ASIAN JOURNAL OF ACCOUNTING PERSPECTIVES

DOI: 10.22452/AJAP.vol15no1.3
Vol. 15, No. 1, p. 49–66
28 February 2022

THE IMPACT OF HIERARCHY OF INFORMATION AND ETHICAL PREDISPOSITION ON AGGRESSIVE REPORTING

LIM YING ZHEE[1,*]
ANNA AZRIATI CHE AZMI[2]

Received: 25 January 2021 / Revised: 1 November 2021 / Accepted: 27 January 2022

ABSTRACT

Research aim: The objective of this study is to examine whether ethical predisposition and hierarchy of information can explain the aggressive reporting by managers.

Design/methodology/approach: A 3×2 between-subjects experiment manipulating the hierarchy of information (principle, principle + criteria, and principle + criteria + indicators) and ethical predisposition (utilitarianism + formalistic) was conducted to examine their joint effect on managers' decision making.

Research Findings: Statistical results revealed that ethical predisposition influenced aggressive reporting in the presence of more levels in the hierarchy of information in accounting standards.

Theoretical contribution/ Originality: This study proposes that in drafting accounting standards, standard setters should strike a balance in how much information is to be provided. Our study also provides evidence that accounting standards should not be too general or too specific. Moving towards either one of these two extremes could lead to undesired reporting patterns by accountants.

Practitioner/ Policy implication: The findings of the study provide useful insights into how individuals' attributes affect the interpretation of the different levels of hierarchy of information in accounting standards. The findings are beneficial for standard setters in drafting accounting standards.

Research limitation: Owing to factors such as time limit and appropriate length of the instrument, the study had to exclude some specificity of the standard, such as definitions and descriptions of the standard, from the instrument. It is possible that the incomplete information might have influenced the participants in making their judgment. Besides, since accounting students who returned from practical training were used as proxies for chief finance officers (CFOs), the viewpoints or opinions on how the decision was made might not be in line with actual practice because they might not serve in a decision making capacity during the practical training.

Keywords: Aggressive Reporting, Formalistic, Information Hierarchy, Utilitarian
Type of article: Research Paper
JEL Classification: M3

1. Introduction

Given that accounting standards can be used as tools to defend and legitimise reporting decisions (Shakespeare, 2020; Trisanti, 2019; Donelson et al., 2012; Jamal & Tan, 2010; Kang & Lin, 2011; Wang, 2010), financial reporting decisions by managers are a function of the different levels of information prescribed in the accounting standards (Fang et al., 2018; Agoglia et al., 2011; Cuccia et al., 1995; Jamal & Tan, 2010). Previous studies focused on the effect of principle-based versus rule-based standards, demonstrating that different types of standards

[1] Faculty of Business, Multimedia University, Jalan Ayer Keroh Lama, 75450, Bukit Beruang, Melaka. [2] Department of Accounting, Faculty of Business and Economics, University of Malaya, 50603 Kuala Lumpur, Malaysia.
Lim Ying Zhee, yzlim@mmu.edu.my; Anna Azriati Che Azmi, annaazriati@um.edu.my
* Corresponding author: L. Y. Zhee

would result in different reporting behaviours. However, it might not be meaningful to categorise the accounting standards into these two extremes since a pure set of principle-based standards cannot exist as accounting standards are getting more complex, thus blurring the lines between the two (Morais, 2020; Bennett et al., 2006). Hard rules will always underpin the accounting standards at the operationalisation level, with soft rules intermingling to provide further guidance at the application level. While hard rules are normally very prescriptive, the interpretation and application of soft rules require judgment. Meanwhile, Alexander (1999) suggested that information can be divided into three hierarchy levels, namely types A, B, and C. The Type A level of information sets the framework for decision making. The Type B level of information, which bridges Type A and Type C levels of information, tends to be more precise and spells out the principles or standards that will guide the assessment and decision-making process. The third level of information, Type C, is normally more precise than the previous two and is meant to facilitate specific measurements for the expected problems on a checklist basis. Morais (2020), Bennett et al. (2006), and Alexander (1999) argued that rather than examining the effect of principle-based versus rule-based accounting standards on financial reporting decision making, how different levels of information in the current principle-based accounting standards that come in hard rules and soft rules might affect managers' financial reporting decision making is something that warrants further scrutiny.

While studies in this area are sparse, potential insights could be drawn from strands of studies which focused on how different levels of precision in the standards would affect judgment and decision-making. Prior studies documented that standards that have greater detail could serve as "safe harbours" that deter managers from the act of defending and justifying their reporting decisions. The decisions may not be in the best interest of the stakeholders while still meeting the accounting standard requirements (Morais, 2020; Donelson et al., 2012; Fornaro & Huang, 2012; Schipper, 2003). The more detailed the accounting standard, the more it could encourage a higher level of manipulation by managers, hence more opportunistic actions (Cameran et al., 2014; Chen et al., 2007; Juslin & Olsson, 2004; Lin et al., 2012). In contrast, a less detailed standard leaves room for judgment as it focuses on substance-over-form reporting, thus generally being associated with less aggressive financial reporting behaviours (Brochet et al., 2013; Brown & Wright, 2008; Fornaro & Huang, 2012; Wang, 2010). At one end of the spectrum, more information could help clarify the general principles that may promote the exact behaviour recommended by the guidelines (Donelson et al., 2012; Fornaro & Huang, 2012; Schipper, 2003). At the other end of the spectrum, detailed information could be used as an instinctive measure and checklist for opportunistic decisions (Agoglia et al., 2011; Tan & Jamal, 2010; Clor-Proell & Nelson, 2007).

This dichotomy in financial reporting decision making could be affected by an individual's ethical attributes. Studies have found that individuals with different ethical attributes or moral awareness will react and behave differently despite being in similar situations (Valentine, & Godkin; 2019; Xu & Ma, 2015; Raglan & Schulkin, 2014; Wiltermuth et al., 2013; Ruedy & Schweitzer, 2010). Several studies (e.g., Nalukenge et al., 2018; Young, 2020; Bauer et al., 2020) have observed various aspects of ethical attributes such as group ethics, social identification, and mental

release as possible determinants of financial reporting decision making. Using the model of cognitive ethical decision making and behaviour and individuals' ethical predisposition (Rest et al., 1999; Brady & Wheeler, 1996; Rest, 1986), the current study contributes to the literature by examining ethical disposition, focusing on how individuals perceive rules and guidelines in their ethical decision making. Literature on cognitive framework and decision making mentions that there is a difference in the decision-making patterns of the formalistic and the utilitarian (Dong et al., 2021; Reynolds, 2006; Ishida et al., 2016). The formalistic focuses more on rules and guidelines, whereas the utilitarian focuses less on them (Reynolds, 2006; Perasall, 2007; Wiltermuth et al., 2013; Brady & Wheeler, 1996). However, it is unclear how the different levels of hierarchy of information influence the formalistic and utilitarian decision making. Based on this reasoning, the level of detail in accounting standards may affect the ethical predisposition of individuals, leading to different reporting practices.

