

# The effect of professional standards on confirmation bias in tax decision-making

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## ***Abstract***

This study first examines whether confirmation bias in a tax decision context is greater when the quantity of information describing the tax issue is substantially increased. The study reviews international accounting bodies' professional codes and then focuses on de-biasing by testing the use of principles-based ethical standards to mitigate pro-client confirmation bias. Specifically, we examine the effect of AICPA Code of Conduct Section 54 for integrity and Rule 102-6 for advocacy. We use novice participants who would not yet have preconceived notions developed from their workplace environment regarding the standards or the case facts. Our results show that pro-client recommendations are a function of the presence of a professional standard and the level of contextual detail. Confirmation bias exists in the detailed context without professional standards. However, when professional standards are present, this type of confirmation bias is mitigated.

**Key words:** client advocacy; confirmation bias; principles-based standards; professional ethics

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## 1. INTRODUCTION

Throughout the world, tax practitioners offer planning and compliance services to business clients and their executives (Frecknall-Hughes & Moizer, 2015; Gupta, 2015). In the US, the regulatory environment has been strengthened in recent years to improve compliance and prevent abuse from overly aggressive client-favourable reporting (Financial Accounting Standards Board (FASB), 2006; Internal Revenue Service (IRS), 2009; IRS, 2011). The tax and auditing literature has documented the propensity of professional accountants to exhibit confirmation bias, a psychological tendency to seek out, attend to, and remember information that is in line with an outcome the accountant prefers, either because it agrees with a client's preference or because it follows the accountant's preconceptions (Kunda, 1990; Oswald & Grosjean, 2004). For example, Cloyd and Spilker (1999) demonstrated that practitioners tend to seek out more favourable cases, rulings and standards than unfavourable ones. The penchant toward pro-client outcomes has been documented in the interpretation and weighting of evidence for moderate-risk clients (Johnson, 1993; Cuccia, Hackenbrack & Nelson, 1995), while Kadous, Magro and Spilker (2008) found that confirmation bias evidenced with moderate-risk clients is not observed for clients with a high practice risk. Assuming most clients are moderate risk and that ambiguous issues abound, the results imply that the impact of confirmation bias is non-trivial.

Notwithstanding the pervasiveness of the literature supporting confirmation bias, Nelson (2003) asserts that practitioners ultimately make decisions that are consistent with their incentives. These incentives include motivating factors such as likelihood of litigation, potential for client loss, loss of reputation, possible penalties, and client importance. He argues, however, that the incentives could be designed to favour accuracy. For example, in an auditing environment he applauds the Financial Accounting Standards Board (FASB) consideration of a 'true and fair' override that would require transactions to reflect the underlying economic substance.

Similar to the proposed FASB override, guidance for accurate, objective reporting is provided in the American Institute of Certified Public Accountants (AICPA) Code of Professional Conduct (2014).<sup>4</sup> The 2014 version of the Code replaced an earlier version effective from 2010. In the 2014 Preface, Section 0.300.040 requires members to demonstrate the highest sense of integrity, and adds that integrity requires honest and candid reporting and that integrity does not permit deceit or subordination of principle (previously ET Section 54 in the 2010 Code). Another AICPA rule, Section 1.140 of the 2014 Code, (previously rule 102-6 in the 2010 version) implicitly acknowledges that accuracy can become subjective in the presence of ambiguous technical guidance.<sup>5</sup> This

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<sup>4</sup> The rule for independent, unbiased judgments is not the same as the term for independence that is used in the auditing literature. Auditors are forbidden to opine unless the independence requirements are satisfied. In this situation, independence regarding the client-auditor relationship is regulated by a specific set of regulations.

<sup>5</sup> The Section's first paragraph states: 'An advocacy threat to compliance with the "Integrity and Objectivity Rule" [1.100.001] may exist when a member or the member's firm is engaged to perform non-attest services, such as tax and consulting services, that involve acting as an advocate for the client or to support a client's position on accounting or financial reporting issues either within the firm or outside the firm with standard setters, regulators, or others'. Also, paragraph 3 states: 'Some professional services involving client advocacy may stretch the bounds of performance standards, go beyond sound and reasonable professional practice, or compromise credibility, thereby creating threats to the member's compliance with the rules and damaging the reputation of the member and the member's firm. If such circumstances exist,

is consistent with Nelson (2003) who suggests that aggressive reporting decisions tend to increase with more imprecise reporting standards. Section 1.140 (formerly Rule 102-6) of the AICPA Code condones justifiable client advocacy in tax and financial decision-making. To date, research has not examined the impact of AICPA standards for advocacy and integrity on the propensity toward pro-client decision-making, yet Libby and Luft (1993) argue that the purpose of professional standards is to influence professional judgments. The issue is whether professional standards required by the Code act as incentives that influence decision-making. The current article contributes to the literature by examining the effects of the advocacy standard and integrity standard as contained in the 2010 version of the AICPA Code on tax decision-making that involves ambiguous technical guidance. We purposely use student participants to provide a homogenous group for this baseline study and to reduce possible rival effects from work experience and/or organisational climate.

Confirmation bias is often exacerbated by supplemental material, as the additional judicial and legislative rulings can be misinterpreted or over-weighted as support for a pro-client position (Johnson, 1993; Cuccia et al., 1995). Klayman (1995) admits that much is unknown about why confirmation bias exists, but he adds that a potential theme for future research is to examine the role of motivation as a moderator of the cognitive processes that result in confirmation bias. Prior research, however, has not examined the potential impact of professional standards as motivating factors (e.g., such as Integrity and Advocacy in a tax context). If the presence of these standards is included, would the additional evidence still result in more pro-client outcomes as prior literature suggests?

When analysing how to apply a subjective rule, irresolute information regarding the facts and circumstances of a tax issue can contribute to the ambiguity, as it is difficult to evaluate how the subjective rule fits an indeterminate case. Clearly, recommendations and reporting decisions should not be driven by additional, irresolute information, but rather by authoritative tax guidance, yet prior studies have documented a confirmation bias arising from a conscious or unconscious supportive interpretation of the regulatory and judicial rulings. The AICPA standard for integrity requires its members to be honest and candid in their judgments. Therefore, if this type of AICPA professional standard is applied, it should mitigate the propensity toward pro-client decision-making related to the added details.

Client advocacy has also been sanctioned by the AICPA, perhaps as acknowledgment that conservatism does not always result in an accurate decision. If the technical guidance is ambiguous, a professional standard such as Rule 102-6 could either increase the likelihood of a pro-client reporting decision if it is justifiable, or the standard itself could be over-valued as motivation for pro-client decisions that are not justified. The concern is that confirmation bias could affect how the added detail would be weighted, possibly leading to an increase in the likelihood of a pro-client outcome. That said, the advocacy rule is not intended to condone this type of confirmation bias. Its status as a professional standard as well as the discussion included in Rule 102-6 reinforces its purpose of helping the client determine an objective, appropriate interpretation of the relevant technical guidance.

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the member and member's firm should determine whether it is appropriate to perform the professional service'. See n 9, below, for the equivalent paragraph in the 2010 version of the Code.

Our results show that in the absence of professional standards for integrity and advocacy, confirmation bias derived from additional inconclusive information leads to a more pro-client tax outcome than does the same tax issue without that additional information. In contrast, when either AICPA Section 54 or Rule 102-6 is explicitly presented to the participants, the final tax reporting decision does not significantly differ between the contexts with and without the additional information. The implication is that the professional standards tend to mitigate the confirmation bias that is associated with a propensity to misinterpret additional information as support. In addition, we find that the presence of AICPA Section 54 for integrity decreases the likelihood of a pro-client recommendation in the context with additional inconclusive details, which is a more realistic case.

