task (mean = 1.60, on a -3 to +3 scale) and were confident in

their ability to do so (mean = 1.60, on a -3 to +3 scale). Panel B of Table 19 shows that none of the measures vary significantly between CI strength conditions (all $p \geq 0.365$).[56] I also ask participants to provide an assessment of the company's risk of material misstatement (*MRisk*). Untabulated analyses indicate that participants believed the client to be of somewhat high risk, as the mean response of 5.5 is significantly greater than the scale midpoint of 4.0 (Wilcoxon signed rank test: $W = 3.07$, $p \leq 0.002$), but a Mann-Whitney rank-sum test shows no differences in *MRisk* between conditions ($U = 0.66$, $p < 0.511$).

6.6 Identity Process Measures

As in Study One, I ask auditors to assess the client on its perceived level of cooperativeness (*Coop*), trustworthiness (*Trust*), and competence (Comp) and I ask auditors the importance of working with the client to avoid note disclosure (*Avoid*). All four measures use a 7-point Likert scale with higher values indicating higher ratings of the client (or importance). I expect that auditors will provide higher ratings in the high versus low CI strength conditions. The descriptive statistics in Panel A of Table 20 show that each of the 4 measures is higher in the high CI strength condition. In Panel B I use the non-parametric, Kruskal-Wallis ANOVA to examine the significance of each measure. The results indicate a significant effect of CI strength for all measures except *Coop* (*Coop* $p \leq 0.476$, one-tailed; all other $p \leq 0.034$, one-tailed). In general, these results are consistent with theory, which predicts that individuals that have stronger identities will exhibit stronger perceptions of group members and more actively strive to reach agreement with those members.

[56] In addition, unless otherwise reported in subsequent analyses, participants' confidence in their specific audit judgments is not significantly associated with the audit judgment and is therefore excluded from reported results.

6.7 Initial Audit Judgments in an Ambiguous Decision Context

Although the main purpose in Study Two is to examine audit judgments in an unambiguous context, the design of the experimental task allows me to corroborate findings from Study One for initial audit judgments. The going concern issue is initially described in an ambiguous manner – as in Study One – and only after additional evidence is provided does the audit evidence unambiguously indicate that the going concern assumption is unsupported. Although I only examine a setting where PI salience is not heightened, results for initial audit judgments would be consistent with Study One if there is a positive relationship between CI strength and auditors' initial agreement with the client and no relationship between PI strength and auditors' initial agreement with the client. To examine these relationships, which are reported in Table 21, I examine the effect of CI strength (CI_{St}), and the measured variable of PI strength (*PI_Str*) on auditors' initial assessment of the likelihood that Highpoint meets the going concern assumption (*GC1*). Higher values for *GC1* indicate greater agreement with the client. As explained previously, I also include the covariates *RightAns* (perceived task ambiguity) and *Qualified* (percentage of actual prior audits with going concern doubt that resulted in a qualified audit opinion) in an ANCOVA.

The ANCOVA results in Panel B of Table 21 show a significant effect for *PI_Str* ($p \leq 0.099$) but not for CI_{St} ($p \leq 0.538$). The covariate-adjusted means in Panel A indicate that the pattern for CI strength is consistent with expectations as *GC1* is higher when CI_{St} is high (55.49) versus low (47.69). A power analysis indicates that the power of this test is quite low (0.16, alpha = 0.05 one-sided). The number of participants needed per condition to demonstrate a significant result when power equals 0.4 or 0.8 is 38 and 121, respectively.[57] An untabulated

[57] In Study One, the comparison of low versus high CI strength in the unheightened PI salience condition had an approximate power level of 0.4.

analysis reveals that PI strength has a significantly positive relationship with *GC1* (regression coefficient = 11.50, $p \leq 0.099$), which is unexpected. In this setting, when PI salience was not influenced, auditors not only showed no negative association between PI strength and initial audit judgments but actually agreed with the client more as PI strength increased.

Overall, the results in Study Two do not corroborate the findings from Study One. However, the sample size appears insufficient to detect significant differences between treatment conditions. In addition, I find a positive relationship between initial agreement with the client and PI strength.

6.8 Subsequent Audit Judgments in an Unambiguous Decision Context (Exploration of Research Question 3)

In research question 3, I explore whether there is a relationship between revisions in auditor agreement with the client and CI strength when additional audit evidence unambiguously indicates that the client's position is unsupportable. In Study Two, both additional pieces of audit evidence provide evidence that does not support the client's position that it meets the going concern assumption. Thus, subsequent audit judgments are made in an unambiguous context, as opposed to initial audit judgments.

Participants in Study Two received two pieces of additional, negative evidence; one item was the same as participants received in Study One and thus I refer to the evaluation of this evidence as I did in Study One (*Pers2*). The evaluation of the other item is referred to as *Pers3*. As expected, the mean rating of each evidence item (*Pers2*: -0.87; *Pers3*: -0.33) is less than the scale midpoint of 0, although untabulated Wilcoxon signed-rank tests demonstrate that only *Pers2* is significant (*Pers2*: $W = -2.02$, $p < 0.043$; *Pers3*: $W = -0.90$, $p < 0.369$). Untabulated ANCOVA models also indicate that neither rating is influenced by CI strength.

The mean overall rating (*PersTot*; -0.90) is also significantly lower than zero (W = -1.91, $p < 0.057$). The ANCOVA results in Panel B of Table 22 show no significant effects for CI_{St} ($p \leq 0.379$) or *PI_Str* ($p < 0.502$). The covariate-adjusted means in Panel A indicate that the pattern of means for *PersTot* is higher – i.e. less negative – when CI_{St} is high (-0.47) versus low (-1.34). A power analysis indicates that the power of this test is low (0.23, alpha = 0.05 one-sided) but the effect of CI strength on *PersTot* is stronger than the effect on *GC1*. The number of participants needed per condition to demonstrate a significant result when power equals 0.4 or 0.8 is 19 and 59, respectively.

After evaluating the additional audit evidence auditors are asked to make a final judgment about the likelihood that the client meets the going concern assumption (*GC2*). In Table 23 I examine whether CI strength influences how participants revise initial assessments to determine final assessments, using a RM ANCOVA. As in Study One, the repeated measure is *Assess* and I use the same variables as used to evaluate *GC1* in study two (see Table 21). Panel A and Panel B of Table 23 show the covariate-adjusted means for the two CI strength conditions, for initial and subsequent going concern assessments, respectively. Whereas there is an approximately 8 percent increase in *GC1* as CI strength increases, there appears to be little important difference in the mean of *GC2* as CI strength increases (low CI_{St} = 46.18; high CI_{St} = 48.65). Panel C of Table 23 provides results of the repeated measures analysis and shows that there are no significant effects. This indicates that the effect of CI strength did not differ across initial and subsequent audit judgments. However, my tests failed to detect a positive relationship for initial going concern assessments. Thus, it is unclear whether the lack of association between CI strength and revisions in going concern assessments is due to low power or because

participants with stronger client identities did not agree more with the client to begin with. I attempt to address these issues with the following analysis.

The power analysis for *GC1* indicated that increasing the sample size by a factor of approximately 5 may provide significant results if power = 0.4; even for a power level of 0.4, the sample size would need to increase by a factor of approximately 55 to reach significance for *GC2* (412 participants needed per cell). Alternatively, rating the likelihood of continued client existence as above the 50 percent threshold indicates that a participant believes the client is likely to succeed, whereas a rating below the 50 percent threshold indicates that a participant believes the client is likely to fail (Joe 2003). The mean initial assessment of auditors with strong (weak) client identities is above (below) the 50 percent threshold, although the difference in means is not significant. Nonetheless, this pattern is similar to that exhibited by participants in Study One, when PI salience was unheightened. Unlike Study One, the mean subsequent assessment for auditors with strong client identities dropped below the 50 percent threshold. Thus, there is little difference in subsequent opinion between auditors with strong and weak client identities and both groups indicated the client is likely to fail.

After providing a final assessment auditors are asked to assess the appropriateness of the client's conclusion that no going concern note disclosure is needed (*Approp*). The ANCOVA results in Panel B of Table 24 show no significant effects for CI_{St} ($p < 0.599$) or *PI_Str* ($p < 0.629$). The pattern of covariate-adjusted means of *Approp* in Panel A show a pattern similar to the other dependent variables. Agreement with the client is higher (less negative) when CI_{St} is high (-0.96) versus low (-1.54); the power of this test is 0.15 (alpha = 0.05, one-tailed). There is more power for this test than for *GC2* but less than the test for *GC1*; the number of participants

needed per condition to demonstrate a significant result when power equals 0.4 or 0.8 is 58 and 165, respectively.

Overall, regarding research question 3, there is no relation between client identity strength and revisions in agreement with the client that are made subsequent to the provision of evidence that is unambiguously against the client. However, initial agreement with the client, when the decision context is ambiguous, is also not related to client identity strength. Increasing the sample size may improve results for initial going concern assessments but is not expected to improve results for subsequent assessments. This alternative outcome would indicate that in an unambiguous setting, auditors do not agree more with the client as client identity strength increases, consistent with arguments made in prior audit literature (Kadous et al. 2003).

6.9 Summary

This chapter provides results obtained from my examination of research question three. Generally, when the audit decision context is unambiguous and professional identity salience is not heightened, there is no relationship between agreement with the client and client identity strength. As client identity strength increases, auditors' subsequent revisions in agreement with the client do not increase when professional identity salience is not heightened (response to Research Question 3 is no).

CHAPTER 7: CONCLUSION

7.1 Introduction

In this chapter I provide concluding remarks on the results of my research. Section 7.2 discusses the main results from both studies and their implication for the audit profession and future audit research. Section 7.3 discusses the limitations of this thesis and the opportunities for future research that these limitations provide. I conclude this thesis in Section 7.4.

7.2 Discussion of Results and Implications

The results presented in Chapter 5 show support for hypothesis 1 but not hypothesis 2, and indicate that these effects are not any greater regarding research questions 1 and 2. The results presented in Chapter 6 indicate that no differences exist between conditions regarding research question 3. Collectively these findings provide evidence that, in an ambiguous setting, the positive relationship between auditors' agreement with the client and client identity strength is moderated by professional identity salience. My findings are tenuous as to whether auditors with a strong client identity show any favouritism to the client preference in an unambiguous setting as these same auditors did not show favouritism to the client preference in an ambiguous setting.

7.2.1 Initial Audit Judgments in an Ambiguous Setting

In an ambiguous setting, auditors' initial agreement with the client increases as client identity strength increases, but only when professional identity salience is not heightened (Hypothesis 1). Increasing professional identity salience eliminates the positive relationship between initial agreement with the client and client identity strength. However, I do not find compelling evidence that professional identity salience moderates the relationship between auditors' initial agreement with the client and professional identity strength (Hypothesis 2).

Further, I do not find that auditors with stronger professional identities agree with the client less than auditors with weaker professional identities.

The lack of results supporting hypothesis 2 appears to be a result of auditors in the high client identity strength condition of my experiment reacting in a similar manner to an increase in professional identity salience, regardless of professional identity strength. This reaction is demonstrated through the elimination of a positive association between initial agreement with the client and client identity strength when professional identity salience is heightened. Even auditors with weaker professional identities appear to (feel compelled to) be more skeptical when professional identity salience is heightened, resulting in no difference in agreement with the client as professional identity strength increases. Moreover, I expected little difference in initial agreement with the client as professional identity strength increased, when professional identity salience was not heightened. Thus, there is no relationship between professional identity strength and initial agreement with the client, regardless of the level of professional identity salience.

Although prior research (King 2002; Bamber and Iyer 2007) has found a negative relationship between professional identity strength and agreement with the client, the results may be due to a confound between professional identity strength and salience. For example, King (2002) argues that a strong auditor (professional) identity mitigates the influence of client identity strength but appears to manipulate both audit group salience and strength in his "strong" audit group setting. Thus, in addition to his two conditions that are analogous to low and high client identity strength, his two group affiliation conditions are analogous to low professional identity strength/unheightened professional identity salience and high professional identity strength/heightened professional identity salience. One cannot determine whether it was professional identity salience, strength, or their combination that produced the results in King

(2002). This is an important distinction to make, however, since auditors generally have strong professional identities (Suddaby et al. 2009). While a strong professional identity is important, my results demonstrate that a strong professional identity is insufficient in mitigating the influence of a strong client identity if professional identity salience is not sufficiently high.

A comparison of my results to King (2002) warrants further examination. Even if I could definitively claim that King's results are attributable to professional identity salience, his results would show both a main effect of professional identity salience and of client identity strength on auditor judgments. Conversely, I find only an interaction effect of client identity strength and professional identity salience on initial auditor judgments. I find similar results as those shown in Table 10 even if my unheightened (heightened) professional identity salience condition only includes auditors with low (high) professional identity strength. Thus, similar to King (2002), my results demonstrate that auditor agreement with the client increases as client identity strength increases when professional identity salience is not heightened and professional identity strength is low.

Although I did not previously examine my results as such, my results also indicate that when client identity strength is high, auditor agreement with the client is lower for auditors when professional identity salience is heightened and professional identity strength is high versus when professional identity salience is not heightened and professional identity strength is low. Further, as in King (2002), the level of auditor agreement with the client does not appear to differ when professional identity salience is not heightened, professional identity strength is low, and client identity strength is low versus when professional identity salience is heightened, professional identity strength is high, and client identity strength is high. However, unlike King (2002) the level of agreement in these two conditions is not higher than, but also appears not to differ

significantly from, the condition when professional identity salience is heightened, professional identity strength is high, and client identity strength is low. In my study, it appears that when client identity strength is low auditors with strong professional identities (when professional identity salience is heightened) do not agree with the client less than auditors with weak professional identities (when professional identity salience is not heightened).