Our study aims to examine the decision-making patterns of the formalistic and utilitarian based on the different levels of hierarchy of information in the accounting standards of International Financial Reporting Standards (IFRS). This study contributes to the literature in two ways. First, instead of comparing the effects of principle-based against rule-based accounting standards on managers' decision making as done by most of the prior studies, our study emphasises positioning both elements at different levels of the hierarchy of information. This positioning follows Alexander (1999) in conceptualising the hierarchy of information. While principle-based standards are argued to be able to constrain aggressive reporting behaviours, different levels of prescription given in a set of principle-based standards might affect managers' reporting decision differently. When a set of principle-based standards prescribes the principle of treating an accounting transaction only generally, it might leave room for managers to interpret the standards and apply them in a manner to attain certain reporting objectives. When moving to a higher level of hierarchy of information, i.e., criteria or indicators level, the accompanied prescription in the standard will be at a higher level than the previous level hierarchy of information.

Secondly, following the argument in the strand of principle-based versus rule-based accounting standards, different levels of the hierarchy of information as noted in the accounting standards of IFRS could lead to different reporting behaviours (Morais, 2020). A standard will then be interpreted and applied based largely on the individual who applies it and whether the individual is driven by an intended financial reporting agenda (Morais, 2020; Backof et al., 2016; Jamal & Tan, 2010; Nobes, 2005). Combining the strand of studies on hierarchy of information with individuals' ethical predisposition (formalistic or utilitarian), this study aims to extend the current literature on how ethical predisposition affects the decision-making process given different levels of hierarchy of information in the standards.

Our results revealed that ethical predisposition influenced aggressive reporting in the presence of more levels in the hierarchy of information in accounting standards. Since managers are responsible for preparing the financial statements, the findings of the study provide useful insights into how different levels of hierarchy of information are interpreted differently by individuals with different attributes. These findings will serve as useful input to standard setters in

drafting or revisiting the accounting standards in the future. While it is attested that different levels of information will affect managers differently, it is important to ensure that accounting standards strike a balance between the inclusion of general principles and bright lines, as moving towards either one of these two extremes might promote more unintended financial reporting behaviour. Besides, the findings are important to various industry constituents as knowing the factors contributing to managers' aggressive financial reporting behaviour will ensure a proper oversight role is in place.

The remainder of this paper is organised as follows. The next section presents the literature on hierarchy of information to explain the varying details of the accounting standards. The section also highlights the hypothesis development, elaborating on the hypothesised influence of ethical predisposition at different levels of detail in the accounting standards. The subsequent section is the research methods and results section. The paper ends with the discussion and the conclusion.

2. Literature Review and Hypothesis Development

2.1. Hierarchy of Information

Research works in the field of financial accounting and reporting divide the types of accounting standards into two broad categories, namely rule-based and principle-based standards. Rule-based standards are accompanied by detailed bright-lines with less room for professional judgment, whereas principle-based standards are pillared by general accounting principles and promote the exercise of professional judgment (Morais, 2020; Cuccia et al., 1995; Schipper, 2003; SEC, 2003). However, Bennett et al. (2006) argued that making a distinction between these two types of accounting standards is not meaningful as the classification is subject to various interpretations and not backed by proper definitions. Besides, after analysing Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) standards, Bennett et al. (2006) concluded that a pure set of principle-based standards does not no exist. Regardless of the FASB or IASB standards, hard rules underpin the accounting standards at the operationalisation level complimented by soft rules which provide further guidance and require judgment.

Alexander (1999), on the other hand, argued that information can be arranged into three levels. The first level of information, Type A, is defined as the fundamental reasoning that sets the framework for decision making. It is normally precise in nature, and clearly defined principles will set the basis for the second level of information. This second level, Type B, serves as the recommended standards or elements that are used for making judgments or assessments. It is the intermediary level which is able to integrate the generalizability of Type A information with Type C information. The third level of information, Type C, then facilitates specific measurements for the expected problems on a checklist basis.

By integrating the arguments by Bennett et al. (2006) and Alexander (1999), it is argued that the information in an accounting standard can be classified into these three types of information. This information will then form a hierarchy with three levels encompassing, from top to bottom, Type A, Type B, and Type C. Moving from top to bottom, the amount and precision of information increases, in

line with the different levels of the hierarchy of information. Applying this hierarchy of information to the accounting standards, it is noticed that it is common for accounting standards to provide a general principle first before specifying a more detailed set of prescriptions. An accounting standard will thus be constituted by the Principle (Type A of information), followed by Criteria for application (Type B of information) and Indicators or Checklist (Type C of information) for determining the adequacy of the application of Type B information.

More specifically, in integrating the hierarchy of information with the level of information in accounting standards, we focus on the concept of control. The concept of control is a controversial topic in accounting standards, and it has long been discussed in the criterion applied for preparing consolidated financial statements (Baker et al., 2010; Stenka & Taylor, 2010) and the recognition of revenues (Lim et al., 2017). This study followed Lim et al. (2017) in focusing on the concept of control, which is covered in IFRS 15. Additionally, this study emphasises the varying levels of detail provided by IFRS 15, that is, how an entity shall only recognise the revenue when the control of goods or services has been transferred to the customer and when the performance obligation(s) in the contract has been fulfilled. A review of the IFRS 15 standards revealed that the boards have prescribed the concept of control. This is further enhanced with the principles that are illustrated with examples and indicators. They are used as measures to assist managers in improving the application of the concept of control. Based on this, we argue that the prescriptions provided are in line with the hierarchy of information. Starting with a general principle of control (para 31, IFRS 15), the board has further provided the criteria for assessing whether control has passed (para 33 and 34, IFRS 15). This is then followed by the indicators (para 38, IFRS 15), which prescribe when control is deemed to have passed to the customers. The inclusion of indicators is to facilitate the application of the accounting standard as it is common for standard setters to provide additional information in the form of decision aids. Some of the decision aids are illustrated through Examples, Indicators, Fact-weighting guidance, and Checklist (Rinsum et al., 2017; Capps et al., 2017; Clor-Proell & Nelson, 2007). It is thus argued that the higher the hierarchy of information, the more specific the standard (rule) is.

As discussed earlier, financial reporting decision making by managers is a function of the different levels of information prescribed in accounting standards (Agoglia et al., 2011; Satava, Caldwell, & Richards, 2006; McLean & Elkind, 2003). Many studies have documented that the different levels of information in accounting standards will affect managers' judgment and decision making differently (Gold et al., 2020; Chen et al., 2007; Fornaro & Huang, 2012; Nelson, 2003). Using the same lens, we argue that different levels of the information hierarchy in the accounting standards will affect managers differently. When the prescription is less precise, i.e., only the general principle of control is prescribed, managers will have the opportunity to exercise their professional judgment. On the other hand, if the prescription is at the highest level of the information hierarchy where detailed indicators are included, less professional judgment is required from the managers. Prior studies on the precision of accounting standards provide mixed findings regarding the impact of different levels of information precision on managers' reporting patterns, as personal attributes and

institutional factors might affect the way the standards are interpreted (Backof et al., 2016; Nobes, 2005; Jamal & Tan, 2010).

