

Examining Personal Values and Ethical Behaviour Perceptions between Accounting and Non-accounting Students in the Caribbean

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Abstract

This paper sought to examine personal values and ethical behaviour perceptions among undergraduate students in a Caribbean university. Specifically, the authors tested for differences by gender and academic major on personal values and ethical behaviours, as well as the influence of personal values on ethical behaviour by academic major (accounting vs. non-accounting students). The study used a sample of 231 undergraduate students and employed a survey instrument which was adapted from Akaah and Lund's (1994) personal values and Newstrom and Ruch's (1975) ethical behaviour scales. Findings revealed that females held higher personal values and perceived that they were more ethical than males. Non-accounting students held higher personal values but were less ethical than accounting students. Regression analysis revealed that two personal values factors (honesty and self-control) influenced the ethical behaviour of the complete sample. However, honesty and intellectualism influenced accounting students' ethical behaviour, while only honesty influenced non-accounting students' ethical behaviour. Implications are discussed.

Keywords: Personal values, ethical behaviour, gender, accounting students, non-accounting students.

Introduction ¹

Personal values have been proposed to have a significant influence on decision-making (e.g. Rokeach, 1973). Specifically, it may be argued that an individual's values may propel him or her to behave in an ethical or unethical manner (Baird & Zelin, 2007). Personal values, although individualistic in nature, are largely influenced by societal and cultural factors and tend to vary across nations (Lan et al., 2009). Research indicates that personal values influence an individual's behaviour and attitude, and this can at times conflict with the values held by colleagues or

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organisations within which they work (e.g., Lan et al., 2009). The approach to resolving ethical issues can become critical to the longevity of a company and can also determine the individual's future with the organisation.

In the accounting profession, members are expected to behave with integrity and objectivity and act in the public's interest (Lan et al., 2009; Alleyne, 2010). Thus, accountants are required to uphold the ethical standards of the profession and their work organisations (Alleyne, 2010). Research shows that numerous reports on accounting irregularities and corporate scandals (e.g. Enron and Arthur Andersen) have contributed significantly to investors' lack of trust in the accounting profession (Alleyne, 2010). Consequently, it has become paramount for accounting practitioners and accounting students to assist in rebuilding the profession's image and reputation (Milliron, 2012). Indeed, the corporate failures also raise concerns for the ethical actions of non-accountants, given that management and other professionals have participated in these scandals. Hence, the focus of this study is on students who will be the future leaders, some of whom will become professional accountants while others will become part of corporate management in organizations.

This study makes several contributions. Firstly, it supplements the existing research that tested for the influence of personal values on ethical decision-making. Previous studies have explored the link between personal values and ethical decision-making in business settings (Rokeach, 1973; Akaah & Lund, 1994; Fukukawa et al., 2007). These studies reported mixed findings in support of the influence of personal values on ethical decision-making in business and organisational contexts. Indeed, studies in researching the influence of personal values on ethical decision-making in accounting contexts have been sparse (Shafer et al., 2001). Given that prior research (e.g. Karacaer et al., 2009) have tested for the link between personal values and ethical decision-making, this current study seeks to further explore this relationship. This current study also extends the accounting literature by testing personal values influence on ethical decision-making among future accounting professionals in an educational setting.

Secondly, it performs a comparison between two groups (accounting majors vs. non-accounting majors) to determine which personal values' dimensions influence each group's ethical behaviour. This study mirrors Baker's (1976, p. 891) "attempt to further this understanding by specifying the values which distinguish an accounting or business orientation from a non-accounting orientation." While it is acknowledged that Baker's study was done near thirty years ago, values systems today have contributed to unethical behaviour being prevalent in business. For example, unethical behaviour in the form of fraud has been exhibited in the cases of Enron and Worldcom, and has led to lengthy prison sentences for individuals (Alleyne, 2010). Have the personal values system changed since Baker's study? As a result of global corporate scandals, it appears that public confidence in business has declined. Thus, this current study further extends Baker's study by looking at the influence of personal values on ethical behaviour.