The lack of consistent results with King (2002) may be due to a number of reasons. First, the difference in audit judgment of student participants that were induced versus not induced to have a strong group affiliation (King 2002) may be greater than the difference in audit judgment exhibited by professional auditors with varying degrees of professional identity strength (my study). Recall that participants in my study with "weak" professional identities still have moderately strong professional identities. Thus, they may make similar judgments as auditors with strong professional identities, when both groups have low client identity strength. Second, participants in King (2002) may have responded more sharply to his manipulation of professional identity strength/salience due to the explicit nature of his manipulations; for example, he explicitly threatens to publicly shame the auditor that exhibits the most bias toward the client. My manipulation of professional identity salience is much more subtle; this subtlety may not have been sufficient to cause auditors to significantly increase their skepticism and thereby decrease agreement with the client, when client identity strength was already low.

Regardless of the cause of differences between my results and those of King (2002), my thesis demonstrates that professional identity salience can be heightened through cues related to the profession. Practically, professional identity salience can be heightened by the use of professional slogans or promotional items in audit materials (e.g. screensavers, stationery) or shifting auditors' focus from a client service to a public service role. Partners can communicate

this latter focus and auditors could be reminded of it prior to making judgments about ambiguous audit issues.[58] For example, electronic versions of professional standards bookmarked to the rules of professional conduct would heighten professional identity salience prior to auditors navigating to specific rule provisions.

7.2.2 Subsequent Audit Judgments in an Ambiguous Setting

In an ambiguous setting, I find that both identity effects and the presentation order of evidence have important implications for auditors' subsequent agreement with the client. The order of evidence led auditors to revise their initial agreement with the client in a manner consistent with the recency effect. Auditors that viewed the negative (positive) evidence item last demonstrated greater decreases (increases) in agreement with the client, subsequent to evaluating the additional evidence. Auditors with stronger client identities did not exhibit any greater subsequent agreement with the client, relative to their initial level of agreement, even when professional identity salience was not heightened (Research Question 1). However, results indicate that the identity effects that influenced initial audit judgments, while not magnified, still influenced subsequent audit judgments when subsequent positive evidence was presented after subsequent negative evidence. I do not find that the relationship between auditors' agreement with the client and professional identity strength, as moderated by professional identity salience, is any different for subsequent versus initial agreement (Research Question 2). Given the lack of support for Hypothesis 2, it does not appear that professional identity salience moderated the relationship between professional identity strength and subsequent audit judgments, nor is professional identity strength related to subsequent audit judgments.

[58] This is similar to the justification preferences communicated by partners (e.g. "client insight-inducing" versus "skepticism-inducing") as suggested by Peecher (1996). However, partners need not explicitly ask subordinates to be skeptical but rather stress public service as opposed to client service or client sales.

These results contribute to prior auditing literature on recency bias and evidence order effects. For example, Asare (1992) argues that the effect of evidence order will dominate initial judgment frames, such that subsequent audit judgments are only influenced by the order of evidence. My results suggest that *how* the initial judgment frame is generated matters. Asare (1992) generated initial judgment frames by suggesting that the client was either more likely to be viable or more likely to fail. Client identity strength leads auditors with stronger client identities to view the client more favourably, which can result from generating a positive client frame relative to auditors with weak client identities (Maitner et al. 2010). My results are consistent with the statement that social identities are powerful predictors of behaviour (Ashforth et al. 2008). In my study, client identity strength is a powerful frame/factor that influences auditors' initial agreement with the client and still influences subsequent revisions in agreement, even as additional negative and positive evidence is encountered. However, my results also suggest that framing evidence negatively (presenting negative evidence last) can induce auditors to be highly sceptical and resist the influence of a strong client identity.

7.2.3 Subsequent Audit Judgments in an Unambiguous Setting

In an unambiguous setting, I provide evidence about the relationship between auditors' subsequent agreement with the client and both client identity strength (Research Question 3) and professional identity strength. Prior research has provided little evidence about audit judgments in an unambiguous setting (with the notable exception of Salterio and Koonce 1997) although many suggest that auditors will not show favouritism to client preferences when an audit issue is unambiguously against the client (Kadous et al. 2003; Blay 2005). The influence of client identity strength is generally "unconscious" and showing client favouritism in an unambiguous context would likely indicate an unintentional lapse in professional judgment as opposed to

intentional deceit. Nonetheless, favouring the client preference when audit evidence indicates that preference is not supportable would demonstrate a failure by the auditor to adhere to professional standards. Consistent with prior arguments in the audit literature, I do not find that client identity strength is related to subsequent revisions in auditor agreement with the client that are made after unambiguous evidence is presented. However, I do not find compelling evidence that client identity strength is related to initial auditor agreement made prior to the presentation of the unambiguous evidence (i.e. when the task is ambiguous).

7.2.4 Comparisons to Control Condition

I compare the results of auditors in my treatment conditions to a control condition in an ambiguous audit setting. My results indicate that auditors in the control condition initially made judgments that appeared to neither favour nor disfavour the client. Further, only auditors with strong client identities, when professional identity salience is not heightened, differed in their initial agreement with the client (agreed more) relative to the control condition. This suggests that a strong client identity can induce biased agreement with the client while increasing professional identity salience can mitigate this effect.

For subsequent auditor judgments, I do not find significant differences in revisions in going concern assessments between the control condition and any of the treatment conditions. Results indicate that auditors in the control condition were prone to recency effects similar to those observed for auditors in the treatment conditions. Auditors in the treatment conditions were also influenced by the interaction of client identity strength and professional identity salience. Thus, when professional identity salience is unheightened, auditors are influenced by both client identity strength and recency effects. However, subsequent agreement with the client exhibited by auditors with strong client identities is no greater than auditors in a control condition, who are

only influenced by recency effects. But to the extent that recency effects are undesirable then the subsequent agreement exhibited by auditors with strong client identities is still undesirable.

7.3 Limitations and Opportunities for Future Research

Limitations of my study provide opportunities for future research. I attempt to hold auditors' financial incentives, both positive and negative, constant. While recent evidence suggests that auditor ethics and professionalism may be more important than financial incentives for auditors to maintain their independence (Hope and Langli 2010), individuals tend to respond to both financial and non-financial incentives (Evans, Hannan, Krishnan, and Moser 2001). Future research may explore whether client financial importance (to the auditor or audit firm) exacerbates the influence of client identity on auditor judgment or whether certain auditors, given individual characteristics, are more likely to be influenced by their professional identity or litigation risk.

I do not directly measure objectivity or professional skepticism of auditors in my experiment; Hurtt (2010) has developed a scale that measures professional skepticism as a stable auditor trait. Future research may use her scale to more generally examine how trait skepticism influences client and professional identity strength, or potentially, how identity strength or salience influences skepticism. I manipulate client identity in an experimental setting, which may limit the ability to observe extremely strong client identities. Suddaby et al. (2009) show that auditors' identity with actual clients can be quite strong; a more powerful client setting may lead to different inferences about the extent to which professional identity salience must be activated or other debiasers of client identity that may be effective. For example, a more powerful client setting may create greater pressure from the client such that when both client and professional

identities are salient, auditors may not simply adhere to their professional identity but choose alternative strategies to deal with the identity conflict, as suggested by Ashforth et al. (2008).

Future research can examine other cues or aspects of the audit task that influence professional identity salience. In particular, increased engagement risk or the review process common in audit tasks may lead to increased accountability and more careful thinking when evaluating evidence (Kennedy 1993) including greater thought about the goals of the profession, which serves to increase professional identity salience. Accountability may also increase the salience of the audit team identity; whether this increases or decreases agreement with the client may depend on both audit team/firm identity strength and the client identity strength of other audit team members. In particular, the strength of subordinates' audit team/firm identity and supervisors' client identity may significantly influence how auditor judgments made during field work translate into final decisions regarding the financial statements or the auditor's report.

In chapter 2, I argued that my choice to focus on the professional rather than organizational (i.e. audit firm) identity is in part due to professional values developing prior to, and thus driving, audit firm values. Recent work by Suddaby et al. (2009) offers a different perspective; the professional identity is mediated by an individual's organizational identity. For example, the authors argue that the sheer size of audit firms, in particular that of the Big 4, results in an organizational presence that overshadows the profession. In this regard, the thrust of professional values for an auditor comes from the values espoused by the audit firm; again, it is not clear what direction this will lead the auditor in. It has been argued that the focus by Arthur Andersen on client service and consulting fees was a root cause of their audit failures (Chung and Kallapur 2003) and yet, others point out that independence was a core value of Arthur Andersen (Squires, Smith, MacDougall, and Yeack 2003). Although I have chosen to examine

professional identity, including audit firm identity as an additional focus may have provided broader insights. The results of Suddaby et al. (2009) suggest that both audit firm identity and client commitment may be increasingly important relative to professional identity for auditors of higher ranking positions in the audit firm. Future research in this area could examine, for example, whether a strong professional identity is less relevant in predicting auditor judgments in the presence of a strong audit firm identity. Further, future research can more directly examine the values that a strong audit firm identity engenders and how this differs across individual firms, the size of firm, or firm type (e.g. Big4 versus others; regional vs. national vs. international).

7.4 Conclusions

I believe that the results of this thesis will make important contributions to the audit literature. Existing audit literature suggests that different levels of client versus professional identity strength will lead to differences in auditor judgments (King 2002; Bamber and Iyer 2007). My results, consistent with recent research in SIT (Forehand et al. 2002; LeBoeuf et al. 2010), suggest that the effects of client identity strength depend on professional identity salience. In particular, the impaired objectivity induced by a strong client identity may not be mitigated by professional identity strength when professional identity salience is not heightened but increasing professional identity salience appears to eliminate this impaired objectivity.

While prior research has closely related client identity to client familiarity, my results show that a strong client identity can be formed through subtle cues that routinely occur in the audit context, which is distinct from familiarity or auditor tenure. This is also important to audit practice as it suggests that client identity may pose a greater risk than current guidelines and rules acknowledge. More careful thought should be given to how to mitigate such risk, which may again point toward methods to ensure high professional identity salience.

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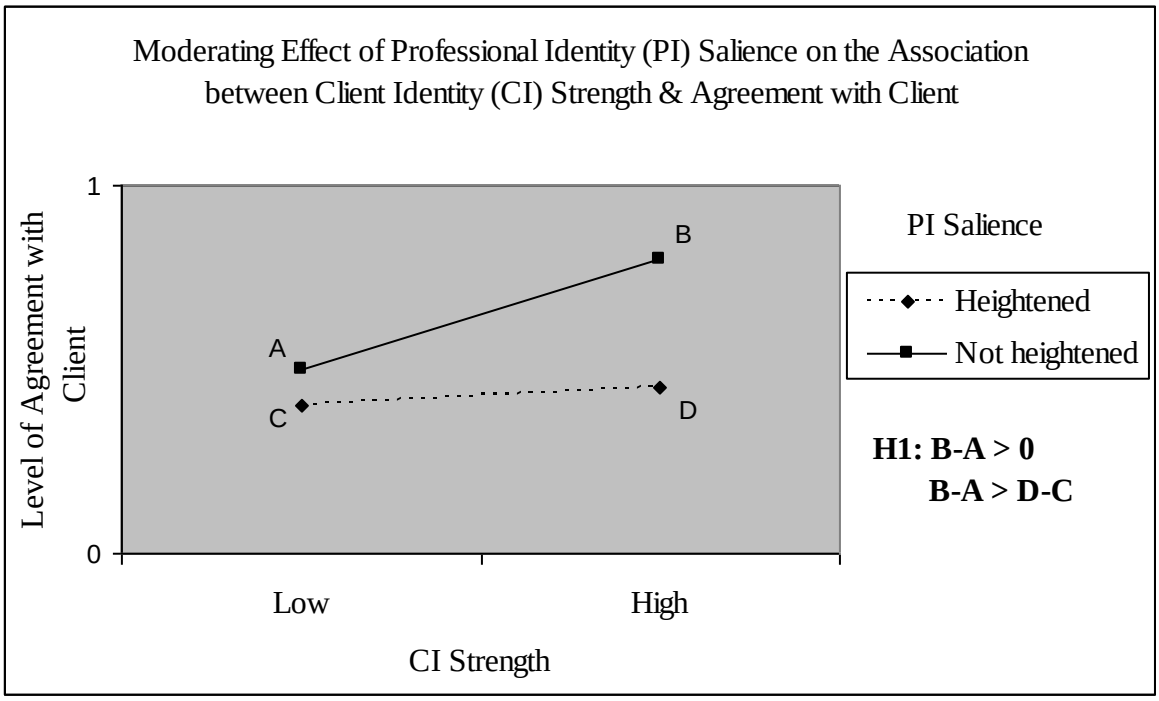
FIGURES

Figure 1
Illustration of Hypotheses

Panel A: Hypothesis 1



Panel B: Hypothesis 2

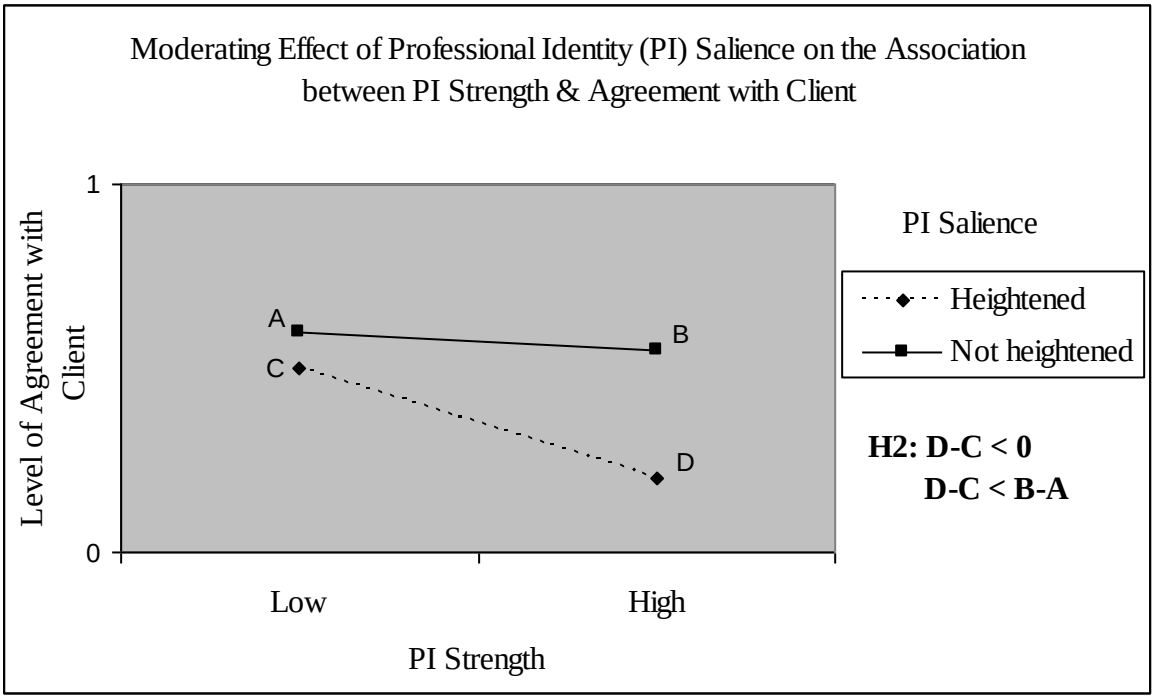


Figure 2
Timeline of Study One
(manipulation steps in **bold**)