Prior literature, e.g., Johnson (1993), has documented confirmation bias in a tax setting involving the deductibility of reasonable compensation, and correlated advocacy attitudes with client advocacy judgments, and Pinsker, Pennington and Schafer (2009) also use a reasonable compensation case scenario and contrast the different roles of audit vs. tax professional to examine whether switching roles influences client advocacy and professional scepticism. As no prior studies have considered the influence of professional standards, we document the potential impact of AICPA professional standards on judgments involving ambiguous tax reporting decisions. The present study shows that professional standards are important factors in compliance contexts. Furthermore, most prior research related to professional codes of ethics in accounting has involved an audit setting, and none of those studies involved the overarching principles-based standards for integrity and advocacy.

Our study further contributes to the literature by comparing the effects of advocacy and integrity standards in two contexts. Both contexts involve the same ambiguous tax issue (classification of compensation to the owner as a salary or as a dividend). One case, however, has scant evidence to support or deny its tax deductibility. The other case contains a considerable amount of additional but inconclusive detail. Consistent with Bonner (1994), the quantity of components that must be considered creates additional ambiguity for the task context, and this can lead to an increased likelihood of confirmation bias given the tendency to interpret the evidence as pro-client (Johnson, 1993; Cuccia et al., 1995). Our study confirms this finding in the absence of professional standards. However, confirmation bias attributable to the added detail does not exist in the presence of the professional standards. The implication is that increased exposure to overriding standards, especially Section 54 for integrity, may be able to reduce some of the confirmation bias that has been demonstrated in the information searches, data evaluation, and reporting decisions.

The results of this study have important implications for: 1) accounting standard setters who develop professional codes and rules; 2) tax, audit, financial and managerial accountants who have varying sets of ethical standards meant to guide their professional judgments; 3) regulatory tax authorities, such as the Internal Revenue Service (IRS), who monitor professional accountants' behaviour, and 4) academics who wish to engage students in applied ethical decision-making.

The remainder of this article proceeds as follows. The next section provides background information and develops our hypotheses. Sections 3 and 4 outline our method and results respectively, with concluding remarks in section 5.

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 2.1 Professional Codes of Ethics

This study explores the influence of professional standards as contained in the AICPA Code of Professional Conduct (2010; 2014); specifically the effects of integrity and client advocacy on confirmation bias. Apart from the US, at the suggestion of a reviewer, we examined the codes of several English speaking countries, specifically for chartered accountants in Australia, New Zealand, Ireland, South Africa and the UK, who must all comply with a code based on the Code of Ethics for Professional Accountants of the International Ethics Standards Board for Accountants (IESBA) published by the International Federation of Accountants.<sup>6</sup>

The IESBA Code has adopted a principles-based (rather than rules-based) approach and does not apply directly to members of a particular professional body, but rather the main accountancy bodies throughout the world are required to comply with a code no less stringent than the principles included in the IESBA Code of Ethics. This Code states: 'The principle of integrity imposes an obligation on all members to be straightforward and honest in all professional and business relationships. Integrity also implies fair dealing and truthfulness', and is an element of the traditional accountant stereotype (Carnegie & Napier, 2010).

### 2.2 Confirmation bias

Confirmation bias is a tendency to seek out, attend to, and remember information that is in line with a preferred outcome. Essentially, individuals are hard-wired to exhibit a confirmation bias (seeking confirmation of one's prior beliefs) and a selective information processing bias (seeing only what one wants to see) when evaluating evidence (Kunda, 1990; Oswald & Grosjean, 2004). The bias is clearly of interest to accounting firms, as it may affect audit and tax professionals' weighting of evidence and their professional judgments and decisions.

Confirmation bias can be distinguished from the separate construct of client advocacy which Mason and Levy (2001, p. 127) define in a tax setting as '.... a state of mind in which one feels one's primary loyalty belongs to the taxpayer. It is exhibited by a desire to represent the taxpayer zealously within the bounds of the law, and by a desire to be a fighter on behalf of the taxpayer'. The IESBA Code defines an 'Advocacy threat' as 'the threat that a Member will promote a client's or employer's position to the point that the Member's objectivity is compromised', but unlike the AICPA or Ontario, the IESBA does not specifically condone client advocacy; rather, the IESBA assumes professional accountants will be client advocates.

The significant influence of advocacy was a frequent result in early behavioural studies on tax practitioners' recommendations to clients (Ayres, Jackson & Hite, 1989; Jackson & Milliron, 1989), and the positive correlation between client advocacy and favourable recommendations on tax decision-making continues today (Johnson, 1993; Levy, 1996; Mason & Levy, 2001; Pinsker et al., 2009; Bobek, Hageman & Hatfield, 2010). Although several studies have documented the significant effects of advocacy, most of these results have not had large explanatory effects. For example, the correlation

<sup>6</sup> Interestingly, CPAs in Ontario (and possibly other Canadian provinces), like the AICPA, do not utilise the 'standard' definition of Integrity as per the IESBA Code.

between advocacy attitude and recommended tax position in Johnson (1993) was 0.17, it was only 0.13 in Pinsker et al. (2009), and it was not significant at all in Barrick, Cloyd and Spilker (2004).

Bobek et al. (2010) note that most prior research does not use a scale to measure individual advocacy attitude. Instead, a treatment effect is induced for advocacy by indicating the client-favourable position (Cloyd & Spilker, 1999). In Cuccia et al. (1995), aggressive reporting decisions were significantly higher for the scenarios that described the client as having a preference for aggressive (but legitimate) tax reporting positions rather than clients described as having conservative preferences. In contrast, the Ayres et al. (1989) study did not manipulate client preference, but the underlying premise of the decision variable was to capture practitioners' propensity to prefer decisions that are favourable for the client (i.e., reduce taxable income) rather than report conservatively on ambiguous reporting issues. This is consistent with research finding that most practitioners assume their clients prefer tax saving strategies, even when not explicitly requested (Christensen, 1992; Stephenson, 2007).

In a review of tax practitioners' decision-making, Roberts (1998) reiterated the effects of advocacy in practice. As indicated by the studies he reviewed, advocacy attitudes produce confirmation bias when practitioners evaluate case law, weigh evidence, and decide how much effort to expend to find support for pro-client positions. Kadous et al. (2008) demonstrated the complexities of client preference by explicitly manipulating the client's level of tax practice risk. They found that the extent to which information search is confirmatory is influenced by a balance of incentives including client risk and the regulatory environment. Specifically, confirmation bias was not exhibited when their high-risk clients had a history of aggressive reporting and litigation. In contrast, confirmation bias was documented for the moderate-risk clients. Bobek et al. (2010) found that advocacy attitude is specific to the client's characteristics. That is, when told that the client has previously proposed questionable tax-saving strategies and has been audited by the IRS, resulting in sizable adjustments and penalties, tax practitioners are less likely to be an advocate for the client. This is consistent with research finding that when the client engagement is described as high-risk, auditors are less likely to permit an aggressive reporting decision (Hackenbrack & Nelson, 1996). Furthermore, Cuccia et al. (1995) reported that when a client is described as risk-averse, practitioners are not as likely to recommend an aggressive pro-client tax position. In sum, the studies have shown that auditors and tax practitioners are more likely to permit aggressive reporting when the engagement risk is moderate.