Thirdly, to our knowledge, this research may be the first to examine the relationship between personal values and ethical behaviour in the Caribbean. Most of the empirical research on ethical decision-making in the Caribbean has been done by Alleyne and colleagues (Alleyne et al., 2006; Alleyne et al., 2010; Devonish et al., 2009; Alleyne, 2010). This makes a compelling argument for much needed research in this area. Notably, empirical studies have been conducted to determine the factors likely to influence individuals' ethical or unethical actions in different situations (Beu et al., 2003). According to Jones (1991) and Alleyne (2010), the process of arriving at ethical decisions is complex in nature as it involves individual, organisational and contextual issues. This emphasises the importance of understanding the relationship between personal values and ethical decision-making, which is the focus of this current study. The main objective of this study is to synthesise the literature on personal values and ethical behaviour, and replicate two earlier studies, one done by Newstrom and Ruch (1975) and the other by Akaah and Lund (1994) with a focus on the Caribbean. Specifically, Akaah and Lund (1994) examined the influence of personal values on the ethical behaviour of marketing professionals, using Newstrom and Ruch's (1975) typology of unethical behaviours.

Fourthly, this paper is important for accounting educators who have been advocating for the inclusion of ethics in the curriculum of accounting education, as an intervention strategy to restore credibility to the profession (McPhail, 2001; Braun & Stallworth, 2009). However, there is recognition that curriculum change is not revolutionary but rather more progressive (Pizzolatto & Bevill, 1996), despite claims of increased accounting ethics education (Cohen & Pant, 1989; Dellaportas & Leung, 2001). The teaching method employed to disseminate ethics in accounting courses is based primarily on conformity to rules and codes rather than underlying ethical issues (Kerr & Smith, 1995; Puxty et al., 1994). Prior research has emphasised the importance of codes of ethics to direct accounting professionals' behaviour (Sirgy, Siegel & Johar, 2005). Do personal values influence the ethical decision-making of potential entrants to the profession? If personal values do matter, then accounting educators will need to implement the appropriate intervention strategies. Furthermore, Shafer et al. (2001) argued that there needs to be identification of the specific personal values that are compatible with the accounting profession. Thus, this research seeks to identify those value preferences that are likely to influence ethical decisions among accounting professionals, and indeed, other professionals.

Finally, another contribution of this study is the use of a relatively unused personal values scale (PVS) by Scott (1965), in the area of accounting. Akaah and Lund (1994) used the Scott's scale among marketing professionals. A significant body of research has utilised the Rokeach Value Scale (RVS) and the Schwartz Value Scale (SVS) (e.g. Shafer et al., 2001; Karacaer et al., 2009), but scholarly questions have been raised about the subjective nature of these value instruments in the identification of value items (Hofstede, 1980; Brathwaite & Law, 1985). Further, Shafer et al (2001) argued for the use of personal values scales other than the Rokeach scale to determine the influence of personal values on ethical decision-making. Thus, this research answers Shafer et al.'s (2001) call for the use of another personal value inventory.

The structure of the paper is as follows: The next section provides a selective review of the literature, and is followed by a section which explains the research methodology. The following section presents the results of the study. The final section concludes the paper.

Literature Review

Perceptions of personal values and ethical decision-making

Personal values may be regarded as deep-seated, pervasive, core-beliefs or guiding principles that transcend specific situations to direct or propel human behaviour in decision-making. This belief coincides with Rokeach's (1973, p. 5) definition of a value described as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence." Rokeach (1973) purported that values are central to an individual's thought processes, and therefore instrumental in the formation of attitudes and the execution of purposive behaviours in many circumstances or issues. It was further suggested that an individual's values are arranged or classified according to a value system which subsequently influences acceptable behavioural responses.

Rokeach (1973) regarded values as abstract fundamental coordinators of behaviour, and brought consensus to the field of social science research by showing the linkage between values and behaviour (Cheng & Fleischmann, 2010). Thus, the Rokeach's Value Survey was created to highlight this linkage. Researchers (e.g. Hofstede, 1980; Brathwaite & Law, 1985) have questioned the subjective nature of rational-theoretical inventories in the identification of value items and the amount necessary for inclusion in the instrument as they may not necessarily reflect values that are significant for the targeted population. Nevertheless, prior research has used the Rokeach Value Scale in several studies investigating the value system of accounting and non-accounting students (e.g., Baker, 1976; Wilson et al., 1998).

In contrast, Scott's (1965) Personal Values Scale measured an individual's concept of ideal personal traits and investigated ideal relations among people. The personal values scale consists of 12 moral ideals of kindness, social skills, intellectualism, loyalty, academic achievement, physical development, status, honesty, religiousness, self-control, creativity and independence. This current study used Scott's (1965) four subscales to measure personal values such as intellectualism, honesty, self-control and religiousness. Intellectualism may be defined as individuals having the capacity for understanding, thinking, and reasoning. Honesty can be defined as the condition of being trustworthy, genuine and sincere. Self-control may be defined as the ability to exercise restraint or control over one's feelings, emotions and reactions. Religiousness is defined as the belief in worship of, or obedience to, a supernatural power or powers considered to be divine or to have control over human destiny. The Personal Values Scale is considered as an empirically-based inventory which suggests that value items are directly extracted from empirical data based on interviews, survey or content analysis (Cheng & Fleischmann, 2010).