Panel A: Low Client Identity Strength Condition

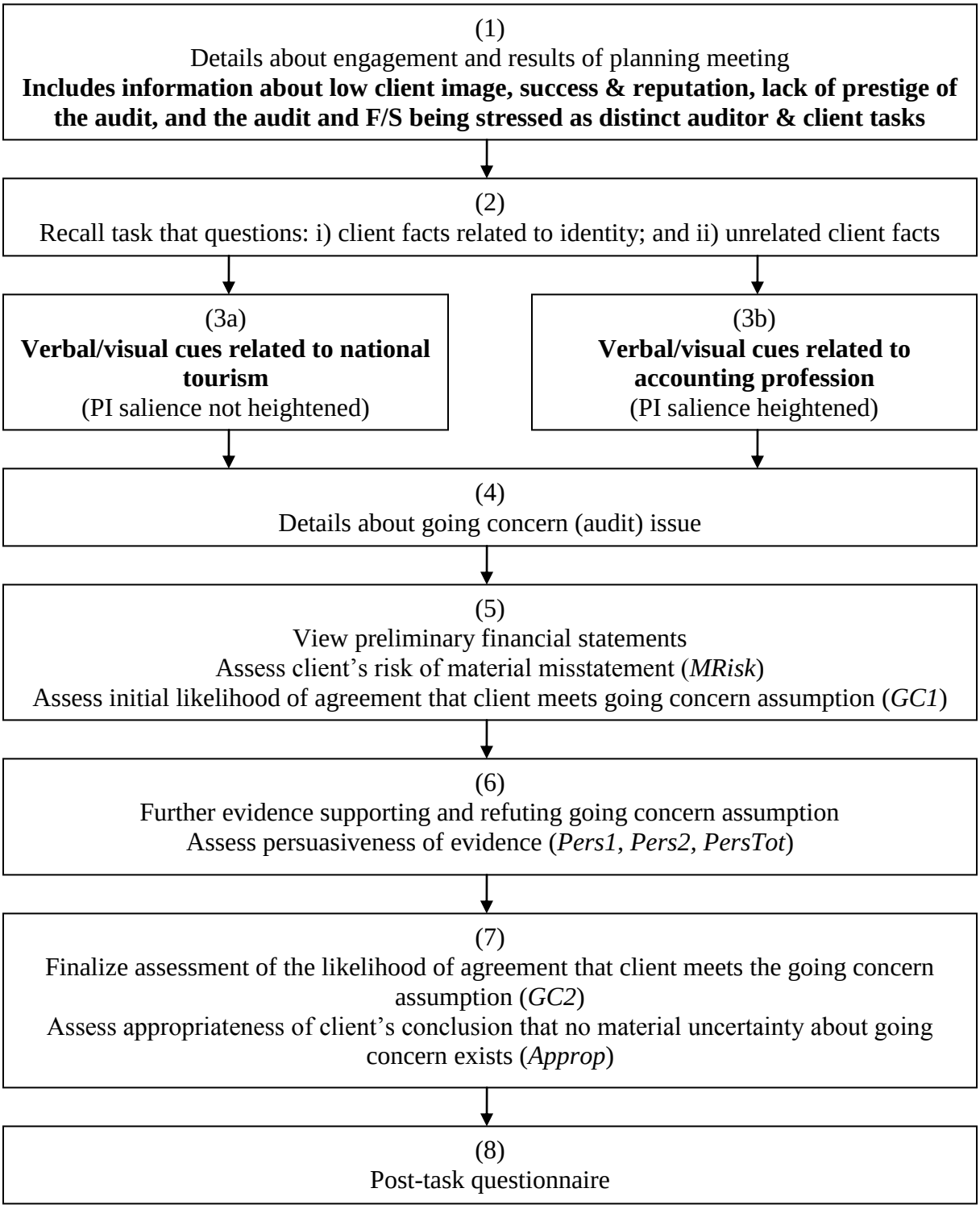


Figure 2 (Continued)

Panel B: High Client Identity Strength Condition

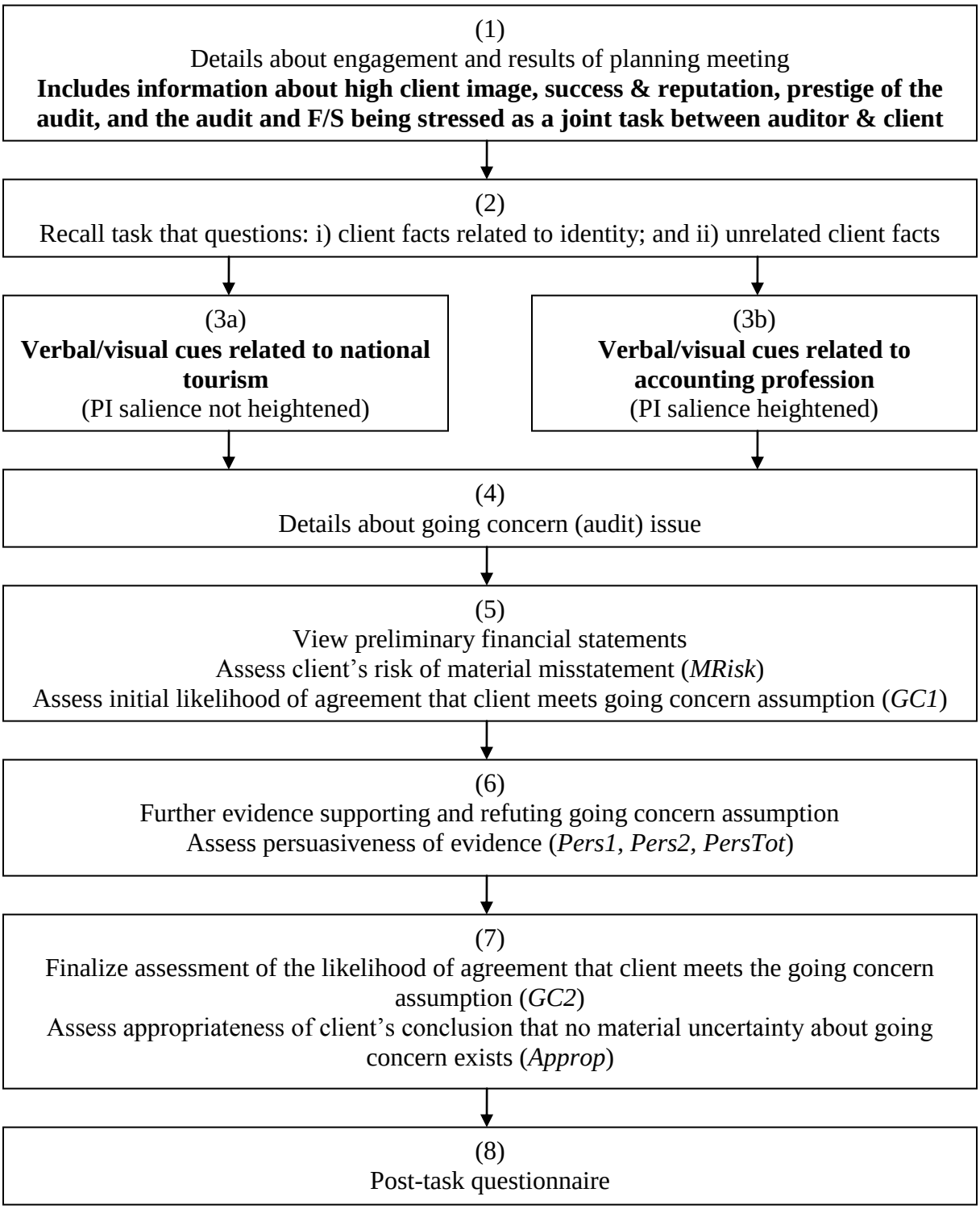


Figure 3
Experimental Design - Study One

Professional Identity \ Client Identity Strength[1]	Low CI Strength	High CI Strength	Not Manipulated (Control)
PI Salience Not Heightened	A	B	
PI Salience Heightened	C	D	
Not Manipulated (Control)			E

Figure 4
Experimental Design - Study Two

	Low	High
Client Identity Strength[1]	F	G

[1] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

TABLES

Table 1
Dependent Variable Measurements

Assessment of Going Concern Assumption

The following questions were used to measure participants' assessment of the likelihood that the client (Highpoint) meets the going concern assumption; both after financial statements were presented (*GC1*) and subsequently, after two additional evidence items were presented (*GC2*). Responses are collected by requesting a percentage between 0 and 100 percent.

GC1 Based solely on the financial statement information previously presented, what do you believe is the likelihood that the company meets the going concern assumption and will be able to continue to exist for the foreseeable future (0-100%)?

GC2 After viewing the evidence presented, what do you believe is the likelihood that the company meets the going concern assumption and will be able to continue to exist for the foreseeable future (0-100%)?

Evaluation of Additional Evidence

The following questions were used to measure participants' evaluation of two additional evidence items (*Pers1* and *Pers2*; questions are equivalent), and their overall evaluation of the combined evidence (*PersTot*). Responses are collected using a 7-point Likert scale ranging from -3 (Strongly refutes) to +3 (Strongly supports).

Pers1&2 How strongly does the above evidence refute or support the company's going concern assumption that it will continue to exist for the foreseeable future?

PersTot How strongly did all the previous sources of evidence, taken all together, refute or support the company's going concern assumption that it will continue to exist for the foreseeable future?

Assessment of Appropriateness of Client Conclusion

The following question was used to measure participant's final decision about the appropriateness of the client's conclusion that it meets the going concern assumption and, therefore, does not require note disclosure (*Approp*). Responses are collected using a 7-point Likert scale ranging from -3 (Highly inappropriate) to +3 (Highly appropriate).

Approp How appropriate is the client's conclusion that there is no material uncertainty about its ability to continue as a going concern and thus no note disclosure is needed?

Table 2
Professional Identity Salience Measurements

The following questions were used to measure participants' perceptions of professional identity salience during the audit task. These questions were the first questions asked as part of the post-experiment questionnaire.

Responses for question 1 are collected by permitting the participants to respond in the space provided below the question. Responses for question 2 are collected using a 7-point Likert scale ranging from 1 (Gave it little thought) to 7 (Gave it much thought).

1. Tell me about yourself in your own words. Feel free to list anything that describes you as a person. Do not identify yourself by name. Please take about a minute to do so.

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?

Table 3
Identity Strength Process Measurements

The following questions were used to measure participants' perceptions of various client factors that prior research has shown to be associated with identity strength. These questions were provided as part of the post-experiment questionnaire.

Responses for question 1 are collected using a 7-point Likert scale ranging from 1 (Very uncooperative) to 7 (Very cooperative). Responses for questions 2 and 3 are collected using a 7-point Likert scale ranging from -3 (Strongly agree) to to +3 (Strongly disagree). Responses for question 4 are collected using a 7-point Likert scale ranging from -3 (Not very important) to +3 (Very important).

1. Imagine that another accounting issue arises that will require the client to provide you with a significant amount of documentation and additional information. How cooperative do you think the client will be in providing you with the details requested?

2. Based on the information provided about the client, I consider the client to be trustworthy.

3. Based on the information provided about the client, I consider the client to be competent.

4. How important is it to negotiate or work with Highpoint in order to avoid note disclosure or a qualified opinion regarding the going concern assumption?