The distribution of tax clients who are highly risk-seeking or highly risk-averse is not known, but utility theory assumes that most taxpayers prefer to pay less tax than more. Hence, consistent with prior studies, the current study examines confirmation bias for moderate-risk clients with the assumption that saving taxes by reducing taxable income is a favourable outcome for the typical client (i.e., not excessively risk-seeking or risk-averse).

Whether measured as advocacy attitude or confirmation bias, the tax literature is replete with studies acknowledging practitioners' tendency to favour pro-client judgments (Ayres et al., 1989; Johnson, 1993; Cloyd and Spilker, 1999), and the same is true for the auditing literature in which auditors often demonstrate a bias toward a position that is favourable for their client (Hackenbrack & Nelson, 1996; Kadous, Kennedy & Peecher, 2003; Moore et al., 2006).



Relevant to the present study, Cuccia et al. (1995) found that tax practitioners attempted to conform to client preferences by interpreting vague verbal standards as support for their aggressive decisions. In addition, when the threshold standards were described in numerical terms (e.g., 60% required level of support), practitioners interpreted the evidential support as being more favourable in order to justify an aggressive position. Similar work by Johnson (1993) found that tax judgments were influenced by confirmation bias. Her study labelled prior court cases as either favourable or unfavourable evidence for a client's preferred position on an ambiguous tax issue. Half of the practitioner sample was told cases A and C (B and D) constituted favourable (unfavourable) evidence, but the others were told that the same cases, A and C (B and D) were unfavourable (favourable). Participants perceived the cases that were labelled as favourable to be more applicable to their client's situation, and they interpreted those cases as supportive regardless of the unsupportive details and facts specified within each case. The study documented the propensity to overweight additional facts and evidence as favourable to a client-preferred position, even when the underlying facts were not supportive.

Bonner (1994) explains that technically correct solutions can be confused by uncertain information as well as the number of criteria on which to evaluate a decision. The implication is that practitioners are prone to confirmation bias when given a myriad of facts to consider, as the cognitive effort needed to process a large quantity of information is likely to be reduced by substituting a less effortful heuristic such as confirmation bias.

To avoid preparer penalties on aggressive reporting positions, US tax law standards typically require a 'more likely than not' weighting of the judicial evidence and legislative guidance. In both the Cuccia et al. (1995) and Johnson (1993) studies, the amount of information given to all participants was substantially equal, and most responded that the presented information met the 'more likely than not' tax criterion. The current study extends the test of confirmation bias to tax decisions in which a case with an ambiguous outcome involves additional but inconclusive details about the facts of the client's transaction. It is posited that the decision-maker will interpret the case scenario with detailed information as more supportive of the client-preferred outcome, relative to the same scenario that is stripped of most of the irresolute information. If the case is presented without the detail, then there is less information to interpret as supporting evidence (i.e., there is less evidence to 'confirm'). Consequently, confirmation bias should be weaker in the less detailed context. This leads to our first hypothesis:

**HYPOTHESIS 1.** *In the absence of motivating professional standards, a case with additional, inconclusive, information is more likely to result in confirmation bias (a more pro-client decision) than a case with substantially less information.*

### 2.3 Effect of integrity on confirmation bias

Under the AICPA Code of Conduct (2010), Section 54 reinforces integrity as an ethical guideline for CPAs. The rules of the Code are intended to help CPAs interpret the entire body of principles- and rules-based guidance. In fact, one of the initiatives associated with the Sarbanes-Oxley Act of 2002 is the proposed adoption of principles-based technical accounting standards, which is expected to dampen aggressive financial reporting related to undue reliance on form over substance (Agoglia, Douppnik & Tsakumis, 2011). To date, however, there is scant evidence on the effects of integrity, a

principles-based ethical standard required by the Code. Given the complexity of current tax laws, expertise in interpreting government rules and regulations is a valued service. Even though integrity is sanctioned by the profession, its effectiveness remains a question for empirical research. As noted by Jones, Massey and Thorne (2003), the AICPA's professional code could either enhance or limit auditors' ethical sensitivities, and they call for research to identify ways in which the Code can enhance ethical awareness and behaviour. Herron and Gilbertson (2004) compared the effects of principles-based and rules-based ethical guidelines, as student participants were given either excerpts from AICPA Section 50 with a principles-based focus or from the rules-based AICPA Section 101, each pertaining to independence in the auditor-client relationship. This treatment did not significantly affect the participants' decisions regarding a specific transaction: whether an auditor's independence would be violated if the hypothetical audit engagement were accepted when the client was already a tax and consulting client. They did find, however, that participants with high-level moral reasoning (based on DIT scores) were influenced only by the principles-based excerpts and those with low-level moral reasoning were influenced only by the rules-based excerpts. Applying this result to practice is difficult as each practitioner's level of moral reasoning is not known. The implication is that in the presence of rules-based guidance only, even very ethical decision-makers lose focus on the primary objective. The trend toward principles-based accounting reinforces the need for decision-makers to stay focused on the primary objective. Hence, the current study examines the effect of exposure to principles-based standards on tax decision making.<sup>7</sup>

Sunder (2010) discusses the balance between uniform, written rules-based standards and principles-based social norms, arguing that the latter should be given a stronger role in restoring personal and professional responsibility in accounting. Both Sunder (2010) and Jones et al. (2003) assert that more research is needed to identify ways in which the Code can enhance ethical awareness and behaviour. Both the 2010 and 2014 versions of the Code require members to make professional reporting decisions that are accurate, honest, and candid, which is consistent with Nelson's (2003) call for principles-based technical standards that require a 'true and fair' override to incentivise more accurate reporting. Libby and Luft (1993) argue that the professional code was created with the goal of influencing professional judgments, and they argue that even minimal exposure to professional guidelines could influence ethical judgments. The present study tests the effectiveness of Section 54 as a principles-based standard that could diminish confirmation bias by providing an explicit prime for this professional code.

Klayman (1995) asserts that little is known about the connection between motivation and the cognitive processes that result in confirmation bias. By including professional ethical standards in our model, the desire to see a client-favourable solution must be weighed against the desire to satisfy a professional ethics standard. Hence, the question is whether the confirmation bias from the detailed case will persist when participants

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<sup>7</sup> The Defining Issues Test (DIT), developed by Rest (1979), is widely used to measure one's current ethical stage of development. The test incorporates more personal dilemmas than business dilemmas, and this has led numerous researchers to question its application in business settings (Weber, 1990; Trevino, 1992; Fisher, 1997; Doyle, Frecknall-Hughes & Glaister, 2009; Bailey, Scott & Thoma, 2010). Shawver and Sennetti (2009) created eight business scenarios and asked a total of 24 questions regarding intended behaviour. Subject responses on the DIT were significantly correlated with only three of the 24 items. The researchers concluded that the DIT may be appropriate for measuring absolute levels of cognitive, ethical development, but applied business dilemmas are more appropriate for measuring relative effects on professionals' business decision-making.



are exposed to the integrity standard. If exposure to the integrity standard is a robust effect, then it should negate any increased tendency, conscious or unconscious, to recommend the deduction when additional but inconclusive details are added. Thus, the standard calling for candid and honest judgments may lead participants to interpret the additional information with more scepticism. On the other hand, if the effect of confirmation bias related to the added details is dominant (per H1), then the pro-client tendency should persist. Hence, the presence of a confirmation bias driven by additional detail is examined to test whether the confirmation bias expected in the absence of a professional standard (H1) is mitigated in the presence of a professional standard for integrity, which leads to our second hypothesis:

*HYPOTHESIS 2. The increased propensity for confirmation bias (a pro-client decision) in a detailed context is less likely in the presence of a professional standard for integrity than in its absence.*