Ethical decision-making may be defined as decisions that have legal and moral components that are acceptable to a larger community (Jones, 1991). Prior research indicates that ethical decisions are correlated or highly influenced by personal values that characterise the decision-makers in accounting contexts (e.g., Wright et al., 1997; Douglas & Schwartz, 1999; Douglas et al., 2001; Shafer et al., 2001; Karacaer et al., 2009).

Prior studies have examined individuals' ethical perceptions and personal values. These studies have found mixed results (Barnett & Karson, 1987; O'Fallon & Butterfield, 2005). This current study seeks first to determine the level of personal values and ethical behaviour among the sample of respondents. Thus, the first research question is:

Research question 1: What are the perceptions of personal values and ethical behaviour among the sample of respondents?

Differences in personal values and ethical behaviour between males and females

Prior research has found mixed findings on gender differences in ethical decision-making (Silver & Valentine, 2000; McCuddy & Perry, 1996). For example, Silver and Valentine (2000) found that females were more ethical than males. Gilligan (1977) argued that males were more justice-oriented while females were more compassionate and caring. This may suggest that their socialisation process influences their ethical decision-making. Socialisation is partly a function of conditioned behaviours, which tend to be gender-specific (Terpstra et al., 1993). Women are often socialised to exhibit behaviours (i.e., care and compassion) that will gain societal approval, whereas men are more likely to be less ethical in their actions because they have been conditioned to be aggressive and competitive (Terpstra et al., 1993; McCabe et al., 2006). Given the potential for transfer of values through the socialisation process, different values may be brought into the work environment based on gender differences which may significantly influence work ethics and the decision-making process. In some cases, significant discrepancies may exist between the personal values held by individuals and the behaviours that they exercise due to circumstances or fear of retribution.

Personal values and ethical behaviours are highly personalised matters, and in some instances, individuals are likely to give false impression of themselves to gain socially desirable outcomes. However, Singh et al. (2002) found that females were less likely to engage in impression management. Prior research revealed that females were likely to be more ethical than males (Cohen et al., 1998; Cohen et al., 2001; Sankaran & Bui, 2003; Becker, 2007; Becker & Ustad, 2007; Devonish et al., 2009). For example, Becker and Ustad (2007) reported that females found cheating to be less acceptable than males. Sankaran and Bui (2003) found that females were more concerned with ethical issues than their male counterparts. In contrast, McCuddy and Perry (1996) found insignificant gender differences in their study.

Several studies, which focused on personal values, have found differences in males and females (e.g., Lindeman & Verkasalo, 2005; Schwartz & Rubel, 2005). For example, Lindeman and Versakalo (2005) found that benevolence (kindness) and universalism were more significant for female university students rather than power, which was more significant for males. Schwartz and Rubel (2005) found that males constantly emphasised the importance of power, achievement, stimulation and self-direction more than their female counterparts. In addition, these authors reported that females preferred values such as benevolence, security and universalism.

Lan et al. (2009) found that several significant gender differences in personal values existed between accounting majors and practicing accountants. These authors found that male accounting practitioners and students rated “achievement” much higher than their female counterparts. Giacomino and Akers (1998) reported that females rated the values “mature love” and “broadmindedness” significantly higher than males, while males rated the value type “power” significantly higher than their female counterparts. In contrast, prior research also revealed very little gender differences in individuals’ personal value systems (e.g., Fagenson, 1993). Overall, this review of the literature supports the view that there are significant differences between males and females based on their personal values and ethical behaviours. Based on the above, the first research hypothesis is:

Hypothesis 1: There are significant differences between males and females on the various facets of personal values and ethical behaviour.