Table 4
Summary of Design and Expectations for Auditor Agreement with the Client

		Procedures for: Client Identity (CI) Strength Treatment			**Professional Identity (PI) Salience Treatment**	
Treatment Group		*Client Image/ Reputation & Prestige of Audit*	*Audit & F/S as Joint Task*	*Recall of Client Information*	*Verbal & Visual Cues*	*Predicted Agreement With Client*
Study One						
A	CI Strength Low & PI Salience Not Heightened	Low	No	Equal Across Conditions	Vacation/ Tourism Canada	Low
B	CI Strength High & PI Salience Not Heightened	High	Yes	Equal Across Conditions	Vacation/ Tourism Canada	High
C	CI Strength Low & PI Salience Heightened	Low	No	Equal Across Conditions	CA Magazine/ CICA	Lower
D	CI Strength High & PI Salience Heightened	High	Yes	Equal Across Conditions	CA Magazine/ CICA	Lower
E	Control	N/A	N/A	N/A	N/A	Low
Study Two						
F	CI Strength Low & PI Salience Not Manipulated	Low	No	Equal Across Conditions	N/A	Low
G	CI Strength High & PI Salience Not Manipulated	High	Yes	Equal Across Conditions	N/A	Uncertain

Table 5
Demographic Information about Participants

	Mean	Median	Standard Dev.	Minimum	Maximum	N
1. Experience working in public accounting (years):	5.45	4.00	2.67	3.00	13.00	73

	Mean	Median	Standard Dev.	Minimum	Maximum	N
2. Number of audits per year:	8.32	6.00	6.08	1.00	25.00	73

3. Participated in the audit of a public company:	Number	Percentage
"No"	8	11%
"Yes, once"	5	7%
"Yes, multiple times"	60	82%
	73	100%

4. Rank of employment:	Number	Percentage
Senior	36	49%
Manager	23	32%
Senior Manager	14	19%
	73	100%

5. Industry specialization:	Number	Percentage
Financial Services	10	14%
Manufacturing	15	21%
None Listed	17	23%
Other[1]	20	27%
Technology[1]	3	4%
Various	8	11%
	73	100%

	Mean	Median	Standard Dev.	Minimum	Maximum	N
6. Familiar with industry/business facts described in case materials: [on a scale of -3 (Strongly disagree) to +3 (Strongly agree)]	-0.34	0.00	1.68	-3.00	3.00	73

Table 5 (Continued)

	Mean	Median	Standard Dev.	Minimum	Maximum	N[2]
7. Number of prior audits with going concern doubt:	2.89	2.00	2.92	0.00	10.00	72

	Mean	Median	Standard Dev.	Minimum	Maximum	N[2 3]
8. Percentage of prior audits (in Q7) that resulted in note disclosure:	55%	55%	0.39	0%	100%	56

	Mean	Median	Standard Dev.	Minimum	Maximum	N[2 3]
9. Percentage of prior audits (in Q7) that resulted in a qualified opinion:	8%	0%	0.23	0%	100%	56

	Mean	Median	Standard Dev.	Minimum	Maximum	N
10. Self-perceived sufficient experience with going concern issues: [on a scale of -3 (Strongly disagree) to +3 (Strongly agree)]	0.74	1.00	1.57	-3.00	3.00	73

[1] No other industry, aside from those listed above, had more than 3 auditors list it as their area of specialization. Technology is listed as a separate industry, despite only 3 specialists, as the client industry in the experimental task is technology.

[2] One auditor, who reported having experience with 90 prior audit clients that had going concern doubt, is removed from this comparison in order to report less skewed results.

[3] 16 auditors reported that they had not dealt with a client that had doubt about its going concern assumption, reducing the sample for this test.

Table 6

Professional Identity (PI) Salience[1] Manipulation Checks

Panel A: Contingency Table of Dichotomous Measure of PI Salience[2] (n = 73)

	PI Salience Not Heightened		PI Salience Heightened		Total	
	N	Freq.	N	Freq.	N	Freq.
Did not Mention Profession	29	81%	24	65%	53	73%
Mention Profession	7	19%	13	35%	20	27%
Total (N)	36		37		73	

Panel B: Tests of Statistical Significance of Dichotomous Measure of PI Salience[2] (n = 73)

Significance Test	Test Statistic	p-value	
Fisher Exact	n/a	0.107	one-tailed
Chi Square	2.26	0.133	two-tailed

Panel C: Descriptive Statistics of Continuous Measure of PI Salience[3] (n=73)

	PI Salience Not Heightened		PI Salience Heightened		Combined	
	N	Mean (S.D.)	N	Mean (S.D.)	N	Mean (S.D.)
Experiment made participant think about profession.	36	4.19 (1.62)	36	4.76 (1.12)	73	4.48 (1.41)

Panel D: Test of Statistical Significance of Continuous Measure of PI Salience[3] (n = 73)

Significance Test	Test Statistic	p-value	
T-test	1.72	0.045	one-tailed

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[1] Manipulated intervention. Each participant is either presented with verbal and visual cues related to the accounting profession that increase the salience of the professional identity (coded 1) or related to tourism and vacation so as not to alter professional identity salience in any way (coded 0).

[2] See description of question 1 in Table 2. Measure is adapted from Forehand et al. (2002).

[3] See description of question 2 in Table 2. Measure is adapted from Reed (2004).

Table 7
Client Identity (CI) Strength[1] Manipulation Check

Panel A: Descriptive Statistics of CI Strength Measure[2] (n=73)

	Low CI Strength		High CI Strength		Combined	
	N	Mean (S.D.)	N	Mean (S.D.)	N	Mean (S.D.)
Personal identity overlap with client identity.	36	2.39 (0.99)	37	3.54 (1.30)	73	2.97 (1.29)

Panel B: Test of Statistical Significance of CI Strength Measure[2] (n = 73)

Significance Test	Test Statistic	p-value
T-test	4.25	< 0.001 one-tailed

Panel C: Descriptive Statistics of CI Strength-Induced Client Perceptions[3] (n=73)

	Low CI Strength		High CI Strength		Combined	
	N	Mean (S.D.)	N	Mean (S.D.)	N	Mean (S.D.)
1. The audit is a joint task between auditor and client.[4]	36	1.22 (1.17)	37	1.16 (1.30)	73	1.19 (1.23)
2. The client is under pressure to meet reporting deadlines.[4]	36	0.69 (1.41)	37	0.86 (1.25)	73	0.78 (1.33)

Panel D: Test of Statistical Significance of CI Strength-Induced Client Perceptions[3] (n = 73)

Significance Test	Test Statistic	p-value
T-test: Joint task	-0.21	0.837 two-tailed
T-test: Pressure	0.55	0.587 two-tailed

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[1] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[2] See description of question in the Appendix (p. 170, question 4). Measure is adapted from Aron et al. (2004).

[3] The language used in the manipulation of CI strength is intended to increase participants' perceptions (in the high CI strength condition) that the audit is a joint task between auditor and client but may have an unintended consequence of increasing participants' perceptions that the client is under pressure to meet reporting deadlines.

[4] Responses are collected using a 7-point Likert scale ranging from -3 (Strongly disagree) to +3 (Strongly agree).

Table 8
Comparison of Perceived Case Material Characteristics and Self-Confidence

Panel A: Descriptive Statistics (n=73)

	Mean	Std. Dev.
1. Realism of case materials.[1]	0.96	1.29
2. Audit task is challenging.[1]	0.64	1.17
3. Motivated to complete task.[1]	0.81	1.73
4. Confidence in ability to complete task.[2]	1.30	1.11

Panel B: Correlations (n = 73)

	Question 1	Question 2	Question 3	Question 4
Question 1	1.00			
Question 2	0.21*	1.00		
Question 3	0.51**	0.32**	1.00	
Question 4	0.22*	-0.20*	0.21*	1.00

** Correlation is significant at $p < 0.01$, two-tailed

* Correlation is significant at $p < 0.10$, two-tailed

Panel C: Multivariate Analysis of Variance of Questions 1-3 (n=73)

	F	df	p-value (two-tailed)
CI Strength[3]	0.34	3	0.794
PI Salience[4]	1.14	3	0.341
CI Strength x PI Salience	0.87	3	0.464

Panel D: Analysis of Variance of Question 4 (n=73)

	F	df	p-value (two-tailed)
CI Strength	0.44	1	0.508
PI Salience	5.16	1	**0.026**
CI Strength x PI Salience	0.05	1	0.819

[1] Responses are collected using a 7-point Likert scale ranging from -3 (Strongly disagree) to +3 (Strongly agree).

[2] Responses are collected using a 7-point Likert scale ranging from -3 (Not very confident) to +3 (Very confident).

[3] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[4] Manipulated intervention. Each participant is either presented with verbal and visual cues related to the accounting profession that increase the salience of the professional identity (coded 1) or related to tourism and vacation so as not to alter professional identity salience in any way (coded 0).

Table 9
Comparison of Perceived Client Characteristics and Desire to Actively Agree with Client

Panel A: Descriptive Statistics

	Low CI Strength (n = 36)		High CI Strength (n = 37)[1]	
	Mean	Std. Dev.	Mean	Std. Dev.
1. Consider the client cooperative.[2]	3.67	1.35	4.70	1.20
2. Consider the client trustworthy.[3]	-0.42	0.97	0.62	1.09
3. Consider the client competent.[3]	0.31	1.01	0.7	0.94
4. Consider it important to work with client to avoid note disclosure.[4]	0.53	2.01	1.03	1.61

Panel B: Correlations (n = 73)[1]

	Question 1	Question 2	Question 3	Question 4
Question 1	1.00			
Question 2	0.45**	1.00		
Question 3	0.31**	0.43**	1.00	
Question 4	0.03	-0.04	0.13	1.00

** Correlation is significant at p < 0.01, two-tailed

Panel C: Multivariate Analysis of Variance of Questions 1-3 (n=73)

	F	df	p-value (two-tailed)
CI Strength[5]	7.12	1	**0.001**
PI Salience[6]	2.25	1	**0.090**
CI Strength x PI Salience	0.52	1	0.667

Panel D: Analysis of Variance of Question 4 (n=72)

	F	df	p-value (two-tailed)
CI Strength	1.16	1	0.285
PI Salience	0.5	1	0.482
CI Strength x PI Salience	0.2	1	0.659

[1] One participant did not respond to the question for Avoid.

[2] Responses are collected using a 7-point Likert scale ranging from 1 (Very uncooperative) to 7 (Very cooperative).

[3] Responses are collected using a 7-point Likert scale ranging from -3 (Strongly disagree) to +3 (Strongly agree).

[4] Responses are collected using a 7-point Likert scale ranging from -3 (Not very important) to +3 (Very important).

[5] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[6] Manipulated intervention. Each participant is either presented with verbal and visual cues related to the accounting profession that increase the salience of the professional identity (coded 1) or related to tourism and vacation so as not to alter professional identity salience in any way (coded 0).

Table 10
Analysis of Initial Going Concern Assessments (GC1) by Client Identity (CI) Strength and Professional Identity (PI) Salience Conditions

Panel A: Descriptive Statistics: GC1[1]

	Mean [a] (s.e.) n	Professional Identity Salience (PI_{Sa}[3])		
		Not Heightened	Heightened	Overall
Client Identity Strength (CIs_t[2])	Low	A 47.40 (5.08) 19	C 53.69 (5.17) 17	50.55 (3.60) 36
	High	B 59.31 (5.12) 17	D 48.30 (4.93) 20	53.81 (3.54) 37
	Overall	53.36 (3.64) 36	51.00 (3.67) 37	52.18 (2.58) 73

Panel B: Analysis of Covariance: GC1

Effect	Mean Squares	F	df	p-value
CI_{St}	189.65	0.43	1	0.51
PI_{Sa}	17.89	0.04	1	0.84
CI_{St} x PI_{Sa}	1291.46	2.96	1	**0.09**
PI_Str[4]	35.04	0.08	1	0.78
PI_Str x PI_{Sa}	3.40	0.01	1	0.93
Covariates:				
RightAns[5]	2860.34	6.56	1	**0.01**
Audits[6]	1066.04	2.45	1	0.12
Error	435.98		65	
R^2	0.170			

Panel C: Comparison of Low versus High CI_{St} by PI_{Sa} Condition

	Change in GC1	t-stat	p-value [b]
PI_{Sa} unheightened: Condition B - Condition A	11.90	1.67	**0.05**
PI_{Sa} heightened: Condition D - Condition C	-5.39	-0.78	0.44

Table 10 (Continued)

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[a] GC1 is adjusted for auditors' perceived ambiguity (RightAns), audits conducted per year (Audits), and professional identity strength (PI_Str) by including these variable as covariates in the ANCOVA model. The adjusted means are reported here in Panel A.

[b] p-values are one-tailed for all tests unless the magnitude of the effect is opposite in direction to hypotheses.

[1] GC1 is the auditor's initial assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[2] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[3] Manipulated intervention. Each participant is either presented with verbal and visual cues related to the accounting profession that increase the salience of the professional identity (coded 1) or related to tourism and vacation so as not to alter professional identity salience in any way (coded 0).

[2] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[5] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[6] Audits is the number of audits participated in per year, as indicated by each individual auditor.

Table 11
Initial Going Concern Assessments (GC1) by Level of Professional Identity Strength (PI_Str)

Panel A: Descriptive Statistics: GC1[1]

	Level of PI_Str[2]				
Statistics	PI_Str < 4	PI_Str = 4	PI_Str = 5	PI_Str = 6	PI_Str = 7
Overall (n = 73)					
Mean	54.50	54.50	51.76	51.08	48.75
(s.d.)	(31.49)	(24.09)	(19.07)	(20.48)	(20.13)
n	10	10	21	24	8

Panel B: Descriptive Statistics by PI Salience (PI_{Sa}[3]) Condition: GC1

Statistics	PI_Str ≤ 4	PI_Str = 5	PI_Str ≥ 6
PI_{Sa} Not Heightened (n = 36) [4]			
Mean	54.17	53.36	56.00
(s.d.)	(27.04)	(20.16)	(20.92)
n	12	14	10
PI_{Sa} Heightened (n = 37) [4]			
Mean	55.00	48.57	48.00
(s.d.)	(29.52)	(17.73)	(19.69)
n	8	7	22

[1] GC1 is the auditor's initial assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[2] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[3] Manipulated intervention. Each participant is either presented with verbal and visual cues related to the accounting profession that increase the salience of the professional identity (coded 1) or related to tourism and vacation so as not to alter professional identity salience in any way (coded 0).

[4] The relationship between PI_Str and GC1, when separated into low (≤4), medium (=5), or high (≥6) is insignficant both when PI_{Sa} is not heightened and heightened. No simple t-tests are significant either for comparisons between levels of PI strength, when PI_{Sa} is heightened.