## 2.4 Effect of advocacy on confirmation bias

The AICPA has repeatedly confirmed the right of CPAs to be advocates for their tax clients, and Rule 102-6, originally drafted in 1995, of the 2010 AICPA Code sanctioned the need for taxpayer advocacy. Traditionally, client advocacy has been associated with tax services, although Rule 102-6 condones advocacy for accounting, financial reporting, and tax. It is important to note that when acting as a client advocate, the 2010 and 2014 versions of the Code, both require members to maintain objectivity and integrity, with the narrative for Rule 102-6 thus implying that advocacy is justifiable only when the technical guidance is unclear. Several behavioural studies have shown that attitude toward advocacy correlates with preferences for client-favourable outcomes (e.g., Johnson, 1993, Levy, 1996, Davis & Mason, 2003), but Barrick et al. (2004) did not. When advocacy has been tested by manipulating client preference, research tends to show a positive association as practitioners strive to help their clients, provided the hypothetical client is not too risk-seeking or too risk-averse (Hackenbrack & Nelson, 1996; Cuccia et al., 1995; Kadous et al., 2008). This suggests that the presence of a professional standard sanctioning advocacy might reinforce the pro-client tendency.

Both confirmation bias and an advocacy standard could lead to a more pro-client outcome when there is scant or substantial information that is inconclusive. Kunda (1990), however, asserts that motivated reasoning toward preferred outcomes has boundaries, caused by internal or external constraints, which result from certain thresholds or limits. For example, personal norms, societal norms, professional standards, and/or sanction threats could restrict the amount of risk-seeking or risk-taking behaviour that is acceptable to the decision-maker. If by definition the issues are truly ambiguous (lack sufficient support), then confirmation bias can move the decision to a favourable position when it is allegedly not supportable. At some point, this bias crosses the line and becomes unjustifiable.

This raises the issue that advocacy, as a standard allowed by the AICPA, could infer a professional ceiling for the extent of advocacy that would be consistent with the professional standard. In essence, although the standard permits advocacy, the standard itself cautions against exceeding certain boundaries.<sup>8</sup> Moreover, merely being labelled

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<sup>8</sup> See n 5, above.

as a professional standard in the AICPA Code of Conduct conjures up behaviour that is fitting for a professional.

In sum, prior studies have documented the role of advocacy in confirmation bias, treating advocacy either as an internalised belief (i.e., using the Mason & Levy (2001) scale) and/or as an outcome arising from an explicit manipulation of client preference. The current study, however, presents advocacy as delineated by professional guidelines. It should be noted that the wording in Rule 102-6 is guarded (e.g., ‘...*may be requested by a client*...’). The purpose of the present study is not to induce aggressive, pro-client decisions. If Rule 102-6 acts as a boundary because of its recognised position as a part of the AICPA Code of Conduct, then its presence would mitigate the expected confirmation bias coming from the added context. Thus, the following hypothesis is tested:

**HYPOTHESIS 3.** *The increased propensity for confirmation bias (a pro-client decision) in a detailed context is less likely in the presence of a professional standard for advocacy than in its absence.*

### 3. RESEARCH DESIGN AND METHOD

We test our hypotheses in a mixed between- and within-subjects design, varying between participants the primed professional standard at three levels (none, integrity, and advocacy standard). The level of contextual information presented in a case scenario is varied within subjects at two levels (low vs. high).

#### 3.1 Participants

On the first day of their introductory tax class, undergraduate students (mostly seniors) from a large, public, Midwestern US university were asked to participate in the present study. Given the lack of research on the effectiveness of current wording in the AICPA standards for advocacy and integrity, the use of students allows for a more homogenous group to test for any differential impact of the treatment variables, and it reduces the likelihood of rival effects such as prior work experience and/or organisational climate.

The use of student participants as surrogates has been a controversial area in behavioural tax and accounting research. For instance, Marriott (2014) challenges the wisdom of using student subjects as a proxy for adult taxpayers, and she suggests studies should justify their sample choices, per the preceding paragraph, and note the inherent limitations, especially if tax policy research questions are being examined. In terms of whether student participants are appropriate surrogates for practising accountants, there is encouraging evidence from Liyanarachchi and Milne (2005) and Mortensen, Fisher and Wines (2012) who find advanced level accounting students to be useful surrogates for accounting practitioners in decision-making tasks.

Interestingly, a prior study by Pflugrath, Martinov-Bennie and Chen (2007) found that codes of ethics did impact experienced auditors but did not affect student participants. The researchers asserted that the amount of content from a professional code may have been too much material for students to grasp in an abbreviated experiment. The present study merely provides brief excerpts from the AICPA Code of Conduct. This increases the likelihood that the treatment effects will be sufficiently understood by the homogenous student groups. Experienced professionals will likely have pre-conceived notions and/or workplace norms regarding the interpretation of these standards and/or how the classification between owner compensation and return of capital should be

distinguished. Consequently, research involving professionals may require a different treatment effect than a mere presentation of the stated standard. In contrast, for student participants, a brief exposure to the principles-based standards is expected to be sufficient (Pinsker et al., 2009). Although external validity for professional decision-making will be limited, the cost of using student participants for this baseline study is much less than using experienced professionals.

### 3.2 Case scenarios and dependent variable

In the present study we test the impact of exposure to professional standards for advocacy and integrity on two hypothetical cases involving the same ambiguous tax guidance, one with scant details and the other with substantially more information. The order was not randomised because if the second case was presented first, participants would likely assume, consciously or unconsciously, that the low-context case has similar facts as the first case. Thus, the low-context case with few details was presented first, followed by the high-context case. After responding about deductibility on each of the two cases, additional information was solicited regarding tendency to be an advocate, as well as background questions including items such as gender, age, work experience, and beliefs about the AICPA standards.

The first case, shown in Appendix 1, is a substantially-condensed version of the second case. The second case, in Appendix 2, was adopted from prior research (Pinsker et al., 2009). These researchers used the case because of the inconclusive facts and ambiguous regulatory guidance, and they indicated that the facts given were insufficient to support either deductible compensation or return of capital. The authors did not report the mean responses, but they did report that the outcomes significantly differed by one's professional role (e.g., tax professionals were more likely to recommend a tax deduction than were the auditors).

The decision context concerns a payment of \$600,000 to the corporation's president and whether it should be deducted as compensation for services rendered or not deducted because the excessive payment is a return of capital to a shareholder. The case includes favourable and unfavourable, relevant and irrelevant information that could be perceived as support for the deduction. The present study operationalises context specificity, in that the high-context case contains more irresolute details that give the decision-maker an opportunity to interpret them in their preferred direction. Johnson (1993) using the same tax issue as the present study and Pinsker et al. (2009), but with different facts, reported that professionals found the high-context case to be ambiguous, and on average, the professionals indicated a 56% likelihood that the deduction would be allowed in a court of law.

The primary dependent variable in the present study is the change toward a pro-client judgment when a variety of potentially pro and con information is added to the case. The debatable item involves the deductibility of a capital expenditure. Both cases use a seven-point scale, ranging from -3 for 'definitely no deduction' to 3 for 'definitely a deduction', following Pinsker et al. (2009) who used the same case and response scale. Klayman (1995) explained confirmation bias as the extent to which the confirming tendency exceeds an appropriate amount, yet he acknowledges that appropriateness is a vague measure. For the purpose of the current study, we operationalise it as a judgment that significantly differs from a neutral response (that neither favours nor disfavors the related tax deduction). It should also be noted that the dependent variable represents an intended behaviour. Our study assumes that the manipulation for ethical standards will

affect moral reasoning, and that moral reasoning correlates with intended and actual behavior (Fishbein & Ajzen, 1975; Trevino, 1992).