Differences between accounting and non-accounting students on personal values and ethical behaviour

One of the earliest attempts at studying values in accounting and non-accounting majors was conducted by Baker (1976) with students at a university in California. Baker (1976) evaluated the value systems of accounting and non-accounting majors with the use of the Rokeach Value Scale by Rokeach (1973). Baker (1976) found major differences on 8 out of 36 items on the scale: (1) a comfortable life, (2) a world of beauty, (3) wisdom, (4) ambitious, (5) clean, (6) imaginative, (7) family security, and (8) responsible. Specifically, Baker (1976) found that accounting students ranked a comfortable life, family security, ambition, cleanliness and responsibility significantly higher than non-accounting students. In contrast, accounting students valued wisdom (somewhat similar to intellectualism in our study) lower than their non-accounting counterparts. However, these findings led Baker (1976) to argue that the results were inconclusive in determining whether accounting and non-accounting university students have diametrically different value systems.

Gandal et al.’s (2005) study found that economic students attributed more value priorities on achievement, power and hedonism and less importance on universalism than students from other disciplines. Gandal et al. (2005) argued that personal values differences between students from different majors may be due to the self-selection and training processes. Research indicates that the career choices are directly related to their values, interests and goals (Schneider et al., 1995; Walsh & Holland, 1992). In instances where incongruence exists, people may be more likely to adapt or change their values or majors to accommodate an environment that is more suitable or congruent to their interests. This is corroborated by Sankaran and Bui (2003), who found that students choose their particular courses or degree programmes consistent with their values systems.

Swindle et al. (1987) found that the values (e.g., family security, self respect and happiness) held by Certified Public Accountants (CPAs) were more oriented to self rather than others. Wilson et al. (1998) studied practicing CPAs’ value preferences with the use of the Rokeach Value Scale and found that they were more oriented toward an achievement value system. Giacomino and Akers (1998) found differences between the responses of non-accounting and accounting students with honesty and self-direction rated as being very important values by accounting students.

Lan et al. (2009) found that accounting majors rated values such as being devout as least important/significant, while self-direction was considered more significant.

It has been argued that accountants should have integrity and be ethical (Fatt, 1995). Baird and Zelin (2007) found that accounting majors disapproved of unethical acts more than their non-accounting counterparts. Eaton and Giacomino (2000) also found that accounting students were more likely to be ethical than non-accounting majors. Sankaran and Bui (2003) further argued that business students are more likely to be motivated by financial or monetary gains rather than moral or ethical inclinations since the basic rules or foundation of business is grounded in the pursuit of profits. Overall, the above literature supports the view that there are significant differences between accounting and non-accounting majors based on their personal values and ethical behaviours. This review of the literature led to the development of the second research hypothesis:

Hypothesis 2: There are significant differences between accounting and non-accounting students on the various facets of personal values and ethical behaviour.

The influence of personal values on ethical behaviour

Homer and Kahle (1988) suggested that values form the foundation for the development of individual attitudes that direct specific decision-making behaviour. Similarly, Mayton et al. (1994) contend that personal values are more likely to be predictors of attitudes and actual behaviour. Prior research has found support for personal values significantly influencing ethical behaviour (Finnegan, 1994; Fritzsche, 1995; Wright et al., 1997; Giacomino & Akers, 1998; Douglas & Schwartz, 1999; Douglas et al., 2001). The literature has also shown that personal values have been incorporated into many ethical decision-making models to show the influence on ethical decision-making (e.g., Fritzsche, 1995; Shafer et al., 2001; Fritzsche & Oz, 2007; Lan et al., 2009; Karacaer et al., 2009). For example, Fritzsche and Oz (2007) found support for the influence of altruistic values on ethical decision-making. Giacalone and Jurkiewicz (2003) found support for spirituality (religiousness) being associated with perceptions of unethical practices. It is presumed that personal values are responsible for the formation of perceptions, evaluations, judgments, commitments, level of satisfaction, attitudes and behaviours, and therefore, are very good predictors of attitudes and the driving force behind ethical decision-making behaviours of individuals.

Akaah and Lund (1994) tested for the influence of personal values on ethical behaviour among marketing professionals. In their study, personal values were measured using Scott's (1965) four sub-scales (e.g., intellectualism, honesty, self-control and religiousness). Akaah and Lund (1994) justified the relevance and usefulness of these subscales in their study by arguing that "each captures an ideal relationship between people and/or state of affairs that is universally good" (p. 420). How applicable are these subscales to our current study? It is believed that this personal values inventory has the four specific dimensions critical to professionals, especially accountants.