2.2. Ethical Disposition and Hierarchy of Information

The cognitive process of ethical decision-making by Rest et al. (1999) suggests that ethical judgment begins with ethical or moral awareness and that it is influenced by individuals' moral preferences (Dong et al., 2021; Reynolds & Ceranic, 2007). Ethical predisposition is generally referred to as the cognitive framework of individuals when making moral decisions, and it is advocated that patterns or rules of behaviour will influence an individual's moral behaviour (Brady & Wheeler, 1996). There are two frameworks — formalism and utilitarianism. The former emphasises the importance of patterns and rules of behaviour in determining the appropriate moral behaviour, whereas the latter focuses on the consequences of a situation (Reynolds, 2006). It is argued that the moral act optimises or has a better impact on an individual's moral decision making. By combining Rest et al.'s (1999) ethical judgment framework and Brady and Wheeler (1996), this study focuses on how individuals who adopt formalism and utilitarian views perceive the hierarchy of information in accounting standards when it comes to ethical decision making. The rationale for making this assumption is that our study proposes that the different levels of hierarchy of information in accounting standards may influence choices if a person holds strongly to a certain ethical predisposition. Pearsall and Ellis (2011) explained that the formalist focuses on a set of consistent ethical principles which are grounded in culture, tradition, and formal rules. These rules are the ones that guide their actions. Likewise, Wiltermuth et al. (2013) noted that people with a formalistic ethical predisposition focuses on rules and principles. They may find the consequence of an action irrelevant if it does not adhere to rules or principles.

Mulder et al. (2015) also found specific rules to be better than general rules in encouraging people to become more obedient. This is because people can justify their unethical behaviours when the rule is particularly vague or uncertain. Establishing more specific rules instead of general rules will reduce the possibility of people rationalising their unethical behaviours. An illustration was provided in the case of an organisation that had stated the specific rule of not accepting gifts. This rule is likely to reduce the employees' tendency to accept gifts. In contrast, a more general rule stating a prohibition of activities that engage in a conflict of interest may not produce the same effect. Principle-based standards are viewed as less precise standards, as it provides managers with the opportunity to exercise judgment based on a predetermined position (Pan & Patel, 2016; Jamal & Tan, 2010). In this regard, managers are thus required to exercise their judgment when interpreting the standards and to apply consistency within this context of interpretation. Sometimes, this may not be achievable. This argument is supported by previous studies which stated that individuals may exercise their judgment aggressively based on their incentives (Trisanti, 2019; Libby & Luft, 1993; Bhimani, 2008; Jamal & Tan, 2010).

Looking at the above scenario in the context of ethical predisposition, it would seem that an individual with a strong formalistic ethical disposition is likely to abide by the guidelines or rules. In other words, a formalistic individual is less inclined to follow their predetermined stance before making a decision. The

reason is that the formalistic individual is not concerned with the possible benefits to be gained for themselves or others. The reward and cost of behaving in an ethical manner does factor into the decision of the formalistic individual due to their tendency to follow guidelines and rules. With more specific rules (a higher hierarchy of information), however, there will be less flexibility for interpretations. Consequently, the formalistic individual is more likely to behave according to the specific rules. Comparatively, the utilitarian would not consider the rules and guidelines in assessing the morality of a decision. Rather, they would consider what provides the greatest utility or benefit, but it does not mean that the utilitarian ignores the rules. Thus, the utilitarian is less susceptible to the detailedness of rules and guidelines. Based on this, it is hypothesised that:

H1a: Those with more inclination towards a formalistic ethical disposition will show a tendency to report less aggressively when accounting standards increase in the level of hierarchy of information.

H1b: Those with more inclination towards a utilitarian ethical disposition will show no differences in the aggressiveness of reporting when accounting standards increase in the level of hierarchy of information.

3. Research Methodology

Following most prior experimental studies, this section discusses the experimental design, experimental procedure, variables, and sample of the study (Agoglia et al., 2011; Jamal & Tan, 2010; Libby et al., 2002).

3.1. Study Design

The study used a 3×2 between-subjects design with hierarchy of information (principle, principle + criteria, and principle + criteria + indicators) and ethical predisposition (utilitarian + formalistic) as the independent variables. This study was developed based on Lim et al. (2017) as it suits the context of the current study which aims to understand what influences people to use information for decision making. The current study was modified slightly so as to fulfil the research objectives. However, the context of the case, which required participants to assume the role of the company's future chief financial officer (CFO) and make a financial reporting decision as to whether to recognise revenues from a software development contract, remained intact.

In their study, Lim et al. (2017) manipulated the implementation guidance by varying the inclusion or exclusion of indicators in the excerpt of IFRS 15 as the instrument. Their participants were given the excerpt of IFRS 15, which prescribes the concept of control (para 31, 33 and 34), together with a list of indicators that further prescribe when the control of goods or services has been transferred to the customers (para 38). In the condition without indicators, the same excerpt (minus the indicators) was also provided to the participants.

Since the current study argues that different levels of hierarchy of information may affect a person's information processing and decision-making process differently, the excerpt of IFRS 15 included was modified. It is argued that para 31 of IFRS 15 serves as the principle in prescribing and briefing what constitutes control. Para 33 and 34, on the other hand, provide further descriptions of control and further define the context where control exists. This information serves as the

second level (intermediary) of the hierarchy of information. To assist with the application of the concept of control, para 38 provides the indicators as to when control is considered as has been transferred and when the performance obligation is deemed satisfied. This information is considered as the third level of the hierarchy of information because it specifies and details out the information needed to support the set of principles and criteria for decision making. With that, participants were given an excerpt of IFRS 15 with varying conditions: (1) with the principle only (para 31); (2) with the principle and criteria (para 31, 33, and 34); and (3) with the principle, criteria, and indicators (para 31, 33, 34, and 38).

The ethical predisposition manipulation varied between formalistic and utilitarian. Participants were classified into the group they belonged based on the scores gathered from the vignettes adopted from Brady and Wheller (1996). Further discussion on ethical predisposition is provided in section 3.4.3 of the paper.

3.2. Data Collection and Sample of the Study

The study adapted the hypothetical case by Lim et al. (2017) with slight modifications. The final instrument consisted of two parts. Part A consisted of a hypothesis case with the excerpt of IFRS 15 manipulated according to the different levels of hierarchy of information. Participants were required to assume the role of CFO and make the financial reporting decision as to whether the revenue from the contract should be recognised. Part B consisted of questions on ethical predisposition, demographic data, and manipulation checks.