### 3.3 Independent variables

Each participant was randomly assigned to a treatment group – either the advocacy group (Advocacy), integrity group (Integrity), or a control group. Participants first received their respective treatment scenarios prior to reading the two cases and making separate reporting recommendations about deducting the payments to the company president/shareholder. Participants in the control group (without a manipulation) began by responding to the low-context case. After indicating their decision, they were told to proceed to the next case. Before responding to both cases, participants in the respective advocacy and integrity groups first read a targeted standard: AICPA Rule 102-6 for the advocacy group and Section 54-Article III.02 for the integrity group. The primed conditions were extracted directly from the AICPA Code of Conduct (2010):<sup>9</sup>

‘Integrity requires a member to be, among other things, honest, and candid ... Service and the public trust should not be subordinated to personal gain and advantage. Integrity can accommodate the inadvertent error and the honest difference of opinion; it cannot accommodate deceit or subordination of principle.’ [Integrity]

‘A member or a member’s firm may be requested by a client ... to act as an advocate in support of the client’s position on accounting or financial reporting issues, either within the firm or outside the firm with standard setters, regulators, or others.’ [Advocacy]

## 4. ANALYSIS AND RESULTS

A total of 73 students attending the first day of tax class completed the questionnaires in January 2011 on a voluntary and anonymous basis. The average age of the participants was 21.58 ( $SD = 1.98$ ) with a range from 19 to 35. The majority, 56.9%, was 21, and most were seniors. In addition, most were males, 67.1%, similar to the overall male to female population in the university’s business school. In the Advocacy group, one-third of participants had heard of the AICPA Code of Conduct, but none indicated any familiarity with Rule 102-6. The mean score was 1.96 ( $SD = 0.98$ ) on a scale from 1-7 in which 1 indicates ‘very unfamiliar’. In the Integrity group, 39% had heard of the Code, but only 11% indicated any familiarity with Section 54 (scores of 5-7), and the mean score was 2.43 ( $SD = 1.57$ ). These responses indicate that the respondents were quite unfamiliar with the targeted professional standards, and, therefore, were unlikely to have strong, preconceived notions about the standards. This suggests that student participants are appropriate participants as the goal of this study is to examine how the current language in the professional standards differentially affects judgments associated with the confirmation bias coming from additional, but

<sup>9</sup> Note that in presenting the Advocacy prime, we did not present to participants the final paragraph of Rule 102-6 which states: ‘Moreover, there is a possibility that some requested professional services involving client advocacy may appear to stretch the bounds of performance standards, may go beyond sound and reasonable professional practice, or may compromise credibility, and thereby pose an unacceptable risk of impairing the reputation of the member and his or her firm with respect to independence, integrity, and objectivity. In such circumstances, the member and the member’s firm should consider whether it is appropriate to perform the service’. It is possible that if this had been presented to participants, it may have changed their perception of whether integrity was more important than advocacy.

inconclusive, details. Seasoned professionals are likely to have more varied exposure to and strong *a priori* beliefs regarding these standards as well as stronger positions regarding the technical rules for classification of compensation to shareholders and dividend payments. If confirmation bias varies in the presence or absence of professional standards for the novice group, then future research should pursue this line of research on experienced professionals to investigate whether the hypothesised effects of the standards persist when respondents have strong internalised beliefs regarding the professional standards and/or the nature of the ambiguous technical issues.

To ensure that the randomised treatments were effective, we tested for group differences on advocacy scale, interpretation of the advocacy standard, interpretation of the integrity standard, and relative importance of the two standards for tax decision-making. Regarding the advocacy scale, responses to all five questions (with anchors of 1 for disagreement to the statement favouring advocacy and 7 for agreement) were averaged for an overall advocacy attitude. Cronbach's alpha for reliability among the five questions is 0.881 as presented in Table 1. The scaled average has a mean of 4.49 ( $SD = 1.36$ ). It should be noted that a midpoint of 4 (for lack of agreement or disagreement) would represent the lack of a strong tendency in either direction. Thus, overall, most had a very slight tendency toward being an advocate. This average response is slightly less aggressive than prior research using professionals (Pinsker et al., 2009 reporting a mean of 4.35: 3.90 for auditors and 4.90 for tax professionals; Bobek et al., 2010 reporting an overall mean score of 4.95 by tax professionals). When comparing the control group responses to the advocacy and integrity groups, the respective means ( $SD$ ) on the advocacy scale were 4.81 ( $SD = 1.51$ ), 4.36 ( $SD = 1.14$ ), and 4.41 ( $SD = 1.49$ ). These means did not significantly differ ( $F(2,65) = 0.669$ ,  $p = 0.516$ ). The implication is that our participants have similar attitudes regarding their own inclination toward advocacy; thus, the randomisation to groups is successful on this attitude.

Similarly, we tested for mean differences among the randomised groups on belief about the advocacy standard (see Panel B in Table 1). The respective means ( $SD$ ) for the control, advocacy, and integrity groups were 5.00 ( $SD = 1.46$ ), 5.04 ( $SD = 1.13$ ), and 5.14 ( $SD = 1.21$ ). These means did not significantly differ from each other ( $F(2,70) = 0.086$ ,  $p = 0.918$ ). Thus, the overall mean of 5.07 ( $SD = 1.23$ ) illustrates that most believed the advocacy standard only slightly favoured agreement with a pro-client position. The respective means ( $SD$ ) on attitude toward the integrity standard were, respectively, 3.94 ( $SD = 1.55$ ), 3.78 ( $SD = 1.16$ ), and 3.36 ( $SD = 1.42$ ), which were not significantly different ( $F(2,70) = 1.184$ ,  $p = 0.312$ ). Lastly, the respective means ( $SD$ ) on which standard is more important in tax decision-making were 4.39 ( $SD = 1.82$ ), 4.15 ( $SD = 1.73$ ), and 4.54 ( $SD = 1.73$ ) indicating no significant differences ( $F(2,70) = 0.341$ ,  $p = 0.712$ ). The implication of these results is that most subjects agreed, 71.2%, that the advocacy standard slightly favours a pro-client position; that integrity tends to result in a less favourable client position (53.4% agreed), and that a slight majority, 50.7%, agreed that integrity is a more important standard than advocacy for tax decision-making (35.6% responded that advocacy is a more important standard than integrity). Table 1 presents demographics, advocacy attitude scale and attitudes toward the professional standards.<sup>10</sup>

<sup>10</sup> Prior literature suggests that these variables might influence tax decision-making. Although gender has frequently been identified as a significant factor in explaining non-compliance tendencies, prior research is mixed (Conroy, Emerson & Pons, 2010; Mayhew & Murphy, 2009; Shaub, 1994; Eynon, Hill & Stevens,



**TABLE 1: Demographics and Attitudes for Advocacy and Integrity**

<b>Panel A: Demographics (n = 73)</b>			
Age	Mean (SD) = 21.58 (1.98)		
Gender	Percent Male/Female = 67.1/32.9		
<b>Panel B: Attitude</b>			
<i>ADVOCACY/INTEGRITY</i>	Mean (SD)	Less Favorable to Client (%)	More Favorable to Client (%)
“Do you believe this AICPA guideline requires you to be more favorable (pro client) or less favorable (less pro client) in your interpretation of the tax reporting standards? <sup>a</sup> ”			
AICPA Code, Rule 102-6(2) [Advocacy]	5.07 (1.23)	13.7	71.2
AICPA Code, Section 54-Article III(2) [Integrity]	3.66 (1.37)	53.4	21.9
<i>RELATIVE INFLUENCE</i>	Mean (SD)	Rule 102-6 (%)	Section 54 (%)
“Based on the above two standards, which one would be more influential, to you, in most tax decisions? <sup>b</sup> ”			
	4.36 (1.74)	35.6	50.7
<i>ADVOCACY SCALE</i>	Mean (SD)	% Disagree	% Agree
Average Response to Five Statements <sup>c</sup>			
	4.49 (1.36)	33.8	60.3

## Notes:

<sup>a</sup>Responses ranged from +1 (much less favorable) to +7 (much more favorable). Responses of 1-3 (5-7) were coded as Less (More)

Favorable to Client.