Table 12
Analysis of Initial Going Concern Assessments (GC1) for Control Condition

Panel A: Descriptive Statistics: GC1[1]

	Mean[a]	S.E.	n
Control Condition	49.00	5.81	20
Treatment B: high CI_{St}/unheightened PI_{Sa}	59.31	5.12	17
Treatment D: high CI_{St}/heightened PI_{Sa}	48.30	4.93	20
Treatments A & C: low CI_{St}	50.55	3.60	36

Panel B: Regression: GC1

	Coefficient	Std Err	t	p-value
PI_Str[2]	1.79	4.69	0.38	0.71
RightAns[3]	-3.69	3.16	-1.17	0.26
Audits[4]	0.57	0.66	0.87	0.40
Intercept	33.56	23.78	1.41	0.18
R^2	0.160			

Panel C: Comparison of Control Condition to Treatment Conditions

	Difference in GC1	t-stat	p-value[b]
Treatment Condition B - Control Condition	10.31	1.33	**0.10**
Treatment Condition D - Control Condition	-0.70	-0.09	0.93
Treatment Conditions A & C - Control Condition	1.55	0.23	0.82

[a] GC1 is adjusted for auditors' perceived ambiguity (RightAns), audits conducted per year (Audits), and professional identity strength (PI_Str) by including these variable as covariates in the regression model. The adjusted means are reported here in Panel A.

[b] p-value is one-tailed for first comparison (in expected direction) and two-tailed for second and third comparisons.

[1] GC1 is the auditor's initial assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[2] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[3] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[4] Audits is the number of audits participated in per year, as indicated by each individual auditor.

Table 13
Analysis of Identity Effects and the Effect of Evidence Order on Overall Evaluation of Additional Audit Evidence (PersTot)

Analysis of Covariance: PersTot[1]

Effect	Mean Squares	F	df	p-value
CI_{St}[2]	1.42	0.88	1	0.35
PI_{Sa}[3]	2.35	1.46	1	0.23
CI_{St} x PI_{Sa}	6.18	3.84	1	**0.05**
PI_Str[4]	5.34	3.32	1	**0.07**
PI_Str x PI_{Sa}	3.76	2.34	1	0.13
Order[5]	2.76	1.72	1	0.20
CI_{St} x Order	6.71	4.18	1	**0.05**
CI_{St} x PI_{Sa} x Order	2.90	1.80	1	0.17
PI_Str x Order	5.11	3.18	1	**0.08**
Covariates:				
RightAns[6]	2.89	1.80	1	0.18
Audits[7]	6.34	3.94	1	**0.05**
Error	1.61		60	
R^2	0.373			

[1] PersTot is the auditor's belief that the combined evidence refutes or supports the client's going concern assumption. The scale ranges from -3 ("strongly refutes") to +3 (strongly supports); a further definition appears in Table 1.

[2] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[3] Manipulated intervention. Each participant is either presented with verbal and visual cues related to the accounting profession that increase the salience of the professional identity (coded 1) or related to tourism and vacation so as not to alter professional identity salience in any way (coded 0).

[4] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[5] Order = 1 for auditors who received the positive evidence item last and 0 for auditors who received the negative evidence item last.

[6] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[7] Audits is the number of audits participated in per year, as indicated by each individual auditor.

Table 14

Analysis of the Change in Agreement with Client: Initial Going Concern Assessments (GC1) versus Final Going Concern Assessments (GC2)

Panel A: Descriptive Statistics: GC1[1]

	Mean [a] (s.e.) n	Professional Identity Salience (PI_{Sa}[4])		
		Not Heightened	Heightened	Overall
Client Identity Strength (CIs_t[3])	Low	A 47.40 (5.08) 19	C 53.69 (5.17) 17	50.55 (3.60) 36
	High	B 59.31 (5.12) 17	D 48.30 (4.93) 20	53.81 (3.54) 37
	Overall	53.36 (3.64) 36	51.00 (3.67) 37	52.18 (2.58) 73

Panel B: Descriptive Statistics: GC2[2]

	Mean [a] (s.e.) n	Professional Identity Salience (PI_{Sa})		
		Not Heightened	Heightened	Overall
Client Identity Strength (CIs_t)	Low	A 48.18 (4.70) 19	C 51.86 (4.78) 17	50.02 (3.32) 36
	High	B 52.07 (4.73) 17	D 44.00 (4.56) 20	48.03 (3.28) 37
	Overall	50.12 (3.37) 36	47.93 (3.39) 37	49.03 (2.38) 73

Table 14 (Continued)

Panel C: Repeated Measures Analysis of Covariance: Assess[5]

Effect	Mean Squares	F	df	p-value
Within Subjects				
Assess	73.74	0.50	1	0.48
Assess x CI_{St}	247.18	1.67	1	0.20
Assess x PI_{Sa}	216.90	1.47	1	0.23
Assess x CI_{St} x PI_{Sa}	13.61	0.09	1	0.76
Assess x PI_Str[6]	31.97	0.22	1	0.64
Assess x PI_Str x PI_{Sa}	246.37	1.67	1	0.20
Assess x Order[5]	1542.43	10.44	1	**0.01**
Assess x CI_{St} x Order	201.19	1.36	1	0.25
Assess x CI_{St} x PI_{Sa} x Order	42.57	0.29	2	0.75
Covariates:				
Assess x RightAns[5]	138.42	0.94	1	0.34
Assess x Audits[6]	36.76	0.25	1	0.62
Error	147.69		61	
Between Subjects				
CI_{St}	14.65	0.02	1	0.88
PI_{Sa}	351.33	0.54	1	0.47
CI_{St} x PI_{Sa}	1722.55	2.65	1	0.11
PI_Str	516.04	0.79	1	0.38
PI_Str x PI_{Sa}	1060.97	1.63	1	0.21
Order	2.76	0.18	1	0.68
CI_{St} x Order	6.71	0.12	1	0.73
CI_{St} x PI_{Sa} x Order	2.90	1.37	2	0.26
Covariates:				
RightAns	1662.71	2.55	1	0.12
Audits	1969.92	3.03	1	**0.09**
Error	651.18		61	
R^2	0.855			

Table 14 (Continued)

[a] GC1 and GC2 are adjusted for auditors' perceived ambiguity (RightAns), audits conducted per year (Audits), and professional identity strength (PI_Str) by including these variable as covariates in an ANCOVA model, which does not include the effect of evidence order. The adjusted means are reported here in Panels A and B.

[1] GC1 is the auditor's initial assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[2] GC2 is the auditor's final assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[3] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[4] Manipulated intervention. Each participant is either presented with verbal and visual cues related to the accounting profession that increase the salience of the professional identity (coded 1) or related to tourism and vacation so as not to alter professional identity salience in any way (coded 0).

[5] Assess is the repeated measures factor in the analysis, which represents the initial (GC1) and final (GC2) going concern assessments provided by each participant.

[6] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[7] Order = 1 for auditors who received the positive evidence item last and 0 for auditors who received the negative evidence item last.

[8] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[9] Audits is the number of audits participated in per year, as indicated by each individual auditor.

Table 15
Analysis of Identity Effects and the Effect of Evidence Order on Assessment of the Appropriateness of Client Conclusions (Approp)

Panel A: Analysis of Covariance: Approp[1]

Effect	Mean Squares	F	df	p-value
CI_{St}[2]	1.63	1.09	1	0.30
PI_{Sa}[3]	5.74	3.83	1	**0.06**
CI_{St} x PI_{Sa}	0.23	0.15	1	0.70
PI_Str[4]	0.71	0.48	1	0.49
PI_Str x PI_{Sa}	4.46	2.98	1	**0.09**
Order[5]	3.79	2.53	1	0.12
CI_{St} x Order	0.18	0.12	1	0.73
PI_{Sa} x Order	0.06	0.04	1	0.85
CI_{St} x PI_{Sa} x Order	10.34	6.91	1	**0.01**
PI_Str x Order	4.93	3.29	1	**0.07**
PI_Str x PI_{Sa} x Order	0.00	0.00	1	0.97
Covariates:				
RightAns[6]	0.57	0.38	1	0.54
Audits[7]	8.53	5.70	1	**0.02**
Public[8]	8.09	5.41	1	**0.02**
Error	1.47		59	
R^2	0.400			

Table 15 (Continued)

Panel B: Descriptive Statistics: Approp when Negative Evidence Item Presented Last (Order = 0)

	Mean [a] (s.e.) n	Professional Identity Salience (PI_{Sa})		
		Not Heightened	Heightened	Overall
Client Identity Strength (CI_{St})	Low	A -0.46 (0.49) 8	C -1.95 (0.42) 9	-1.20 (0.34) 17
	High	B -1.56 (0.42) 9	D -1.25 (0.45) 9	-1.41 (0.33) 18
	Overall	-1.01 (0.35) 17	-1.60 (0.33) 18	-1.31 (0.26) 35

Panel C: Descriptive Statistics: Approp when Positive Evidence Item Presented Last (Order = 1)

	Mean [a] (s.e.) n	Professional Identity Salience (PI_{Sa})		
		Not Heightened	Heightened	Overall
Client Identity Strength (CI_{St})	Low	A -1.16 (0.40) 11	C -0.70 (0.48) 8	-0.93 (0.33) 19
	High	B -0.90 (0.47) 8	D -1.78 (0.38) 11	-1.34 (0.32) 19
	Overall	-1.03 (0.34) 19	-1.24 (0.34) 19	-1.13 (0.25) 38

Table 15 (Continued)

[a] Approp is adjusted for auditors' perceived ambiguity (RightAns), audits conducted per year (Audits), experience auditing public companies (Public), and professional identity strength (PI_Str) by including these variable as covariates in the ANCOVA model. The adjusted means are reported here in Panels B and C.

[1] Approp is the auditor's assessment of Highpoint's conclusion that no going concern note disclosure is needed. The scale ranges from -3 (highly inappropriate) to +3 (highly appropriate). A further definition appears in Table 1.

[2] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[3] Manipulated intervention. Each participant is either presented with verbal and visual cues related to the accounting profession that increase the salience of the professional identity (coded 1) or related to tourism and vacation so as not to alter professional identity salience in any way (coded 0).

[4] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in Appendix 1 (p. X, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[5] Order = 1 for auditors who received the positive evidence item last and 0 for auditors who received the negative evidence item last.

[6] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[7] Audits is the number of audits participated in per year, as indicated by each individual auditor.

[8] Public = 1 for auditors that have participated in more than one public company audit, and 0 otherwise.

Table 16
Analysis of Change in Going Concern Assessments for Control Condition

Panel A: Descriptive Statistics: GC1[1]

	Mean[a]	S.E.	n
Control Condition	49.00	5.81	20
Treatment B: high CI_{St}/unheightened PI_{Sa}	59.31	5.12	17
Treatment D: high CI_{St}/heightened PI_{Sa}	48.30	4.93	20
Treatments A & C: low CI_{St}	50.55	3.60	36

Panel B: Descriptive Statistics: GC2[2]

	Mean	S.E.	n
Control Condition	48.00	6.14	20
Treatment B: high CI_{St}/unheightened PI_{Sa}	52.07	4.73	17
Treatment D: high CI_{St}/heightened PI_{Sa}	44.00	4.56	20
Treatments A & C: low CI_{St}	50.02	3.32	36

Table 16 (Continued)

Panel C: Repeated Measures Analysis of Covariance: Assess[3]

	Mean Squares	F	df	p-value
Within Subjects				
Assess	33.08	0.25	1	0.62
Assess x Control[4]	163.22	1.24	1	0.27
Assess x PI_Str[5]	4.10	0.03	1	0.86
Assess x Order[6]	1389.63	10.54	1	**0.01**
Assess x Control x Order	24.98	0.19	1	0.67
Covariates:				
Assess x RightAns[7]	0.29	0.00	1	0.96
Assess x Audits[8]	2.31	0.02	1	0.90
Error	131.87		30	
Between Subjects				
Control	252.83	0.25	1	0.62
PI_Str	211.25	0.21	1	0.65
Order	2552.75	2.48	1	0.13
Control x Order	0.46	0.00	1	0.98
Covariates:				
RightAns	62.13	0.06	1	0.81
Audits	3200.00	3.11	1	**0.09**
Error	1029.31		30	
R^2	0.915			

Table 16 (Continued)

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[a] GC1 and GC2 are adjusted for auditors' perceived ambiguity (RightAns), audits conducted per year (Audits), and professional identity strength (PI_Str) by including these variable as covariates in an ANCOVA model, which does not include the effect of evidence order. The adjusted means are reported here in Panels A and B.

[1] GC1 is the auditor's initial assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[2] GC2 is the auditor's final assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[3] Assess is the repeated measures factor in the analysis, which represents the initial (GC1) and final (GC2) going concern assessments provided by each participant.

[4] Control = 1 for auditors that are assigned to the control condition and 0 for auditors that are assigned to the treatment condition where CI strength is manipulated as high and PI salience is manipulated as unheightened.

[5] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[6] Order = 1 for auditors who received the positive evidence item last and 0 for auditors who received the negative evidence item last.

[7] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[8] Audits is the number of audits participated in per year, as indicated by each individual auditor.

Table 17
Demographic Information about Participants in Study Two

	Mean	Median	Standard Dev.	Minimum	Maximum	N
1. Experience working in public accounting (years):	5.20	4.00	3.05	3.00	15.00	15

	Mean	Median	Standard Dev.	Minimum	Maximum	N
2. Number of audits per year:	11.27	10.00	5.26	6.00	20.00	15

3. Participated in the audit of a public company:	Number	Percentage
"No"	7	11%
"Yes, once"	1	7%
"Yes, multiple times"	7	82%
	15	100%

4. Rank of employment:	Number	Percentage
Senior	11	73%
Manager	4	27%
	15	100%

5. Industry specialization:	Number	Percentage
Not-for-profit	2	13%
Manufacturing	2	13%
None Listed	4	27%
Real Estate	1	7%
Retail	1	7%
Various	5	33%
	15	100%

	Mean	Median	Standard Dev.	Minimum	Maximum	N
6. Familiar with industry/business facts described in case materials: [on a scale of -3 (Strongly disagree) to +3 (Strongly agree)]	-0.67	-1.00	1.54	-3.00	3.00	15

	Mean	Median	Standard Dev.	Minimum	Maximum	N
7. Number of prior audits with going concern doubt:	4.33	2.00	5.72	0.00	20.00	15

Table 17 (Continued)

	Mean	Median	Standard Dev.	Minimum	Maximum	N [1]
8. Percentage of prior audits (in Q7) that resulted in note disclosure:	53%	45%	0.41	2%	100%	12

	Mean	Median	Standard Dev.	Minimum	Maximum	N [1]
9. Percentage of prior audits (in Q7) that resulted in a qualified opinion:	14%	0%	0.26	0%	80%	12

	Mean	Median	Standard Dev.	Minimum	Maximum	N
10. Self-perceived sufficient experience with going concern issues: [on a scale of -3 (Strongly disagree) to +3 (Strongly agree)]	0.93	2.00	2.05	-3.00	3.00	15

[1] Three auditors reported that they had not dealt with a client that had doubt about its going concern assumption, reducing the sample for this test.