A total of 130 instruments were distributed. Participants were accounting students in a private university in Malaysia who had undergone their practical training. They were recruited on a voluntary basis. They did not receive any marks for participation but were given a small gift. The experiment was conducted during the lecture hour, and participants were briefed on the administration process of the instrument before they were allowed to start the experiment.

Many prior studies have evidenced that there is no different between accounting students and practising accountants if the participants were carefully selected (Chen et al., 2015; Mortensena et al., 2012; Mohamed Saat et al., 2012; Walters-York & Curatola, 2000). As suggested by Mortensena et al. (2012), knowledge plays an important role in relation to the surrogation decision. The knowledge gained during the practical training will improve accounting students' reasoning process and then elevate the students' ethical decision-making ability (Mohamed Saat et al., 2012). Hence, accounting students with practical training experience are suitable to be the surrogates for accounting practitioners as they would have the relevant accounting knowledge in handling the task given.

Aligned with the arguments by Mortensena et al. (2012) and Mohamed Saat et al. (2012), 65 participants were excluded from the study as they were still in the preliminary stage of study and had not undergone practical training. In addition, one participant did not complete the instrument and hence, was excluded from the sample of the study. Such exclusion is required from the final sample so as to reduce any biased or distorted result. The final sample of the study thus consisted of 64 final year accounting students at a private university in Malaysia who had just returned from their practical training. They consisted of 15 males (23%) and

49 females (77%) who were recruited from among students who were taking the financial statement analysis course[1].

Of the final sample of 64 participants, 22 were randomly assigned with the IFRS 15 excerpt that came with the first level of the hierarchy of information (principle). The remaining 42 were then randomly placed into two groups of 19 and 23 participants who were then assigned the second (principle + criteria) and third (principle + criteria + indicators) level of hierarchy of information, respectively.

3.3. Procedures

The participants were also provided with a package containing two envelopes labelled "(A)" and "(B)". Envelope (A) contained the general instructions, a hypothetical case, an excerpt of IFRS 15, and questions in response to the hypothetical case. Envelope (B) contained questions related to mindfulness and ethical predisposition, a set of manipulation check questions, and demographic questions. Participants were then instructed to complete the tasks in envelope (A) before proceeding with envelope (B). They were further informed not to refer to envelope (A) while administering the materials in envelope (B). Adherence to this procedure was closely monitored by the researchers. On average, the participants took 35 minutes to complete the tasks provided. The breakdown of the time was 20 minutes to read the case, 10 minutes to answer the questionnaire, and 5 minutes to be debriefed. The debriefing was done after all the participants had completed administering their tasks and had returned the envelopes.

3.4. Variables

The variables examined in this study were aggressive reporting, hierarchy of information, and ethical predisposition. The measurement used for each variable is discussed in this section.

3.4.1 Aggressive Reporting

Conceptually, aggressive reporting is defined by the study as recognising higher revenue that may not reflect the substance of the transaction (Frank, Lynch, & Rego, 2009). Similar to the work of Agoglia et al. (2011), aggressive reporting was measured by asking the participants the extent they thought revenue should be recognised. The participants were required to indicate their opinions based on a Likert scale ranging from 0=*less likely* to 100=*very likely*. According to the hypothetical case, the substance of the transaction indicates that the customer has not gained control of the hardware, that is, control has not been passed from the company to the customer. Hence, the revenue recognition should be deferred until control has passed to the customer. Thus, a response closer to 0 indicated that the respondent was less aggressive in reporting whereas a response closer to 100 implied more aggressive reporting.

[1] According to the Ministry of Education (2019), the population of undergraduates in Malaysia by gender consists of 39% males and 61% females. The sample of this study, however, consists of slightly higher female participants. Such sample is not expected to affect the findings of the study, as Shawver and Clements (2015) found no significant difference between gender when it comes to financial reporting decision making.

3.4.2. Hierarchy of Information

Participants were provided with the excerpt of IFRS 15. Participants in the principle condition (Level 1 of the hierarchy of information) were given only para 31 of IFRS 15, which prescribes the general principle of revenue recognition, i.e., to recognise revenue when control of the asset has been passed to the customer. Level 1 has the least detail according to the accounting standard. Participants in Level 2 of the hierarchy of information were given para 31, 33, and 34 of IFRS 15, which provide the principle + criteria condition. Two paragraphs with further description of what control is and the conditions when control is deemed transferred were added. In addition, Level 3 of the hierarchy of information provides participants with the principle + criteria + indicators condition, together with para 38 which comes with specific indicators identifying when control is deemed transferred. This level has the highest detail according to the accounting standard.

3.4.3. Ethical Predisposition

To measure ethical predisposition, the tendency for participants to be either formalistic or utilitarian was assessed using the eight vignettes adopted from Brady and Wheeler (1996) as it is evidenced that the vignettes are correlated with the traits associated with ethical predisposition, either formalistic or utilitarian (Treviño et al., 2006). Each vignette was followed by four statements. The participants were asked to rate each statement on a scale from 1 to 7 to indicate the extent to which the statement fit (or did not fit) their way of thinking. Each of the four statements was constructed to represent one of four options: (i) utilitarian rationale and solution, (ii) formalistic rationale and solution, (iii) utilitarian rationale and formalistic solution, and (iv) formalistic rationale and utilitarian solution. Then, each participant's score for each of the solution-rationale combinations was computed. Thus, the score for each solution-rationale combination is the average of the person's score for all eight vignettes. Following that, two independent coders used these scores to classify the participants into those with tendencies towards utilitarianism or formalism. Additionally, discussions were held between the coders to reach common consensus in the event of disagreements on the classification (Xu & Ma, 2015).

3.5. Data Analysis

Descriptive analysis was performed on the different ethical predisposition and hierarchy of information groups manipulated. The mean scores and standard deviations of each manipulated group were determined to gauge the potential differences among the scores of aggressive reporting for each manipulated group. ANOVA analysis was then performed to validate the hypotheses of the study. This was followed by post-hoc test to further analyse the interactive effects found.

4. Results

4.1. Manipulation Check

Manipulation check was conducted using a set of questions provided in Part B of the instrument. Participants were asked to indicate the levels of hierarchy of

information they were provided with, based on the excerpt of the IFRS 15 attached and assigned. A total of 16 participants did not answer the manipulation check questions correctly. An independent *t*-test result revealed that there was no difference in terms of the mean values of aggressive reporting between those who answered the manipulation questions correctly and those who did not (t=−.626, p=0.537). Regardless of whether they passed or failed the manipulation check questions, all the participants were included into the final sample as the *t*-test result indicated no significant difference between the two groups (t=1.445, p=0.153).