<sup>b</sup>Responses ranged from +1 (Rule 102-6) to +7 (Section 54). Responses of 1-3 (5-7) indicate the view that Rule 102-6 (Section 54) would be more influential.

<sup>c</sup>The five statements (e.g., “I feel I should apply ambiguous professional guidelines to the client’s benefit”) were adopted from Mason and Levy (2001) and Pinsker et al. (2009). Responses ranged from +1 (Strongly Disagree) to +7 (Strongly Agree). Average responses of under (over) +4.0 were coded as Disagree (Agree).

1997; Radtke, 2000). Similarly, age has been found to correlate with compliance. Conroy et al. (2010) found that age is a significant factor in explaining compliance, suggesting that levels of compliance increase with age. Pflugrath et al. (2007) found that experience rather than age could affect compliance levels. However, Emerson et al. (2007) reported that ethical attitudes did not differ with age or experience. Lastly, based on research previously presented in our literature review, advocacy has been identified as a strong predictor variable for tax reporting decisions. Consequently, we used the condensed five-question advocacy scale used by Pinsker et al. (2009) to measure a participant’s agreement/disagreement with whether the client is entitled to favourable treatment when tax laws are unclear or ambiguous. A longer version of the advocacy scale was originally developed by Mason and Levy (2001).



Prior to testing our hypotheses, we examined the relationship between the dependent variables for pro-client decision-making and the background information for gender, advocacy scale, age, and attitude toward the standards for advocacy and integrity. These variables were not significantly correlated with the dependent variables, nor did they affect the results presented in this article. Therefore, the background variables are not included as control variables in the models presented below.

The dependent variables range from -3 for 'no deduction' to 3 for 'definitely taking the deduction'. Descriptive statistics for the recommended reporting decisions and their statistical tests are presented in Table 2. On the first scenario with scant detail, the average response across all three groups is 0.26 ( $SD = 1.63$ ). Those responding less than zero, indicating it is not deductible, comprised 35.6% of the participants, whereas 50.7% of the participants tended to recommend the expenditure as deductible (scores greater than zero). For the second scenario, which contained substantially more detail, the average response across all three groups is 0.42 ( $SD = 1.86$ ). Most, 56.2%, indicated that the expenditure should be deductible, and 39.7% indicated that it should not be deductible.

**Table 2: Reporting Decisions and Gain Scores**

<b>Panel A: Reporting Decisions<sup>a</sup></b>			
Treatment <sup>b</sup>	Case <sup>c</sup>	Mean (SD)	N
Control	Low Context	-.22 (1.80)	18
	High Context	1.11 (1.91)	18
	Total	.44 (1.95)	18
Integrity	Low Context	.46 (1.60)	28
	High Context	-.07 (1.88)	28
	Total	.20 (1.75)	28
Advocacy	Low Context	.37 (1.52)	27
	High Context	.48 (1.72)	27
	Total	.43 (1.61)	27
Total	Low Context	.26 (1.63)	73
	High Context	.42 (1.86)	73
	Total	.34 (1.74)	73

  

<b>Panel B: Gain Scores<sup>d</sup></b>	
Treatment	Mean (SD)
Control	1.33 (2.68)
Integrity	-.54 (2.17)
Advocacy	.11 (2.29)

## Notes:

<sup>a</sup>Reporting Decision: The dependent variable measures whether the participant believed the ambiguous item should be deducted on the tax return. For both cases a seven-point scale was used, anchored at “-3” for definitely not deducting and “3” for definitely deducting.

<sup>b</sup>Treatment: Before reading the two hypothetical tax cases and making tax reporting recommendations, participants first responded either to questions about the advocacy or integrity professional standards (the control group did not receive either of these primes).

Advocacy – AICPA Rule 102-6.

Integrity-- AICPA Section 54-III.02

<sup>c</sup>Case:

Low Context – A condensed version of the below High-Context case. See Appendix

A.

High Context - Adopted from a case used by Johnson (1993) and Pinsker et al. (2009),

Appendix B.

<sup>d</sup>Gain Score: Response to Low-Context case subtracted from response to High-Context case

In order to examine the overall difference between the two cases, the responses were collapsed across all treatment groups. A paired t-test was then computed for a within-subject analysis for responses to the low and high-context cases. The t-test is not significant (means of 0.26 for the low-context case and 0.42 for the high context,  $t(72) = 0.58$ ,  $p = 0.565$ ) for the combined groups of participants, suggesting that the added

context does not increase the likelihood of a confirmation bias. However, as discussed below, the paired t-test results are dependent on the randomly assigned manipulations.

The principal test for each hypothesis is shown in Table 3. Hypothesis 1 predicts that, in the absence of a professional standard, participants are more likely to exhibit confirmation bias in a high context case. This is operationalised in the present study as a higher propensity toward pro-client decisions when the context has substantial data relative to a context with scant details. To test this hypothesis, only the participants in the control group were analysed. A paired t-test is appropriate for this situation, as each participant responded to both cases. Table 2 shows the mean response for the context with scant detail as  $-0.22$  ( $SD = 1.80$ ), but the mean response on the detailed case is  $1.11$  ( $SD = 1.91$ ). The result from the t-test, shown in Table 3, is significant ( $t(17) = 2.11$ ,  $p = 0.025$ ), which supports our primary hypothesis (H1) for confirmation bias related to the detailed context.<sup>11</sup>

**Table 3: Hypothesis Tests**

H1: In the absence of motivating professional standards, a case with additional, inconclusive information is more likely to result in confirmation bias (a more pro-client decision) than a case with substantially less information.

Test: Paired t-test comparing reporting decisions on the Low- and High-Context cases in the Control group

Low Context	High Context	t (df)	p	H1
-0.22	1.11	2.11 (17)	.025	Supported

H2: The increased propensity for confirmation bias (a pro-client decision) in a detailed context is less likely in the presence of a professional standard for integrity than in its absence.

Test: Independent-samples t-test comparing the gain score in the Control group to the Integrity group

Control	Integrity	t (df)	p	H2
1.33	-.54	2.60 (44)	.007	Supported

H3: The increased propensity for confirmation bias (a pro-client decision) in a detailed context is less likely in the presence of a professional standard for advocacy than in its absence.

Test: Independent-samples t-test comparing the gain score in the Control group to the Advocacy group

Control	Advocacy	t (df)	p	H3
1.33	.11	1.64 (43)	.055*	Supported

\* $p = .035$  using a Mann-Whitney U Test ( $U = 165.5$ ).  
Variables are defined in Table 2.