Researchers (e.g., Sapp and Gladding, 1989; Thomas, 1997; Ji, 2004) have found that there is a positive relationship between the personal value of religiousness and ethical decision-making. For instance, religious orientations were significantly correlated with high levels of moral development and used as possible explanations for ethical decisions among college students (Sapp & Gladding, 1989; Ji, 2004). Using Jones' (1991) moral intensity construct, Wright et al. (1997) found that personal values significantly predicted ethical decision-making among undergraduate accounting students. Douglas and Schwartz (1999) found that ethical decisions made by students were significantly influenced by their personal values. Indeed, researchers have argued that personal values influence individuals in their perceptions, interpretations of situations, and hence direct people in their decisions, choices, and behaviors (Rokeach, 1973).

In contrast, some research has found little or no support for the influence of personal values on ethical decision-making (Akaah & Lund, 1994; Shafer et al., 2001). Using a sample of 323 CPAs and Jones' (1991) ethical decision-making model, Shafer et al. (2001) did not find support for the hypothesised relationship between personal values and ethical behaviour. Nevertheless, based on prior research, it may be argued that the propensity to make sound ethical judgment is based on the personal values that are possessed by individuals. Thus, the third research hypothesis is put forward:

Hypothesis 3: Personal values subscales predict ethical behaviour.

Research Method

Sample and Procedures

The authors targeted 400 final year undergraduate students from within the Faculty of Social Sciences in a Caribbean university. The faculty provides degree programmes in psychology, accounting, management, economics, politics, sociology and social work. For this study, students in the sample were defined as accounting and non-accounting students. Students were surveyed during lecture and tutorial sessions. The students were informed about the nature and purpose of the study, and their consent gained. They were assured that confidentiality and anonymity would be maintained.

Instrument and design

A self-administered questionnaire was used as the main data collection instrument for the study (See Appendix A). The first part of the questionnaire elicited demographic information such as age, gender (male or female), religious affiliation, degree programme (accounting vs. non-accounting) and number of courses taken containing ethics. These variables were treated as the main independent variables in the study. Respondents were asked to state the number of courses taken that contained an ethics component. Religious affiliation was measured by asking each respondent to state whether he or she was religious or not. If the response was yes, the student was asked to state his or her religious affiliation.

In order to examine the likelihood of engaging in unethical behaviour (i.e. unethical behavioural intentions), the present study adapted a structured instrument containing seventeen items developed by Newstrom and Ruch (1975), but further modified by Akaah and Lund (1994). This scale measured the extent to which respondents would be likely to engage in unethical behaviour in an organisational setting (Newstrom & Ruch, 1975; Akaah & Lund, 1994). These items were measured using a 7-point Likert scale ranging from 'extremely unlikely' (coded 1) to 'extremely likely' (coded 7), with higher scores on this scale indicating the higher likelihood to engage in unethical behaviour (or lower ethical intentions), and lower scores indicating the lower likelihood to engage in unethical behaviour (or higher ethical intentions). After data collection, this seventeen-item scale was reduced to six factors, consistent with Akaah and Lund (1994). These six factors were personal use, passing blame, bribery, padding of expenses, falsification and deception, which related to different types of unethical practices in a business context. All 17 items on this scale were combined and averaged to form a single composite score for the likelihood of engaging in unethical behaviour. Cronbach alpha for this scale was .81, thus indicating high internal reliability.

To measure personal values, this study used Scott's (1965) personal values scale, adapted by Akaah and Lund (1994) which had four subscales: religiousness, self-control, honesty and intellectualism. The sub-scales were measured in terms of four items and respondents indicated the extent to which they liked or disliked the personal value involved. A 7-point Likert scale ranging from 'strongly dislike it' (coded 1) to 'strongly like it' (coded 7) was

used to gauge respondents' evaluations of their personal values with higher scores in this scale indicating higher personal values. The four items in each of the four subscales were combined and averaged to form a single composite score to reflect overall intellectualism, honesty, self-control and religiousness. Cronbach alphas for these scales were as follows: intellectualism (.71), honesty (.58), self-control (.70) and religiousness (.84) (see Table 2). This study achieved a slightly higher Cronbach alpha for honesty compared to Akaah and Lund's (1994) study which reported a Cronbach alpha of .55 for honesty.

Piloting the questionnaire

The questionnaire was initially tested with 2 academics and 2 students to determine the applicability of the measures to the specific context. Based on the feedback, the instrument was revised to address any ambiguities in question content or areas prone to misinterpretation.

Characteristics of the sample

Table 1 highlights the key characteristics of the sample. Two hundred and thirty-one usable questionnaires were obtained, representing a 58% response rate. The majority of the sample comprised females (60.6%), students under 25 years of age (68.8%), students who were religious (71.9%). Approximately one third (33.8%) of the sample was accounting students.