Table 18
Client Identity (CI) Strength[1] Manipulation Check - Study Two

Panel A: Descriptive Statistics of CI Strength Measure[2] (n=15)

	Low CI Strength		High CI Strength		Combined	
	N	Mean (S.D.)	N	Mean (S.D.)	N	Mean (S.D.)
Personal identity overlap with client identity.	8	1.88 (0.64)	7	3.29 (1.38)	15	2.53 (1.25)

Panel B: Test of Statistical Significance of CI Strength Measure[2] (n = 15)

Significance Test	Test Statistic	p-value
Mann-Whitney U-test	2.05	< 0.020 one-tailed

Panel C: Descriptive Statistics of CI Strength-Induced Client Perceptions[3] (n=15)

	Low CI Strength		High CI Strength		Combined	
	N	Mean (S.D.)	N	Mean (S.D.)	N	Mean (S.D.)
1. The audit is a joint task between auditor and client.[4]	8	1.13 (1.46)	7	1 (2.00)	15	1.07 (1.67)
2. The client is under pressure to meet reporting deadlines.[4]	8	0.25 (1.49)	7	0.71 (1.11)	15	0.47 (1.30)

Panel D: Test of Statistical Significance of CI Strength-Induced Client Perceptions[3] (n = 73)

Significance Test	Test Statistic	p-value
U-test: Joint task	-0.18	0.857 two-tailed
U-test: Pressure	0.78	0.439 two-tailed

---

[1] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[2] See description of question in the Appendix (p. 170, question 4). Measure is adapted from Aron et al. (2004).

[3] The language used in the manipulation of CI strength is intended to increase participants' perceptions (in the high CI strength condition) that the audit is a joint task between auditor and client but may have an unintended consequence of increasing participants' perceptions that the client is under pressure to meet reporting deadlines.

[4] Responses are collected using a 7-point Likert scale ranging from -3 (Strongly disagree) to +3 (Strongly agree).

Table 19
Comparison of Perceived Case Material Characteristics and Self-Confidence - Study Two

Panel A: Descriptive Statistics (n=15)

	Mean	Std. Dev.
1. Realism of case materials.[1]	1.20	1.70
2. Audit task is challenging.[1]	0.67	1.23
3. Motivated to complete task.[1]	1.60	1.24
4. Confidence in ability to complete task.[2]	1.60	1.06

Panel B: Kruskal-Wallis One-way Analysis of Variance - by CI Strength[3] Condition (n=15)

	K	df	p-value (two-tailed)
Question 1	0.13	1	0.720
Question 2	0.82	1	0.365
Question 3	0.00	1	0.951
Question 4	0.26	1	0.614

[1] Responses are collected using a 7-point Likert scale ranging from -3 (Strongly disagree) to +3 (Strongly agree).

[2] Responses are collected using a 7-point Likert scale ranging from -3 (Not very confident) to +3 (Very confident).

[3] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

Table 20
Comparison of Perceived Client Characteristics and Desire to Actively Agree with Client - Study Two

Panel A: Descriptive Statistics (n=15)

	Low CI Strength (n = 8)		High CI Strength (n = 7)	
	Mean	Std. Dev.	Mean	Std. Dev.
1. Consider the client cooperative.[1]	4.75	0.59	4.86	0.34
2. Consider the client trustworthy.[2]	-0.75	0.37	0.43	0.37
3. Consider the client competent.[2]	0.00	0.42	0.86	0.34
4. Consider it important to work with client to avoid note disclosure.[4]	-0.88	0.61	1.00	0.76

Panel B: Kruskal-Wallis One-way Analysis of Variance - by CI Strength[4] Condition (n=15)

	K	df	p-value (one-tailed)
Question 1	0.00	1	0.476
Question 2	4.14	1	0.021
Question 3	2.18	1	0.020
Question 4	3.32	1	0.034

[1] Responses are collected using a 7-point Likert scale ranging from 1 (Very uncooperative) to 7 (Very cooperative).

[2] Responses are collected using a 7-point Likert scale ranging from -3 (Strongly disagree) to +3 (Strongly agree).

[3] Responses are collected using a 7-point Likert scale ranging from -3 (Not very important) to +3 (Very important).

[4] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

Table 21
Analysis of Initial Going Concern Assessments (GC1) - Study Two

Panel A: Descriptive Statistics: GC1[1]

	Client Identity Strength (CI_{St}[2])		
	Low	High	Overall
Mean [a]	47.69	55.49	51.59
(s.e.)	(8.21)	(8.80)	(5.91)
n	8	7	15

Panel B: Analysis of Covariance: GC1

Effect	Mean Squares	F	df	p-value
CI_{St}	211.97	0.41	1	0.54
PI_Str[3]	1722.79	3.30	1	**0.10**
Covariates:				
RightAns[4]	528.32	1.01	1	0.34
Qualified[5]	2431.67	4.66	1	**0.06**
Error	521.88		10	
R^2	0.309			

[a] GC1 is adjusted for auditors' perceived ambiguity (RightAns), prior experience with clients that required a qualified opinion regarding the going concern assumption (Qualified), and professional identity strength (PI_Str) by including these variable as covariates in the ANCOVA model. The adjusted means are reported here in Panel A.

[1] GC1 is the auditor's initial assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[2] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[3] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[4] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[5] Qualified is the percentage of prior audit clients with going concern doubt that received a qualified audit opinion, as indicated by each individual auditor.

Table 22
Analysis of Overall Evaluation of Additional Audit Evidence (PersTot) - Study Two

Panel A: Descriptive Statistics: PersTot[1]

	Client Identity Strength (CI_{St}[2])		
	Low	High	Overall
Mean [a]	-1.34	-0.47	-0.90
(s.e.)	(0.64)	(0.68)	(0.46)
n	8	7	15

Panel B: Analysis of Covariance: PersTot

Effect	Mean Squares	F	df	p-value
CI_{St}	2.65	0.85	1	0.38
PI_Str[3]	1.52	0.49	1	0.50
Covariates:				
RightAns[4]	3.88	1.24	1	0.29
Qualified[5]	5.38	1.72	1	0.22
Error	3.12		10	
R^2	0.068			

[a] PersTot is adjusted for auditors' perceived ambiguity (RightAns), prior experience with clients that required a qualified opinion regarding the going concern assumption (Qualified), and professional identity strength (PI_Str) by including these variable as covariates in the ANCOVA model. The adjusted means are reported here in Panel A.

[1] PersTot is the auditor's belief that the combined evidence refutes or supports the client's going concern assumption. The scale ranges from -3 ("strongly refutes") to +3 (strongly supports); a further definition appears in Table 1.

[2] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[3] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[4] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[5] Qualified is the percentage of prior audit clients with going concern doubt that received a qualified audit opinion, as indicated by each individual auditor.

Table 23
Analysis of Revisions in Going Concern Assessments - Study Two

Panel A: Descriptive Statistics: GC1[1]

	Client Identity Strength (CI_{St}[3])		
	Low	High	Overall
Mean [a]	47.69	55.49	51.59
(s.e.)	(8.21)	(8.80)	(5.91)
n	8	7	15

Panel B: Descriptive Statistics: GC2[2]

	Client Identity Strength (CI_{St})		
	Low	High	Overall
Mean [a]	46.18	48.65	47.42
(s.e.)	(8.62)	(9.23)	(6.21)
n	8	7	15

Panel C: Repeated Measures Analysis of Covariance: Assess[4]

Effect	Mean Squares	F	df	p-value
Within Subjects				
Assess	133.07	0.98	1	0.35
Assess x CI_{St}	49.63	0.37	1	0.56
Assess x PI_Str[5]	157.13	1.16	1	0.31
Covariates:				
Assess x RightAns[6]	296.60	2.18	1	0.17
Assess x Qualified[7]	10.32	0.08	1	0.79
Error	135.80		10	
Between Subjects				
CI_{St}	183.46	0.19	1	0.67
PI_Str	1222.01	1.27	1	0.29
Covariates:				
RightAns	1010.59	1.05	1	0.33
Qualified	1406.25	1.46	1	0.25
Error	961.23		10	
R^2	0.941			

Table 23 (Continued)

[a] GC1 and GC2 are adjusted for auditors' perceived ambiguity (RightAns), prior experience with clients that required a qualified opinion regarding the going concern assumption (Qualified), and professional identity strength (PI_Str) by including these variable as covariates in the ANCOVA model. The adjusted means are reported here in Panels A and B.

[1] GC1 is the auditor's initial assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[2] GC2 is the auditor's final assessment (in percent) of the likelihood that the client meets the going concern assumption and will continue to exist for the foreseeable future. A further definition appears in Table 1.

[3] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[4] Assess is the repeated measures factor in the analysis, which represents the initial (GC1) and final (GC2) going concern assessments provided by each participant.

[5] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[6] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[7] Qualified is the percentage of prior audit clients with going concern doubt that received a qualified audit opinion, as indicated by each individual auditor.

Table 24

Analysis of Assessment of the Appropriateness of Client Conclusions (Approp) - Study Two

Panel A: Descriptive Statistics: Approp[1]

	Client Identity Strength (CI_{St}[2])		
	Low	High	Overall
Mean [a]	-1.54	-0.96	-1.25
(s.e.)	(0.71)	(0.76)	(0.51)
n	8	7	15

Panel B: Analysis of Covariance: Approp

Effect	Mean Squares	F	df	p-value
CI_{St}	1.16	0.30	1	0.60
PI_Str[3]	0.98	0.25	1	0.63
Covariates:				
RightAns[4]	8.51	2.17	1	0.17
Qualified[5]	3.88	0.99	1	0.34
Error	3.93		10	
R^2	0.033			

[a] Approp is adjusted for auditors' perceived ambiguity (RightAns), prior experience with clients that required a qualified opinion regarding the going concern assumption (Qualified), and professional identity strength (PI_Str) by including these variable as covariates in the ANCOVA model. The adjusted means are reported here in Panel A.

[1] Approp is the auditor's assessment of Highpoint's conclusion that no going concern note disclosure is needed. The scale ranges from -3 (highly inappropriate) to +3 (highly appropriate). A further definition appears in Table 1.

[2] Manipulated intervention. Each participant is either presented with client information that strengthens client identity (coded 1) or weakens client identity (coded 0).

[3] PI_Str is the extent to which the auditor identifies with the accounting profession. The scale for this measure is adapted from Aron et al. (2004) and described in the Appendix (p. 170, question 5); it is equivalent to a 7-point Likert scale (range +1 to +7).

[4] RightAns is the extent to which the auditor agrees that the going concern issue had a clear right answer. The scale ranges from -3 (“strongly disagree”) to +3 (“strongly agree”).

[5] Qualified is the percentage of prior audit clients with going concern doubt that received a qualified audit opinion, as indicated by each individual auditor.

APPENDIX

Experimental Instrument – Study One

Thank you for considering participating in my research study. **Participation in this study is voluntary and will take approximately thirty minutes of your time.** Upon reading this you may choose to participate (or not) in the audit task. A decision to participate or not will have no impact on your standing as an employee and your supervisor(s) will not know if you participated in the study or not.

The purpose of this study is to examine the decision processes used by auditors to make audit judgments. Therefore, as a participant in this study I invite you to complete a hypothetical audit task where you will be asked questions about your evaluation of evidence. Please respond and proceed through the case as you would in practice. I realize that your time is valuable but your assistance with this project will further knowledge in auditor decision making.

You may decline to answer any questions presented during the study if you so wish. All information you provide is considered completely confidential; indeed, you will not be asked to identify yourself by name at any point in the study. Furthermore, because the interest of this study is in the average responses of the entire group of participants, you will not be identified individually in any way in any written reports of this research. In addition, the web site is programmed to collect responses alone and will not collect any information that could potentially identify you (such as machine identifiers).

The data, with no personal identifiers, collected from this study will be maintained on a password-protected computer database in a restricted access area of the university. As well, the data will be electronically archived after completion of the study and maintained for two years and then erased. Electronic data, on summary not individual results, will be kept indefinitely. Finally, only Tim Bauer and members of his thesis committee in the School of Accounting and Finance at the University of Waterloo will have access to these materials. There are no known or anticipated risks associated to participation in this study.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes of this office at 519-888-4567 Ext. 36005 or ssykes@uwaterloo.ca.

Consent to Participate

"With full knowledge of all foregoing, I agree, of my own free will, to participate in this study."

[radio button] "I agree to participate."
[radio button – will close browser] "I do not wish to participate."

Brief Questions

1. Age

2. Gender M F

3. I have participated in the audit of a public company.

Yes, on more than one occasion (even if the same firm in multiple years)
Yes, but only on one occasion
No

4. I work for one of the Big 4 accounting firms.

Yes
No

If yes to 4
5. I work for the following accounting firm:

Deloitte
Ernst & Young
KPMG
PWC
I would prefer not to disclose that information

If no to 5
5. I work for the following accounting firm:

BDO
Grant Thornton
Meyers, Norris, Penny
RSM Richter
Other

I would prefer not to disclose that information

6. My current job title is:

Senior (or level below manager)
Manager (or equivalent level)
Senior manager (or level above manager)

Proceed to login

Please do not navigate back through the browser. Doing so will prevent responses from being recorded. Once the task is started it must be completed through to the end. You will not be able to log out and log back in again later. **Please ensure you have allotted sufficient time** (approx. 30 minutes) **to complete the task.**

Please create a unique username and enter it in the space provided below.