To test the second hypothesis, we repeat the paired t-test that was used on our control group to measure the first hypothesis regarding this type of confirmation bias. Although

<sup>11</sup> One-tailed (two-tailed) tests are used for directional (nondirectional) predicted effects.

the first hypothesis indicated that the added detail leads to a higher pro-client preference for the control group, this result does not hold in the presence of AICPA professional standard for integrity. The means for the integrity group of 0.46 ( $SD = 1.60$ ) for the low context and -0.07 ( $SD = 1.88$ ) for the high context, presented in Table 2, do not significantly differ ( $t(27) = 1.307$ ,  $p = 0.202$ ). This result suggests that the added detail does not result in increased confirmation bias for the high-context case in the presence of the integrity standard.

Rather than rely only on a comparison of separate t-tests, we also calculate the gain scores for each participant's response to the high-context case reduced by his/her response to the low-context case. The gain score represents one's incremental tendency to make a pro-client decision on the high-context case (decreased tendency would be a negative score). The outcome variable is then compared between the control group and the group exposed to the professional standard for integrity.

The results are presented in Table 3 and show that the incremental pro-client effect (confirmation bias related to the added detail) significantly differs among the groups. The control group is significantly more likely to demonstrate this bias (mean gain score of 1.33,  $SD = 2.68$ ) than those in the integrity group (mean gain score of -0.54,  $SD = 2.17$ ;  $t(44) = 2.60$ ,  $p = 0.007$ ). This result supports our second hypothesis that confirmation bias driven by a high-context will be mitigated in the presence of the professional standard for integrity.

#### 4.1 Additional analysis on Integrity

Although the main purpose of this study is to examine whether professional standards can mitigate the confirmation bias associated with additional but inconclusive details, we also test whether there is a direct effect of the standards on each reporting decision, both the low and high-context cases. If the current language of the AICPA standard is sufficiently clear and the strength of message is adequate, then it is likely that exposure to the standard will impact subsequent decision-making. The current study tests whether exposure to AICPA Section 54 for integrity results in less pro-client decisions relative to a control group without exposure to this professional standard. The means in Table 2 show that in the low-context case the Integrity group approximated a neutral position with slight leaning toward a deduction 0.46 ( $SD = 1.60$ ), and the mean for the control group was -0.22 ( $SD = 1.80$ ), which approximates a neutral position more than an aggressive one. The difference is not statistically significant for the low-context case. When the integrity standard is tested on the high-context (detailed) case, the respective means are -0.07 ( $SD = 1.88$ ) in the presence of an integrity standard, indicating a neutral position, and 1.11 ( $SD = 1.91$ ) in the absence of this standard, indicating a leaning toward the pro-client position for the control group. The result is significant at  $p = 0.023$  ( $t(44) = 2.068$ ). This suggests that exposure to Section 54 for integrity may be effective in lessening the likelihood of a pro-client position in a high context case. Unanswered is the reason for a stronger effect on the detailed case than the case with scant detail. Based on the premise of the first hypothesis, additional information, relevant or not, is expected to be interpreted as additional support. Under the presence of an integrity standard that requires 'honest' and 'candid' reporting, the extra information may have been viewed more sceptically, which led to a lack of perceived support for the pro-client position. Conversely, those in the control group had no exposure to the standards, and the implication is that the lack of professional constraints allowed the participants to overvalue the added detail as support for the deduction.

The third hypothesis examines whether the AICPA standard for advocacy has a similar effect on confirmation bias as the integrity standard did. Although Rule 102-6 sanctions advocacy, it is a subset of the professional Code and it allows for justifiable pro-client positions. We use a paired t-test to see if participants were significantly more likely to make pro-client judgments in the high-context case. The respective means of 0.37 ( $SD = 1.52$ ) and 0.48 ( $SD = 1.72$ ) on the low-context and high-context cases for the advocacy group do not significantly differ ( $t(26) = 0.252$ ,  $p = 0.803$ ). This suggests that in the presence of the AICPA's professional advocacy standard, the added detail does not increase the inclination toward confirmation bias (similar to the insignificant result reported earlier for the integrity standard).

To examine the relative effect of a more pro-client response related to the high-context case, we compare the gain score for more pro-client responses between the control group and the advocacy group. As seen in Table 3, the difference is marginally significant ( $t(43) = 1.638$ ,  $p = 0.055$ ) as the advocacy group has a mean gain score of 0.11 ( $SD = 2.29$ ) compared to the control group mean of 1.33 ( $SD = 2.68$ ). Using a Mann-Whitney U Test, which is a more robust test for ordinal data (Howell, 2013) such as Likert scales (also used for comparison with the integrity group), the p-value is 0.035 ( $U = 165.5$ ). These results provide support for the third hypothesis. The effect for advocacy is weaker than the integrity results, perhaps because the standard implicitly calls for caution merely because it is identified as an AICPA rule. To measure an overall effect for any 'standard', we combine the responses of the advocacy and integrity groups and then compare them to the control group. There is a significant overall effect ( $t(71) = 2.434$ ,  $p = 0.009$ ), which indicates that when professional standards are not explicitly communicated, confirmation bias is more likely on a high-context case than one with scant detail. The implication is that when professional standards are adequately communicated, they could mitigate some of the confirmation bias associated with the conscious or unconscious over-reliance on the additional information.

#### 4.2 Additional analysis on Advocacy

Similar to the direct effects of exposure to the integrity standard presented above, we test the direct effect of exposure to the AICPA advocacy standard on the low and high context cases. Based on the previously presented results in which the standard led to a reduced propensity toward confirmation bias when the additional, inconclusive evidence was included, we examine whether the advocacy standard led to a more pro-client decision in each context. This would be expected if the wording of the standard is sufficiently strong in its sanctioning of pro-client positions. If the standard is perceived as weak support or cautious regarding when it is appropriate to be an advocate, then the level of pro-client judgments may reflect a status quo similar to the control group. Table 2 indicates that the mean for the control group on the low-context case was -0.22 ( $SD = 1.80$ ), and the mean for the Advocacy group was 0.37 ( $SD = 1.523$ ), which is not a statistically significant difference ( $t(43) = 1.189$ ,  $p = 0.241$ ). Similarly, when the advocacy standard is tested on the high-context case, with respective means of 1.11 ( $SD = 1.91$ ) and 0.48 ( $SD = 1.72$ ), the result is not statistically significant ( $t(43) = 1.153$ ,  $p = 0.255$ ). The lack of a significant effect could be a function of a weak manipulation or a threshold for the amount of aggressive reporting that the control group and advocacy group are willing to exhibit. Actually, Rule 102-6 states that a client 'may' request a member to be his/her advocate. This passive verb is not a strong manipulation for the encouragement of advocacy; merely allowing it when the guidance is ambiguous. We chose to use the exact wording of the current professional standards, as any change

in the wording would not be testing the current standards. Future studies may want to test how different wording or frames could alter the impact of an advocacy standard. In addition, the mere presentation of advocacy as a sanctioned professional standard may infer a higher threshold of professional conduct.