4.2. Hierarchy of Information, Ethical Predisposition, and Aggressive Reporting

The study examined the participants' level of familiarity with IFRS 15 and their perception of the clarity of the concept of control prescribed in that standard. Their level of familiarity was measured using a 9-point Likert scale ranging from not familiar (not clear) to very familiar (very clear). A mean value of 4.73 was recorded for the participants' level of familiarity with IFRS 15, indicating that most of the participants were familiar with IFRS 15. Besides, the participants also claimed that the concept of control in the standard is clearly prescribed (mean=5.66). These findings imply that the financial reporting decision made by the participants was not subject to the risk of unfamiliarity with the standard or unclear concept of control. A two-way ANOVA was then performed to test the hypotheses, and the results are presented in Table 1.

Panel A of Table 1 presents the descriptive statistics for the different manipulated conditions of the study. Panel B presents the ANOVA results derived for the effect of ethical predisposition and hierarchy of information on aggressive reporting, while Panel C shows the planned contrast result. The 2-way ANOVA result also shows a significant interaction effect between hierarchy of information and ethical predisposition at the 10% significance level (F=2.731, t=.0074)[2]. Planned contrast analysis was referred so as to improve the interpretation of the interaction effect between hierarchy of information and ethical predisposition. Panel C shows that for the formalistic group, when a less detailed standard (principle only) was given, they tended to report more aggressively then when a more detailed standard (principle + criteria) was given (p=.034). Interestingly, when given the most detailed standard (principle + criteria + indicators), the formalistic group was more inclined to make more aggressive reporting compared with when given with the less detailed standard (p=.044).

Table 1 Descriptive and univariate analyses

Panel A: Descriptive analysis			
	Ethical Predisposition (EP)		
Hierarchy of Information	**Utilitarian (N=13) Mean (SD)**	**Formalistic (N=51) Mean (SD)**	**Total**
Level 1 (N=22)	58.33 (11.69)	77.19 (14.14)	72.05 (15.79)
level 2 (N=19)	57.50 (12.58)	62.33 (22.11)	61.32(20.27)
Levels 3 (N=23)	80.00 (0.00)	64.00 (23.03)	66.09 (22.10)
	63.08 (13.78)	67.65 (21.01)	66.72 (19.75)

[2] The significance of ANOVA is determined in a two-tailed test as it is invalid to halve the significant value of *F* (Field, 2013).

Table 1 (Continued)

Panel B: Univariate analysis					
	Sum of Squares	**df**	**Mean Square**	**F-value**	**p-value**
Intercept	171641.705	1	171641.705	472.257	.000
Hierarchy	890.4870	2	445.244	1.225	.301
EP	63.603	1	63.603	.175	.677
Hierarchy x EP	1985.456	2	992.728	2.731	.074*
Error	28354.118	61	464.822		

Panel C: Planned contrast	**p-value**
Level 1x Utilitarian *vs* Level 2 x Utilitarian	.946
Level 1 x Utilitarian *vs* Level 3 x Utilitarian	.113
Level 2 x Utilitarian *vs* Level 3 x Utilitarian	.128
Level 1 x Formalistic *vs* Level 2 x Formalistic	.034**
Level 1 x Formalistic *vs* Level 3 x Formalistic	.044**
Level 2 x Formalistic *vs* Level 3 x Formalistic	.799

Note: This table presents the results of univariate factorial analyses of covariance with aggressive reporting as the dependent variable. Hierarchy takes the value of 1 for the condition in which the participants were given only the principles (level 1), the value of 2 for the condition in which the participants were given the principles and criteria (level 2), and the value of 3 for the condition in which the participants were given the principles, criteria, and indicators (level 3). *significant at 10% level of significance, **significant at 5% level of significance.

This finding is illustrated in the interactive graph presented in Figure 1. This finding provides evidence to support H1a. On the other hand, the planned contrast test in Panel C shows that hierarchy of information had no impact on the utilitarian group. This finding supports H1b.

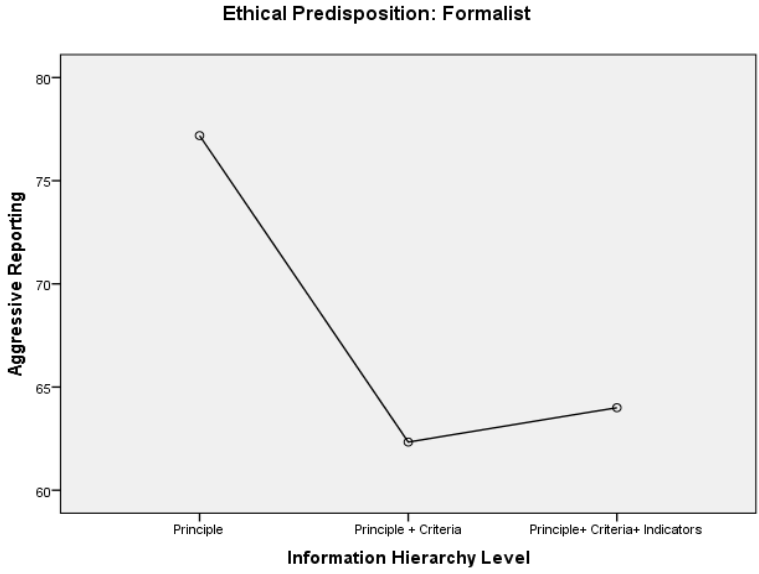

Figure 1 Hypothesised Aggressive Reporting Means

5. Discussion and Implications of the Study

The findings of this study confirm the argument that different levels of hierarchy of information affect accountants' decision making on aggressive reporting differently. Our study has confirmed that the formalistic manager tends to make less aggressive reporting when the accounting standards are more specific. This outcome thus contributes to the formalistic decision-making literature (e.g., Reynolds, 2006; Brady & Wheeler, 1996; Perasall & Ellis, 2011; Wiltermuth et al., 2013; Ishida et al., 2016) by offering the evidence that a more specific rule would enable the formalistic accountant to make more ethical decisions (i.e., report less aggressively). We were also able to show that the utilitarian managers are less influenced by the hierarchy of information in accounting standards. While obeying rules is seen as vital to the formalistic value, such patterns do not hold for the utilitarian. One possible explanation for the utilitarian managers' lack of concern with rules is that they are more concerned with the consequences of an action towards people (Brady & Wheeler, 1996). Thus, we propose that future studies extend our research by exploring the ethical conflict that managers might face between their concern for self and their concern for others in their reporting practices. One possible way to do this is by considering the ethical conflict faced by management between benefiting oneself and benefiting shareholders. Management could be provided with a scenario whereby additional motivation or potential loss could materialise for them in making their decisions.