The username need not include any personal identifiers, and I encourage you not to identify yourself.

Enter username

A random password has been created for you: <password>

Because this study is concerned with an individual's decision process **it is important that you complete this task independently and that no one but you contributes to your responses**. Please do not share your responses with your colleagues. The username and password are provided to assist you in maintaining this unique, confidential, and independent location for your responses. Their purpose is twofold. First, they will ensure that no one but me has access to the information you provide; as a reminder, I am only interested in aggregate responses and will not identify you individually in any way in my research. Second, they will ensure that your responses are solely yours and provide validity to my research that responses from each individual are independent of each other.

To begin the task, please enter your password below.

Enter password

Please proceed to the next page

Engagement Information

You are the in-charge auditor on the audit of Highpoint Computer Corporation (Highpoint) for the year ended December 31, 2009. Highpoint manufactures and sells real-time computer systems and services directly to a diverse group of industries, including gaming, air-traffic control, weather analysis, and financial market data services. Highpoint has been involved in this business for 20 years and has personnel with significant expertise in all aspects of the business. Highpoint's common shares are traded on the TSX Venture Exchange (TSX-V).

This is a new client for your firm, who successfully bid to provide assurance services to Highpoint during the first quarter (Q1) of 2009. The audit for Highpoint was up for bid as a result of Highpoint's mandatory audit partner rotation. Since their audit partner would change, Highpoint thought this would be a good time to look at other audit firms.

[High Client Identity Strength Condition] In discussing the successful bid the engagement partner remarked that "the public would view our audit firm as gaining prestige from acquiring Highpoint as a client and certainly auditors in our firm would love the opportunity to be assigned to what they view as a prestigious audit client."

[Low Client Identity Strength Condition] In discussing the successful bid the engagement partner remarked that "the public might not see our audit firm as gaining any prestige from acquiring Highpoint as a client and certainly our firm has other clients that our auditors view as more prestigious and would prefer to be assigned to. In the end though, a win is a win."

You were recently assigned to the audit after the previous in-charge auditor went on sick leave.

[High Client Identity Strength Condition] Highpoint has received a lot of positive press recently. Environmental groups have praised Highpoint for its efforts to recycle production waste, which far exceeds the initiatives of its competitors and the industry in general. Further, a well-respected annual competition released its results for the current year and included Highpoint in its list of best technology companies to work for in Canada.

[Low Client Identity Strength Condition] Highpoint has received a lot of negative press recently. Environmental groups have criticized Highpoint for its lack of effort in recycling production waste, which lags far behind its competitors and the industry in general. Further, a well-respected annual competition released its results for the current year and did not include Highpoint in its list of best technology companies to work for in Canada.

Please proceed to the next page

Planning Memo – Excerpts

The following are excerpts from the planning memo prepared in Q4 after the audit team's planning meeting for the December 31, 2009 year end.

- In discussing Highpoint's general business environment, the partner noted that "historically Highpoint has had a good share of the market. They have had a high reputation as a good investment and as a firm that delivers a quality product. This year remains to be seen, but they have always had solid operating margins."

[High Client Identity Strength Condition]

- Some strategic decisions of Highpoint have been perceived as big successes by the greater public community. Social welfare agencies are sympathetic to business reasons for closing down one of its factories but have praised Highpoint for assisting former employees with training of new job skills. In Q3, an article in the business press announced that Highpoint would continue to be the lead partner with a municipal group for a children's literacy initiative that includes a new library. The municipality claims that Highpoint has been "responsive and easy to deal with" so far.

[Low Client Identity Strength Condition]

- Some strategic decisions of Highpoint have been perceived as big failures by the greater public community. Social welfare agencies are sympathetic to business reasons for closing down one of its factories but have criticized Highpoint for not assisting former employees with training of new job skills. In Q3, an article in the business press announced that Highpoint was backing out as the lead partner with a municipal group for a children's literacy initiative that included a new library. The municipality claims that Highpoint has been "unresponsive and vague" about its reasons for backing out.

- The predecessor auditors were engaged for 10 years prior to the change in auditor. An unqualified opinion was issued in each of those years.

- Your firm reviewed the working papers of the predecessor auditors; no issues were found, nor reported by them with respect to the December 31, 2008 year end or Q1 of 2009 prior to the change of auditor.

- At the conclusion of the engagement planning, engagement risk was assessed at a medium level based on knowledge and analysis of the client business and industry.

[High Client Identity Strength Condition]

- Your partner met with management of Highpoint to discuss the current year audit. She remarked that "we talked about reporting deadlines and feel that together we can complete our field work, and we can get the financial statements issued, on schedule. We hope that this first year audit runs smoothly and that we can resolve any problems that arise. We will assist each other in conducting our audit field work."

[Low Client Identity Strength Condition]

- Your partner met with management of Highpoint to discuss the current year audit. She remarked that "they talked about their reporting deadlines; they and I feel that the field work can be completed, and the financial statements can be issued, on schedule. Management and I hope that this first year audit runs smoothly and that their team and our team can resolve any problems that arise. Their team will assist our team in conducting the audit field work."

Review Questions

Please respond to the following questions about the preceding information. You may review the previous pages by clicking on the links above.

1. With respect to community involvement and charity, Highpoint:

Is actively involved with children's literacy.
Is no longer actively involved with children's literacy.

2. With respect to the current year audit, Highpoint is:

A long-standing client for your firm.
A first year client for your firm.

3. With respect to the audit of Highpoint, it is viewed as:

Less prestigious than most other audits.
More prestigious than most other audits.

4. With respect to social/environmental responsibility, Highpoint:

Is a leader in its industry.
Lags behind others in its industry.

5. With respect to its industry, Highpoint:

Manufactures and sells real-time computer systems.
Manufactures and sells pharmaceutical supplies.

6. With respect to satisfaction in the workplace, Highpoint is:

Not included in the list of best employers in the technology industry.
Considered one of the best employers in the technology industry.

7. With respect to its prior auditor and audit opinions, Highpoint has:

Received an unqualified opinion in each of the past 10 years.
Received at least one qualified opinion in the past 10 years.

8. With respect to Highpoint's experience, it has been in the technology industry for:

20 years.
5 years.

Please proceed to the next page

[Heightened Professional Identity Salience Condition]

Before proceeding to the next section of the study I would like to gather some information on the **use of media provided by the Canadian Institute of Chartered Accountants (CICA).** Reaching its membership and promoting the CA profession are important issues in recent years and your responses will provide some insight into the use of media to achieve this.

The CICA regularly publishes CA Magazine, which is the leading accounting publication for Canadian chartered accountants on professional, financial, and other business issues.

1. On average, for a given issue of CA Magazine, how much of it **do you read**?

90-100%
75-90%
50-75%
25-50%
0-25%

2. How often do you **read at least some part of a CA Magazine issue**?

Every issue
Regularly
Sometimes
Rarely
Never

The CICA maintains an extensive **website (www.cica.ca)** containing news, resources, services, and information **for chartered accountants in Canada** (including CA Magazine).

3. When was the last time you visited the **CICA website**?

Within the past month
Within the past 6 months
Within the last year
It has been more than a year
I have never visited the website

4. Recent news on the CICA website reported on the decision to allow CGA's to issue audit opinions in Ontario. Do you have **any concerns about CGA's having similar auditing rights as CA's**? (Explain below)

[Unheightened Professional Identity Salience Condition]

Before proceeding to the next section of the study I would like to gather some information on the **use of leisure time in Canada.** Work-life balance is an important issue in recent years and your responses will provide some insight into the use of leisure time to achieve this.

Tourism Canada has made significant investments and great strides in recent years of encouraging Canadians and the world to explore the many destinations and attractions Canada has to offer.

1. In general, how much of your vacation time **do you actually use**?

90-100%
75-90%
50-75%
25-50%
0-25%

2. How often do you choose to use your vacation time **to vacation in Canada**?

Every time I take a vacation
Regularly
Sometimes
Rarely
Never

Tourism Canada maintains an extensive **website (www.canada.travel)** containing maps, resources, services, and travel information for individuals **to learn about fun activities found in Canada**.

3. When was the last time you **visited the Tourism Canada website**?

Within the past month
Within the past 6 months
Within the last year
It has been more than a year
I have never visited the website

4. Recent information on the Tourism Canada website reminded individuals about stricter laws for entering or re-entering the US (e.g. passports or NEXUS card required). Would these laws cause **you to increase your travel to Canadian tourist destinations**? (Explain below)

General Audit Procedures and Financial Statement Information

The annual general audit procedures require a review of Highpoint's assessment of its ability to continue to operate as a going concern. Highpoint has assessed its situation and asserts that it meets the going concern assumption and that there is no material uncertainty about its ability to continue as a going concern and that it will exist for the foreseeable future.

Your partner has asked you to review any and all relevant client information for her and provide your assessment of the appropriateness of Highpoint's above conclusion. She will take this into account in making her conclusions.

Specifically, she would like your opinion whether there is material uncertainty about certain events or conditions that would cast significant doubt on Highpoint's ability to continue as a going concern. Material uncertainty requires note disclosure in the financial statements; if a client fails to provide adequate note disclosure a qualified opinion is further required.

The prior year financial statements did not contain management disclosure of material uncertainty about Highpoint's ability to continue as a going concern. The predecessor auditors issued an unqualified opinion and did not provide any documentation indicating a difference of opinion with Highpoint on its going concern assumption or material uncertainty.

The CFO has made it known to you that a going concern note in the financial statements would cause violation of Highpoint's debt covenants. The preliminary financial statements follow:

Please proceed to the next page

HIGHPOINT COMPUTER CORPORATION

CONSOLIDATED BALANCE SHEETS
(In thousands of dollars, except share data)

	December 31, 2009	December 31, 2008
ASSETS		
Current assets:		
Cash and cash equivalents	$ 4,275	$ 6,874
Securities held for trading	12,092	–
Accounts receivable net of allowance for doubtful accounts of $1,143 (December 31, 2008 - $1,434)	33,538	30,547
Inventory	14,020	17,412
Other current assets	2,860	5,164
Total current assets	66,785	59,996
Property, plant and equipment, net	39,782	51,080
Other long-term assets	4,088	6.954
Total assets	$110,655	$118,031
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	$ 54,872	$ 42,055
Deferred revenue	5,488	5,809
Current portion of long-term debt	7,505	9,894
Total current liabilities	67,775	57,758
Long-term debt	22,322	11,443
Other long-term liabilities	12,077	6,625
	102,174	75,827
Shareholders' equity		
Common shares, authorized 100,000,000; issued 49,424,000 (December 31, 2008 – 36,223,000)	101,596	88,096
Retained deficit	(93,115)	(45,893)
	8,481	42,204
Total liabilities and shareholders' equity	$110,655	$118,031

HIGHPOINT COMPUTER CORPORATION

SELECTED CASH FLOW INFORMATION
(In thousands of dollars)

	Year ended December 31, 2009	2008	2007
Net cash provided by operating activities	$ 3,928	$ 11,099	$ 6,232
Net cash used in investing activities	(3,832)	(6,168)	(9,101)
Net cash used in financing activities	(2,695)	(9,306)	(22,388)
Net decrease in cash and cash equivalents for the year	(2,599)	(4,375)	(25,258)

Please proceed to the next page

HIGHPOINT COMPUTER CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS AND RETAINED EARNINGS
(In thousands of dollars, except share data)

	Year ended December 31,		
	2009	**2008**	**2007**
Net sales:			
Computer systems	$ 50,916	$ 86,489	$120,352
Service and other	64,044	81,684	94,486
Total net sales	114,960	168,173	214,837
Cost of sales:			
Computer systems	32,984	46,367	65,420
Service and other	39,658	49,006	58,168
Total cost of sales	77,642	95,372	123,588
Gross margin	42,318	72,800	91,249
Operating expenses:			
Research and development	16,604	23,357	28,588
Selling, general, and administrative	36,214	44,305	58,381
Restructuring charge	29,376	2,640	12,672
Total operating expenses	82,194	70,302	99,641
Income (loss) from operations	(39,012)	2,498	(8,392)
Interest and other income (expenses), net	(6,350)	(2,866)	(4,006)
Loss before income taxes and extraordinary item	(45,362)	(367)	(12,397)
Provision for income taxes	1,860	2,040	1,560
Loss before extraordinary item	(47,222)	(2,407)	(13,957)
Extraordinary loss on extinguishment of debt	–	–	(33,832)
Net loss	(47,222)	(2,407)	(47,789)
Retained earnings (deficit), beginning of year	(45,893)	(43,486)	4,303
Retained earnings (deficit), end of year	(93,115)	(45,893)	(43,486)
Loss per share:			
Loss before extraordinary item	(1.55)	(0.08)	(0.49)
Extraordinary loss	0.00	0.00	(1.21)
Net loss	(1.55)	(0.08)	(1.70)

Other significant events during the year ended December 31, 2009:

- The industry has continued to change rapidly. Many new competitors entered the market and several competitors failed.
- Net sales fell 31% this year and gross margin percentage declined from 43% to 36%.
- During 2009, Highpoint completed the sale of one of its least cost-effective factories for liquidity purposes.
- During June, Highpoint acquired the real-time division from one of its largest competitors in exchange for common shares and long-term debt. The issues increased the number of shares outstanding by 33% and doubled Highpoint's long-term debt. Management expects the acquired division to provide significant revenues in the future.

Please proceed to the next page

1. Provide a preliminary assessment of the company's risk of material misstatement.

1	2	3	4	5	6	7
Low risk			Neutral			High risk

2. How confident do you feel about your assessment above?

-3	-2	-1	0	1	2	3
Not very confident			Neutral			Very confident

3. Based solely on the financial statement information previously presented, what do you believe is the likelihood that the company meets the going concern assumption and **will be able to continue to exist** for the foreseeable future (0-100%)?