## 5. SUMMARY AND CONCLUSIONS

Although calls exist for more emphasis on accounting professionalism (e.g., Wyatt, 2004), studies such as Johnson (1993) and Cuccia et al. (1995) find that professionals, who are given access to supporting and non-supporting evidence, demonstrate a systematic confirmation bias by overweighting the positive evidence as support for the preferred outcome. Our study differs from prior research on confirmation bias primarily because: 1) it examines confirmation bias in the presence and absence of standards of professional conduct issued by the AICPA, and 2) it examines the effect of supporting and non-supporting evidence in the early stage evaluation of client-specific facts. The current study examines the relative effect of the absence or presence of additional but irresolute information rather than favourable and unfavourable judicial precedents. This allows us to test whether confirmation bias is exacerbated by the quantity of irresolute information. If confirmation bias is demonstrated in the early stage of synthesising the client's facts, this would suggest the possibility of a biased judgment (by the client and by the practitioner) that precedes the next level of potential bias at the legislative and judicial research stage. Our results show that in the absence of professional standards for integrity and advocacy, confirmation bias derived from additional inconclusive information leads to a more pro-client tax outcome than does the same tax issue without that additional information. In contrast, when either the advocacy or integrity standard is explicitly presented to the participants, the outcome does not significantly differ between the contexts with and without the additional information. The implication is that the professional standards tend to mitigate the confirmation bias that is associated with a propensity to misinterpret additional information as support.

The current study also investigates whether the explicit presence of AICPA standards for integrity and advocacy results in simple, direct effects on the tax judgment for recommending an uncertain deduction. Consistent with Nelson's (2003) assertion that a principles-based technical standard could be used to incentivise accurate reporting, we find significant effects for a principles-based code of conduct (integrity standard). As posited, less pro-client tax judgments are reported when this standard is explicitly presented, relative to the absence of the integrity standard for a control group. This holds true, however, only in the high-context case, which represents a more realistic tax case than does the low-context case. Recall that it is the high-context case in which the added detail is expected to exacerbate confirmation bias in the absence of this professional standard.

Prior literature finds that advocacy is correlated with pro-client tax reporting, suggesting that encouraging advocacy could lead to intentionally aggressive reporting behaviour. When advocacy is reinforced as a standard, it raises a concern that some might interpret the standard too liberally. On the other hand, the narrative surrounding Rule 102-6 suggests that advocacy can be justified but only when the technical guidance is unclear.

This study finds that the advocacy standard is not associated with significantly more favourable client decisions. The lack of an aggressive effect could be driven by the passive language in the written standard (i.e., '...may be requested by a client...') or by the fact that any standard sanctioned by the AICPA is assumed to embody professional



constraints. Future research will need to examine how stronger language would impact decision-making when the context is ambiguous.

In the long term, the effect of advocacy and integrity standards may be more affected by organisational culture than sporadic or serendipitous primes of the disparate signals. On the other hand, if new entrants to the profession have had educational training on these counterbalancing objectives and current professionals participate in continuing education on the profession's interpretation of these guidelines, then professionals may be better equipped to apply the standards in practice.

As mentioned in section 3, using students as participants in behavioural tax and accounting research is controversial and this study is limited in its generalisability as students were used as participants. The trade-off is that the study's internal validity is strengthened. Bryant, Stone and Wier (2011) observed no difference in ethical position between accounting students and practising accountants, although the graduate students in their analysis may have had more accounting education than the advanced undergraduates used in the current study. In addition, student participants may not be familiar with the difference between principles and rules as they relate to the structure of the AICPA Code, which may have contributed to the results found in this study. Accordingly, while a similar investigation should be created and administered to experienced tax professionals, the current study serves as a building block and benchmark for future work. This type of study has additional benefits in that the results can influence how new entrants to the profession as well as current accounting students could be educated about the effects of acting in accordance with professional standards.

Another limitation of this study is the use of context-specific tax issues to evaluate what the appropriate response or judgment should be, and it is possible that the results of this study (and prior studies as well) are dependent on the specific cases used. We examine one ambiguous tax issue, but we vary the level of detail in that case that could be misconstrued as positive or negative support.

Aside from implications for standard-setters in the tax profession, accounting firms, and educators, our study also has implications for tax administrations such as the IRS and other agencies. Confirmation bias can result in tax positions being recommended and taken that are not warranted, or perhaps even desired by client taxpayers, with Bobek et al. (2010) noting client advocacy should be 'within the bounds of the law'. While regulation of the tax profession has received attention recently (e.g., Soled & Thomas, 2017; Walpole & Salter, 2014), tax administrations should be aware of research literature on client advocacy, confirmation bias, and the effect of codes of professional conduct on the judgments and decisions of tax practitioners. Future research should continue to examine the balancing effects of professional standards for advocacy and for professional integrity on a variety of tax issues. Furthermore, such research should address how differing principles- and rules-based standards for integrity/objectivity and advocacy affect tax and financial compliance and planning decisions. Future research should also examine whether the effect of the standards holds when incentives for client preferences, sanctions, risk, and client importance are explicitly manipulated. Lastly, research should address how the tax profession can best ensure that its members will readily recall and apply such standards.

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## 7. APPENDICES

### Low-Context Ambiguous Case

Your client's corporate tax return has not yet been finalized. An expenditure of \$600,000 has created a controversy as to whether this payment, which was to the president of the corporation, should be deducted as compensation. The concern is whether it is reasonable compensation for services to a major shareholder (requiring its deduction) or a non-deductible payment for return of capital to a shareholder. If it is deducted on your client's tax return, the tax liability will be much lower as the net taxable income will be significantly reduced.

In this situation, you need to make a recommendation. How strongly do you think that the \$600,000 paid to an owner of Smith and Brown, Incorporated should be deducted on the tax return (reducing the company's net taxable income)?

-3	-2	-1	0	1	2	3
Definitely Do Not Deduct			Neutral			Definitely Deduct

### High-Context Ambiguous Case

#### *Background*

Your new client, Johnson and Sons, Inc., is a family-owned corporation engaged in the waste pickup and disposal business that performs trash-hauling services pursuant to contracts with various municipalities. The business was incorporated in 1970 by Mr. and Mrs. Johnson. In 1990,

after the death of Mr. Johnson, the board of directors (composed of Mrs. Johnson and her four sons) elected Mrs. Johnson president of the company. Each son is an officer with the title “vice president” and one son also holds the title of “secretary and treasurer.” During the past five years, the stock of Johnson and Sons, Inc. has been owned by Mrs. Johnson (46 percent) and her sons (13.5 percent each).

### ***Duties***

Mrs. Johnson works 40 or more hours per week, and her duties consist of (1) keeping the financial books, (2) reviewing bills and signing checks, (3) attending board meetings and voting on major proposals put forward by her sons, who are responsible for the day-to-day operations of the business, (4) engaging in extensive public relations activities, and (5) acting as co-guarantor (together with her sons) of bank loans to the company for major capital expenditures.

### ***Financial Information***

Some financial information for Johnson and Sons, Inc. for the current taxable year is provided:

Gross Sales	\$25,400,000
Net Income	\$ 155,000
Officer Compensation*:	
Mrs. Johnson	\$ 600,000
Son 1-4	\$ 375,000 (each)

\*Payments for salaries have been relatively consistent for several years.

### ***Relevant Tax Law***

Under Section 162(a)(1) of the Internal Revenue Code, there is a two-pronged test for the deductibility of amounts purportedly paid as salaries or other compensation for services: The payments must be (1) “reasonable,” and (2) in fact payments purely for services.

Courts have sometimes applied a five-factor test in considering the reasonableness of compensation, including (1) the employee’s role in the company, (2) a comparison of the compensation paid to similarly situated employees in similar companies, (3) the character and condition of the company, (4) whether a conflict of interest exists that might permit the company to disguise a dividend payment as deductible compensation, and (5) whether the compensation was paid pursuant to a structured, formal, and consistently applied program.

**Please answer the following question by circling a number on the scale:**

How strongly do you feel that the \$600,000 paid to Mrs. Johnson should be deducted on the tax return (reducing the company’s net taxable income)?

-3	-2	-1	0	1	2	3
Definitely Do Not Deduct			Neutral			Definitely Deduct



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