The main theoretical implication of this study is that it proposes to examine principles and rules as a hierarchy of information in a standard. This is in contrast to past accounting studies (e.g., Agoglia et al., 2011; Tan & Jamal, 2010; Clor-Proell & Nelson, 2007) that tended to focus on the different types of accounting standards, such as principle-based versus rule-based standards that affect accountants' financial reporting decision making. By examining principles and rules as part of a hierarchy of information, we were able to examine the effect of the combination of both principles and rules on managers' decision making, thus proposing a combination of principles and rules which would improve the reporting by financial managers. The second theoretical implication of this study is that ethical predisposition, which is strongly connected to how individuals use principles and rules in their ethical decision making, is an important factor in managers' decision making. Our study extends the studies of Young (2020) and Bauer et al. (2020) by incorporating another important element in examining aggressive reporting, namely individual attributes.

The findings of the study also have useful practical implications. Since accounting standard setters are revisiting most of the important standards in the last two decades, the findings of the study provide important insights to the standards setters on how different levels of information in the accounting standards might influence judgment and decision making. It is thus proposed that, in drafting accounting standards, the standard setters need to strike a balance in how much information is to be provided. Our study also provides evidence that accounting standards should not be too general or too specific. Moving towards either one of these two extremes could lead to undesired reporting patterns among accountants with different attributes. The findings are also important to regulators, audit oversight boards, and audit committees. Relevant rules and regulations need to be established as intervention in ensuring that people with

different ethical dispositions are able to arrive at similar reporting decisions when faced with accounting standards which contain different hierarchies of information. Academics, too, can tap on the findings of the study when teaching professional ethics and financial reporting. Students should be given the awareness and emphasis regarding the potential influence of ethical predisposition and hierarchy of information on decision making.

A limitation of this study lies in the possibility that our participants might have made their judgments based on incomplete information. Although absolute care was taken to ensure that the participants were provided with sufficient information to make a decision, we acknowledge that due to factors such as time limit and appropriate length of the instrument, we had to exclude some specificity of the standard such as definitions and descriptions of the standard from the instrument. Thus, future studies could examine whether decision making is influenced by the definitions in accounting standards by providing more complete information to the respondents. In addition, this study used students as surrogates for the CFO of the company in financial reporting decision making. While it is argued that accounting students with relevant knowledge are not different from actual practitioners in terms of decision making, this study would have been more interesting if practitioners were engaged as the participants of the study as the students might not have been fully exposed to financial reporting activities nor given the full capacity in making financial reporting decisions. More practical and useful views might be gathered from the practitioners' perspectives regarding how the financial reporting decision was derived and hence, serve as useful input in interpreting the results and discussing the findings.

References

Agoglia, C.P., Doupnik, T.S., & Tsakumis, G.T. (2011). Principles-based versus rules-based accounting standards: The influence of standard precision and audit committee strength on financial reporting decisions. *Accounting Review, 86*(3), 747–767. https://doi.org/10.2308/accr.00000045

Alexander, D. (1999). A benchmark for the adequacy of published financial statements. *Accounting and Business Research, 29*(3), 239-253. https://doi.org/10.1080/00014788.1999.9729584

Armstrong, M.B., Ketz, J.E., & Owsen, D. (2003). Ethics education in accounting: Moving toward ethical motivation and ethical behavior. *Journal of Accounting Education, 21*(1), 1-16. https://doi.org/10.1016/S0748-5751(02)00017-9

Backof, A.G., Bamber, E.M., & Carpenter, T. D. (2016). Do auditor judgment frameworks help in constraining aggressive reporting? Evidence under more precise and less precise accounting standards. *Accounting, Organizations and Society*, *51*, 1-11. https://doi.org/10.1016/j.aos.2016.03.004

Bagley, P.L., Dalton, D., & Ortegren, M. (2012). The factors that affect accountants' decisions to seek careers with big 4 versus non-big 4 accounting firms. *Accounting Horizons*, *26*(2), 239-264. https://doi.org/10.2308/acch-50123

Baker, C.R., Biondi, Y., & Zhang, Q. (2010). Disharmony in international accounting standards setting: The Chinese approach to accounting for business combinations. *Critical Perspectives on Accounting*, *21*(2), 107-117. https://doi.org/10.1016/j.cpa.2009.11.004

Bauer, T.D., Bucaro, A.C., & Estep, C. (2020). The Unintended Consequences of Material Weakness Reporting on Auditors' Acceptance of Aggressive Client Reporting. *The Accounting Review*, *95*(4), 51-72. https://doi.org/10.2308/accr-52610

Bennett, B., Bradbury, M., & Prangnell, H. (2006). Rules, principles and judgments in accounting standards. *Abacus*, *42*(2), 189-204. https://doi.org/10.1111/j.1467-6281.2006.00197.x

Bhimani, A. (2008). The role of a crisis in reshaping the role of accounting. *Journal of Accounting and Public Policy, 27*(6), 444-454. https://doi.org/10.1016/j.jaccpubpol.2008.09.002

Biondi, Y., & Zhang, Q. (2007). Accounting for the Chinese context: a comparative analysis of international and Chinese accounting standards focusing on business combinations. *Socio-Economic Review*, 5(4), 695-724. https://doi.org/10.1093/ser/mwm015

Brady, F.N., & Wheeler, G.E. (1996). An empirical study of ethical predispositions. *Journal of Business Ethics*, *15*(9), 927-940. https://doi.org/10.1007/BF00705573

Brochet, F., Jagolinzer, A.D., & Riedl, E.J. (2013). Mandatory IFRS adoption and financial statement comparability. *Contemporary Accounting Research, 30*(4), 1373-1400. https://doi.org/10.1111/1911-3846.12002

Brown, K.W., & Ryan, R.M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*(4), 822-848. https://doi.org/10.1037/0022-3514.84.4.822

Brown, H.L., & Wright, A.M. (2008). Negotiation research in auditing. *Accounting Horizons, 22*(1), 91-109. https://doi.org/10.2308/acch.2008.22.1.91

Cameran, M., Campa, D., & Pettinicchio, A. (2014). IFRS adoption among private companies: Impact on earnings quality. *Journal of Accounting, Auditing & Finance, 29*(3), 278-305. https://doi.org/10.1177/0148558X14534260

Capps, G., Koonce, L., & White, B.J. (2017). Example-Based Reasoning and Fact-Weighting Guidance in Accounting Standards. *Contemporary Accounting Research, 34*(1), 582-600. https://doi.org/10.1111/1911-3846.12283

Carlson, L.E., & Brown, K.W. (2005). Validation of the Mindful Attention Awareness Scale in a cancer population. *Journal of Psychosomatic Research, 58*(1), 29-33. https://doi.org/10.1016/j.jpsychores.2004.04.366

Carpenter, T.D., & Reimers, J.L. (2005). Unethical and fraudulent financial reporting: Applying the theory of planned behavior. *Journal of Business Ethics, 60*(2), 115-129. https://doi.org/10.1007/s10551-004-7370-9

Chang, C.J., & Hwang, N.C. (2003). The impact of retention incentives and client business risks on auditors' decisions involving aggressive reporting practices. *Auditing: A Journal of Practice & Theory, 22*(2), 207-218. https://doi.org/10.2308/aud.2003.22.2.207

Chen, Q., Hemmer, T., & Zhang, Y. (2007). On the relation between conservatism inaccounting standards and incentives for earnings management. *Journal of Accounting Research, 45*(3), 541-565. https://doi.org/10.1111/j.1475-679X.2007.00243.x

Chen, C.C., Schwartz, Z., & Yu, X.J. (2015). On the 'students as surrogates' research conundrum: Insights from statistical reasoning in revenue management. *Journal of Revenue and Pricing Management, 14*(4), 262-275. https://doi.org/10.1057/rpm.2015.16

Clor-Proell, S., & Nelson, M.W. (2007). Accounting standards, implementation guidance, and example-based reasoning. *Journal of Accounting Research, 45*(4), 699–730. https://doi.org/10.1111/j.1475-679X.2007.00248.x

Cuccia, A.D., Hackenbrack, K., & Nelson, M.W. (1995). The ability of professional standards to mitigate aggressive reporting. *The Accounting Review, 70*(2), 227-248.