4. How confident do you feel about your assessment above?

-3	-2	-1	0	1	2	3
Not very confident			Neutral			Very confident

Please proceed to the next page

Additional Information Regarding the Audit Issue of Going Concern

To further assess Highpoint's statement about its ability to continue (and operate as a going concern), Highpoint has provided you with requested documentation on various accounts and aspects of its business.

Please click the button below to proceed to the documentation.

Please proceed to the next page

Markets and Products

Highpoint focuses its business on several strategic target markets:

Simulation: Highpoint's newly acquired competitor is recognized as a leader in real-time systems for simulation. The primary applications for Highpoint's simulators include commercial and military aviation, battle management, and engineering design simulation for avionics and automotive labs. Highpoint attempts to provide a real-time advantage by integrating these applications. The market for this class of products has grown at a rate of 60% over the past three years. Highpoint's sales related to this product line have decreased at a rate of approximately 30% in the past three years. However, sales of the newly acquired competitor have increased at a rate of 70% during this time. This product line accounted for approximately 40% of Highpoint's sales in 2009.

Data Acquisition: Highpoint provides radar data processing and control systems for national weather programs. Other customers include the Navy and NASA. The market for this class of products has not grown significantly in the past three years. Highpoint's sales related to this product line have decreased at a rate of 10% per year. This product line accounted for approximately 25% of Highpoint's sales in 2009.

Interactive Real-Time: Highpoint is pursuing this growth market. The products Highpoint provides span such industries as gaming, hotels, and airline. Highpoint has attempted to position itself as a supplier of server technology for customers who require reliable delivery of multiple streams of high quality video. Highpoint is the largest provider of systems for the gaming industry. The market for this class of products has grown at a rate of 100% over the past three years. Highpoint's sales related to this product line have increased at a rate proportional to the market. This product line accounted for approximately 20% of Highpoint's sales in 2009.

Telecommunications: Highpoint is focusing on the ever-expanding market for cellular data communications and wireless gateways. Highpoint has, together with a software supplier, developed a system for wireless communications that require data transfers, protocol conversions, and other interfaces with on-line service providers. The market for this class of products has grown at a rate of 60% over the past three years. Highpoint's sales related to this product line have increased at a rate of 30% per year. This product line accounted for approximately 10% of Highpoint's sales in 2009.

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1. How strongly does the **above evidence** refute or support the company's going concern assumption that it will continue to exist for the foreseeable future?

-3	-2	-1	0	1	2	3
Strongly refutes			Neutral			Strongly supports

2. How confident do you feel about your assessment above?

-3	-2	-1	0	1	2	3
Not very confident			Neutral			Very confident

Please proceed to the next page

Highpoint Computer Corporation
Subsequent Events and Jan/Feb Financial Data

Selected Financial Data (in 000's of dollars)

Income Statement Data	**Jan-Feb, 2010**	**Jan-Feb 2009**
Net sales	18,597	19,659
Cost of sales	11,346	10,650
Gross margin	7,251	9,009
Other expenses	14,724	12,068
Net income	(7,473)	(3,059)
Balance Sheet Data	**Feb 28, 2010**	**Feb 28, 2009**
Cash and securities	7,009	16,367
Other current assets	49,091	50,419
Total assets	102,397	110,655
Current liabilities	67,809	67,775
Total liabilities	99,389	102,174
Shareholder's equity	2,738	8,481
Cash Flow Data	**Jan-Feb, 2010**	**Jan-Feb 2009**
Cash from (used by) operations	(2,435)	25
Cash from investing	123	556
Cash from (used by) financing	16	(1,672)
Net cash flows	(2,296)	(1,091)

Other Subsequent Events

Highpoint entered into a contract for a sale-leaseback transaction on one of its manufacturing facilities. The transaction is expected to close later this year. 75% of the net $4.3 million in proceeds will be used to repay a portion of the long-term debt owed to the other party in this transaction. The remaining $1.1 million will be used for working capital purposes. The agreement is contingent upon the buyer's ability to lease approximately 100,000 square feet of area in the building to third parties and management is not assured that the transaction will be completed as contemplated.

Management states that the slow sales during the first two months are due to slower than expected transitioning with the new acquisition. However, management believes that product sales will increase as the year progresses.

Continued on the next page…

1. How strongly does the **above evidence** refute or support the company's going concern assumption that it will continue to exist for the foreseeable future?

-3	-2	-1	0	1	2	3
Strongly refutes			Neutral			Strongly supports

2. How confident do you feel about your assessment above?

-3	-2	-1	0	1	2	3
Not very confident			Neutral			Very confident

Please proceed to the next page

1. How strongly did **all** the previous sources of evidence, **taken all together**, refute or support the company's going concern assumption that it will continue to exist for the foreseeable future?

-3	-2	-1	0	1	2	3
Strongly refutes			Neutral			Strongly supports

2. How confident do you feel about your assessment above?

-3	-2	-1	0	1	2	3
Not very confident			Neutral			Very confident

3. After viewing the evidence presented, what do you believe is the likelihood that the company meets the going concern assumption and **will be able to continue to exist** for the foreseeable future (0-100%)?

4. How confident do you feel about your assessment above?

-3	-2	-1	0	1	2	3
Not very confident			Neutral			Very confident

5. How appropriate is the client's conclusion that there is no material uncertainty about its ability to continue as a going concern and thus no note disclosure is needed?

-3	-2	-1	0	1	2	3
Highly inappropriate			Neutral			Highly appropriate

6. How confident do you feel about your assessment above?

-3	-2	-1	0	1	2	3
Not very confident			Neutral			Very confident

7. How important is it to negotiate or work with Highpoint in order to avoid note disclosure or a qualified opinion regarding the going concern assumption?

-3	-2	-1	0	1	2	3
Not very important			Neutral			Very important

Please proceed to the next page

Questionnaire

Please respond to the following questions.

1. Tell me about yourself in your own words. Feel free to list anything that describes you as a person. Do not identify yourself by name. **Please take about a minute to do so.**

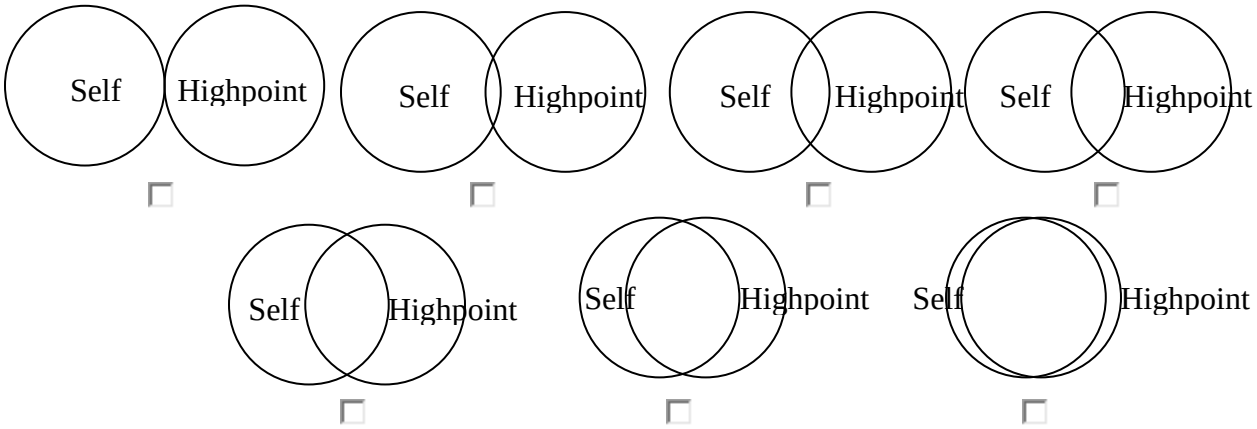
2. To what extent has the information in this experiment **made you think about** the accounting profession and the values, attributes, and qualities you possess as a member of this profession?

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

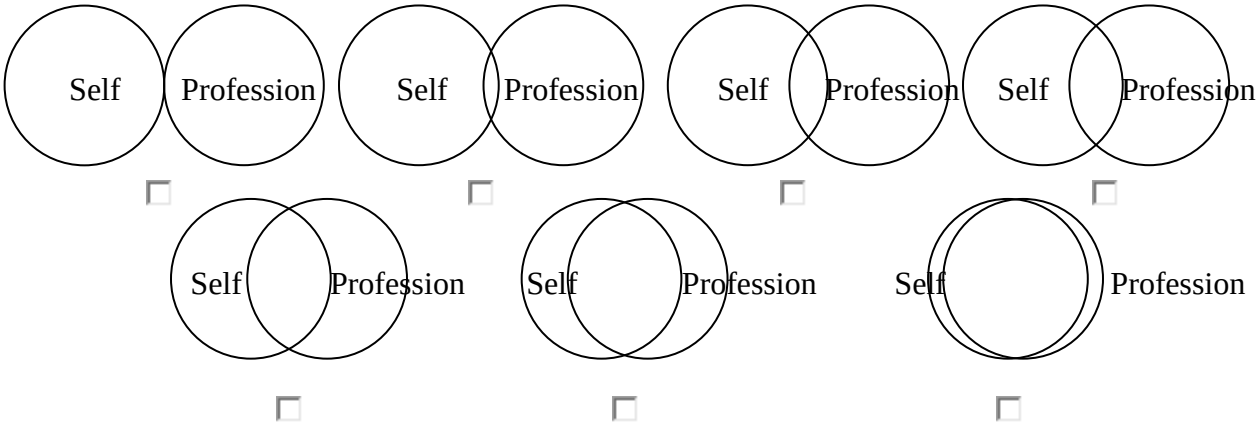
3. To what extent has the information in this experiment **made you think about** whether your personal values, attributes, and qualities relate to the values, attributes, and qualities of the client?

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

4. Select the picture below that best describes how your personal attributes, qualities, and values **align or overlap** with the attributes, qualities, and values of Highpoint.



5. 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 accounting profession.



6. To what extent do you agree that the accounting issue (going concern) had a clear right answer?

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

7. Based on the information provided about the client, I consider the client to be trustworthy.

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

8. Based on the information provided about the client, I consider the client to be competent.

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

9. Imagine that another accounting issue arises that will require the client to provide you with a significant amount of documentation and additional information. How cooperative do you think the client will be in providing you with the details requested?

1	2	3	4	5	6	7
Very uncooperative			Neutral			Very cooperative

10. Highpoint appeared to be under pressure to meet tight reporting deadlines.

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

11. The nature and timing of audit field work (including reporting) was a joint task with Highpoint.

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

12. Would disclosure of going concern uncertainty by Highpoint result in a covenant violation?

Yes
No
I am not sure

Please proceed to the next page

Given the limitations on time and information in an experiment, please respond to the following **two questions**.

13. The experimental task was realistic to the audit duties I perform on a regular basis.

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

14. How confident did you feel in your ability to complete the audit task and provide an appropriate assessment?

-3	-2	-1	0	1	2	3
Not very confident			Neutral			Very confident

Please also respond to the following questions.

15. I feel I have sufficient experience dealing with going concern issues.

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

16. I was familiar with the particular client business/industry facts detailed in the case.

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

17. The task provided a challenge to me.

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

18. Once I began the experimental task I felt motivated to complete it.

-3	-2	-1	0	1	2	3
Strongly disagree			Neutral			Strongly agree

19. Approximately how many audits have you participated in where there was substantial doubt about the entity's ability to continue to exist for the foreseeable future (regardless of the type of report issued)?

20. Approximately what **percentage** of those audits resulted in the client providing note disclosure about material uncertainty in meeting the going concern assumption (0-100%)?

21. Approximately what **percentage** of those audits resulted in a qualified audit opinion (0-100%)?

22. Approximately how many years have you worked in public accounting?

23. Approximately how many audits do you conduct/participate in per year?

24. If you have an industry specialization (e.g. Manufacturing, Financial Institutions, etc.) please provide it below.

Please proceed to the next page

Thank you for completing my study. Below you may make comments about the information given to you or make any other general comments you may have.

What do you think I was studying in this case?

Do you have any additional comments about this case or suggestions?

Experimental Instrument – Modifications for Study Two

[Professional Identity Salience Manipulation is Removed]

[Additional Piece of *Positive* Evidence is Removed]

[Second Additional Piece of *Negative* Evidence]

Financing and Liquidity Information

During 2009, Highpoint entered into new agreement providing for a $17.6 million credit facility with a 5.5% interest rate, which matures on September 1, 2012. As of December 31, 2009, the outstanding balance under the credit facility is approximately $14.1 million, of which $6.5 million is classified as a current liability. The remainder is due at the rate of $150,000 per month until it is paid off in September, 2012 in a single lump-sum payment. The facility may be repaid and reborrowed at any time without penalty. Highpoint has pledged as collateral substantially all of its assets. In the event of a sale or sale-leaseback of its largest facility, Highpoint would be required to make a prepayment on the credit facility equal to 75% of the net proceeds from the sale. **Management has no other borrowing facilities available at the present time.**

Management expects that the acquisition of its largest competitor and its continued integration of the businesses will improve Highpoint s liquidity through improved operating performance and the planned disposition of its largest manufacturing facility. Future liquidity is highly dependent on the revenue growth expected during the upcoming period.

As of December 31, 2009, the company has $4.3 million in cash on hand, a decrease of $2.6 million from the prior year. However, Highpoint holds publicly traded shares with a market value of $12.1 million as of December 31, 2009. Management intends to sell some of these shares for liquidity purposes, should that become necessary.

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1. How strongly does the **above evidence** refute or support the company's going concern assumption that it will continue to exist for the foreseeable future?

-3	-2	-1	0	1	2	3
Strongly refutes			Neutral			Strongly supports

2. How confident do you feel about your assessment above?

-3	-2	-1	0	1	2	3
Not very confident			Neutral			Very confident

Please proceed to the next page