Donelson, D.C., McInnis, J.M., & Mergenthaler, R.D. (2012). Rules-based accounting standards and litigation. *The Accounting Review, 87*(4), 1247–1279. https://doi.org/10.2308/accr-10274

Dong, R., Lu, T., Hu, Q., & Ni, S. (2021). The effect of formalism on unethical decision making: The mediating effect of moral disengagement and moderating effect of moral attentiveness. *Business Ethics: A European Review*, *30*(1), 127-142. https://doi.org/10.1111/beer.12315

Fang, L., Pittman, J., Zhang, Y., & Zhao, Y. (2018). Accounting standard precision, corporate governance, and accounting restatements. *SSRN Electronic Journal. Retrieved from https://papers.ssrn.com/sol3/papers.cfm*

Franceschini, F., Galetto, M., & Maisano, D. (2007). *Management by measurement: Designing key indicators and performance measurement systems*. Heidelberg: Springer Science & Business Media.

Frank, M.M., Lynch, L.J., & Rego, S.O. (2009). Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review, 84*(2), 467-496. https://doi.org/10.2308/accr.2009.84.2.467

Fornaro, J.M., & Huang, H.-W. (2012). Further evidence of earnings management and opportunistic behavior with principles-based accounting standards: The case of conditional asset retirement obligations. *Journal of Accounting & Public Policy, 31*(2), 204–225. https://doi.org/10.1016/j.jaccpubpol.2011.08.001

Gold, A., Heilmann, M., Pott, C., & Rematzki, J. (2020). Do key audit matters impact financial reporting behavior?. *International Journal of Auditing, 24*(2), 232-244. https://doi.org/10.1111/ijau.12190

Ishida, C., Chang, W., & Taylor, S. (2016). Moral intensity, moral awareness and ethical predispositions: The case of insurance fraud. *Journal of Financial Services Marketing, 21*, 4-18. https://doi.org/10.1057/fsm.2015.26

Jamal, K., & Tan, H.T. (2010). Joint effects of principles-based versus rules-based standards and auditor type in constraining financial managers' aggressive reporting. *The Accounting Review, 85*(4), 1325-1346. https://doi.org/10.2308/accr.2010.85.4.1325

Juslin, P., & Olsson, H. (2004). Note on the rationality of rule-based versus exemplar based processing in human judgment. *Scandinavian Journal of Psychology, 45*(1), 37-47. https://doi.org/10.1111/j.1467-9450.2004.00376.x

Kang, G., & Lin, J.W. (2011). Effects of the type of accounting standards and motivation on financial reporting decision. *Journal of Accounting, Business & Management, 18*(2), pp. 84-104

Lakey, C.E., Campbell, W. K., Brown, K. W., & Goodie, A.S. (2007). Dispositional mindfulness as a predictor of the severity of gambling outcomes. *Personality and Individual Differences, 43*(7), 1698-1710. https://doi.org/10.1016/j.paid.2007.05.007

Libby, R., Bloomfield, R., & Nelson, M.W. (2002). Experimental research in financial accounting. *Accounting, Organizations and Society*, *27*(8), 775-810. https://doi.org/10.1016/S0361-3682(01)00011-3

Libby, R., & Luft, J. (1993). Determinants of judgment performance in accounting settings: Ability, knowledge, motivation, and environment. *Accounting, Organizations and Society, 18*(5), 425-450. https://doi.org/10.1016/0361-3682(93)90040-D

Lim, Y.Z., Azmi, A., Devi, S.S., & Mahzan, N. (2017). Implementation Guidance for Standards and Revenue Trend in Aggressive Reporting. *The International Journal of Accounting, 52*(4), 342-353. https://doi.org/10.1016/j.intacc.2017.09.001

Lin, S., Riccardi, W., & Wang, C. (2012). Does accounting quality change following a switch from U.S. GAAP to IFRS? Evidence from Germany. *Journal of Accounting and Public Policy, 31*(6), 641-657. https://doi.org/10.1016/j.jaccpubpol.2012.10.006

MacKillop, J., & Anderson, E.J. (2007). Further psychometric validation of the mindful attention awareness scale (MAAS). *Journal of Psychopathology and Behavioral Assessment, 29*(4), 289-293. https://doi.org/10.1007/s10862-007-9045-1

Ministry of Education. (2019). *2019 Quick facts Malaysia educational statistics*. Malaysia Ministry of Education.

Mohamed Saat, M., Porter, S., & Woodbine, G. (2012). A longitudinal study of accounting students' ethical judgement making ability. *Accounting Education, 21*(3), 215-229. https://doi.org/10.1080/09639284.2011.562012

Morais, A.I. (2020). Are changes in international accounting standards making them more complex?. *Accounting Forum, 44*(1), 35-63. https://doi.org/10.1080/01559982.2019.1573781

Mortensen, T., Fisher, R., & Wines, G. (2012). Students as surrogates for practicing accountants: Further evidence. *Accounting Forum, 36*(4), 251-265. https://doi.org/10.1016/j.accfor.2012.06.003

Mulder, L.B., Jordan, J., & Rink, F. (2015). The effect of specific and general rules on ethical decisions. *Organizational Behavior and Human Decision Processes, 126,* 115-129. https://doi.org/10.1016/j.obhdp.2014.11.002

Nalukenge, I., Nkundabanyanga, S.K., & Ntayi, J.M. (2018). Corporate governance, ethics, internal controls and compliance with IFRS. *Journal of Financial Reporting and Accounting*, *16*(4), 764-786. https://doi.org/10.1108/JFRA-08-2017-0064

Namkoong, G., Boyle, T., El-Kassaby, Y.A., Palmberg-Lerche, C., Eriksson, G., Gregorius, H., & Prabhu, R. (2002). *Criteria and indicators for sustainable forest management: Assessment and monitoring of generic variation.* Working Paper. Forestry Department. Food and Agriculture Organization of the United Nations. Rome, Italy.

Nobes, C.W. (2005). Rules-based standards and the lack of principles in accounting. *Accounting Horizons*, *19*(1), 25-34. https://doi.org/10.2308/acch.2005.19.1.25

Pan, P., & Patel, C. (2018). The influence of native versus foreign language on Chinese subjects' aggressive financial reporting judgments. *Journal of Business Ethics, 150*(3), 863-878. https://doi.org/10.1007/s10551-016-3165-z

Pearsall, M.J., & Ellis, A.P. (2011). Thick as thieves: the effects of ethical orientation and psychological safety on unethical team behaviour. *Journal of Applied Psychology, 96*(2), 401. https://doi.org/10.1037/a0021503

Raglan, G.B., & Schulkin, J. (2014). Decision Making, Mindfulness, and Mood: How Mindfulness Techniques can Reduce the Impact of Biases and Heuristics through Improved Decision Making and Positive Affect. *Journal of Depression and Anxiety, 4*(1), 168-175. https://doi.org/10.4172/2167-1044.1000168

Rest, J., Narvaez, D., Bebeau, M.J., & Thoma, S.J. (1999). Postconventional moral thinking: A neo-Kohlbergian Approach. Mahwah, NJ: Lawrence Erlbaum.

Rest, J.R. (1986). Moral development: advances in research and theory. New York: Praeger.

Reynolds, S.J. (2006). Moral awareness and ethical predispositions: investigating the role of individual differences in the recognition of moral issues. *Journal of Applied Psychology, 91*(1), 233. https://doi.org/10.1037/0021-9010.91.1.233

Reynolds, S.J., & Ceranic, T.L. (2007). The effects of moral judgment and moral identity on moral behavior: an empirical examination of the moral individual. *Journal of Applied Psychology*, *92*(6), 1610. https://doi.org/10.1037/0021-9010.92.6.1610

Rose, J.M. (2007). Attention to evidence of aggressive financial reporting and intentional misstatement judgments: Effects of experience and trust. *Behavioral Research in Accounting, 19*(1), 215-229. https://doi.org/10.2308/bria.2007.19.1.215

Ruedy, N.E., & Schweitzer, M.E. (2010). In the moment: The effect of mindfulness on ethical decision making. *Journal of Business Ethics, 95*(1), 73-87. https://doi.org/10.1007/s10551-011-0796-y

Satava, D., Caldwell, C., & Richards, L. (2006). Ethics and the auditing culture: Rethinking the foundation of accounting and auditing. *Journal of Business Ethics, 64*(3), 271-284. https://doi.org/10.1007/s10551-005-0556-y

Schipper, K. (2003). Principles-based accounting standards. *Accounting Horizons, 17*(1), 61–72. https://doi.org/10.2308/acch.2003.17.1.61

Schwartz, S. (1996). Value Priorities and Behavior: Applying a Theory of Integrated Value Systems. Edt. Sligman-James, C., Olson-Mark, M., and Zanna, P. *The Psychology of Values, The Ontorio Symposium*, Vol. 8.

SEC. (2003). *Study pursuant to Section 108(d) of the Sarbanes-Oxley Act of 2002 on the adoption by the United States financial reporting system of a principles-based accounting system*. U.S. Securities and Exchange Commission

Shakespeare, C. (2020). Reporting matters: the real effects of financial reporting on investing and financing decisions. *Accounting and Business Research*, *50*(5), 425-442. https://doi.org/10.1080/00014788.2020.1770928

Shawver, T.J., & Clements, L.H. (2015). Are there gender differences when professional accountants evaluate moral intensity for earnings management?. *Journal of Business Ethics, 131*(3), 557-566. https://doi.org/10.1007/s10551-014-2293-6

Stenka, R., & Taylor, P. (2010). Setting UK standards on the concept of control: an analysis of lobbying behaviour. *Accounting and Business Research, 40*(2), 109-130. https://doi.org/10.1080/00014788.2010.9663387

Tan, H.-C., & Jamal, K. (2006). Effect of accounting discretion on ability of managers to smooth earnings. *Journal of Accounting and Public Policy, 25*(5), 554-573. https://doi.org/10.1016/j.jaccpubpol.2006.07.007

Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of management*, *32*(6), 951-990. https://doi.org/10.1177/0149206306294258

Trisanti, T. (2019). Discretionary Accounting Choice and Management Opportunistic Behavior to Manage Income. *Jurnal Akuntansi dan Keuangan*, *21*(1), 21-29. https://doi.org/10.9744/jak.21.1.21-29

Valentine, S., & Godkin, L. (2019). Moral intensity, ethical decision making, and whistleblowing intention. *Journal of Business Research*, *98*, 277-288. https://doi.org/10.1016/j.jbusres.2019.01.009

van Rinsum, M., Maas, V.S., & Stolker, D. (2018). Disclosure Checklists and Auditors' Judgments of Aggressive Accounting. *European Accounting Review,* 27(2), 383-399. https://doi.org/10.1080/09638180.2017.1304228

Walters-York, M., & Curatola, A.P. (2000). Theoretical reflections on the use of students as surrogate subjects in behavioral experimentation. *Advances in Accounting Behavioral Research, 3*(3), 243-263. https://doi.org/10.1016/S1474-7979(00)03034-9

Wang, K.J. (2010). Negotiating a fair value under accounting uncertainty: A laboratory experiment. *Behavioral Research in Accounting, 22*(1), 109-134. https://doi.org/10.2308/bria.2010.22.1.109

Wang, Y., & Ruhe, G. (2007). The cognitive process of decision making. *International Journal of Cognitive Informatics and Natural Intelligence (IJCINI), 1*(2), 73-85. https://doi.org/10.4018/jcini.2007040105

Watson, G.W., Berkley, R.A., & Papamarcos, S.D. (2009). Ambiguous allure: The value–pragmatics model of ethical decision making. *Business and Society Review, 114*(1), 1-29. https://doi.org/10.1111/j.1467-8594.2009.00333.x

Wiltermuth, S. S., Bennett, V.M., & Pierce, L. (2013). Doing as they would do: How the perceived ethical preferences of third-party beneficiaries impact ethical decision-making. *Organizational Behavior and Human Decision Processes, 122*(2), 280-290. https://doi.org/10.1016/j.obhdp.2013.10.001

Women, U. N. (2013). *A Transformative Stand-Alone Goal on Achieving Gender Equality*. Women's Rights and Women's Empowerment: Imperatives and Key Components, UN Women, New York.

Xu, Z.X., & Ma, H.K. (2016). How can a deontological decision lead to moral behavior? The moderating role of moral identity. *Journal of Business Ethics, 137*(3), 537-549. https://doi.org/10.1007/s10551-015-2576-6

Young, D. (2021). How Social Norms and Social Identification Constrain Aggressive Reporting Behavior. *The Accounting Review*, *96*(3), 449-478. https://doi.org/10.2308/TAR-2015-0417