Results

General perceptions of personal values and ethical behaviour

Research question 1 sought to determine the respondents' perceptions of personal values and ethical behaviour among the sample of respondents. Tables 2 and 3 present the descriptive statistics for the personal values and ethical behaviour scales, respectively. Table 2 shows that most respondents strongly agreed that they had relatively high personal values. For example, the sample felt that they had high intellectualism (Mean (M) = 5.36), honesty (M = 4.65), self-control (M = 4.83) and religiousness (M = 5.13). The significance of being perceived as having high personal values (i.e. intellectualism) was further evident in responses to items such as: 'Having a strong intellectual curiosity' (M = 5.84) which scored highly, while 'developing an appreciation of the fine arts – music, drama, literature and ballet' scored lower (M = 4.86) in the intellectualism scale. 'Speaking one's mind truthfully, without regard for the consequences' (M = 5.10) was rated highest in the honesty scale, while 'volunteering information concerning wrongdoing, even if a friend is involved' (M = 4.10) was rated lowest. In terms of self-control, 'practicing self control' (M = 5.85) was ranked highest, while the lowest rated item was 'never losing one's temper, no matter what the reason' (M = 4.32). 'Having faith in a being greater than man' (M = 6.06) was rated highest in the religiousness scale, whereas the item 'always attending religious services regularly and faithfully' (M = 4.58) was rated lowest.

Table 3 illustrates that most respondents strongly believe that they demonstrate highly ethical behaviours (overall M = 2.43). For example, the responses to items within the ethical behavioural scale: Personal use (M = 3.45), passing blame (M = 2.03), bribery (M = 2.00), falsification (M = 2.22), padding expenses (M = 1.85) and deception (M = 2.34) further corroborate the sample's belief that they were unlikely to engage in unethical behaviour. Use of company services for personal use was ranked highly (M = 4.13), whereas 'pilfering company materials and supplies' was ranked lowest (M = 2.42). With respect to passing blame, 'concealing one's error' was rated highest (M = 3.13), while the lowest score (M = 1.41) was given for 'claiming credit for someone else's work.' Falsifying information such as 'calling in sick to take a day off' (M = 3.56) was rated highest in the falsification scale. The item 'not reporting others' violations of company policies and rules' (M = 3.00) was rated highest within the deception scale. Overall, these results show that individuals in the sample were highly unlikely to participate in unethical behaviour.

Gender, personal values and ethical behaviour

It was hypothesized that there are significant differences between males and females on the various facets of personal values and ethical behaviour (Hypothesis 1). Table 4 shows the results of an independent samples t-test conducted to test this hypothesis. It was found that there were statistically significant differences on the majority of personal values subscales. For example, females exhibited higher levels of honesty ($M = 4.77$) compared to males ($M = 4.47$), $t(229) = -2.21$, $p < .05$. Again, females exhibited higher levels of religiousness ($M = 5.28$) compared to males ($M = 4.89$), $t(229) = -2.36$, $p < .05$. In contrast, males exhibited higher levels of self control ($M = 5.04$) compared to females ($M = 4.69$), $t(229) = 2.56$, $p < .05$. This finding was consistent with Schwartz and Rubel (2005), who found that males exhibited more self-direction than females.

An important finding was the fact that females ($M = 2.11$) perceived themselves to be more ethical than males ($M = 2.92$), $t(229) = 6.47$, $p < .01$. This finding is consistent with Gilligan's (1977) argument that females tend to be more ethical than males. Gilligan's (1977) argument was based on the premise that females tend to be caring and nurturing, while males were perceived to be more justice-oriented and competitive.

Accounting vs. non-accounting students - personal values and ethical behaviour

It was hypothesized that there are significant differences between accounting and non-accounting students on the various facets of personal values and ethical behaviour (Hypothesis 2). Table 5 shows the results of an independent samples t-test which was conducted to test this hypothesis. It was found that there were statistically significant differences on two personal values subscales. Non-accounting students exhibited higher levels of intellectualism ($M = 5.46$) compared to accounting students ($M = 5.18$), $t(229) = -2.26$, $p < .05$. However, accounting students exhibited a higher degree of religiousness ($M = 5.37$) compared to non-accounting students ($M = 5.00$), $t(229) = 2.20$, $p < .05$. It was also found that accounting students ($M = 2.05$) perceived themselves to be more ethical than non-accounting respondents ($M = 2.62$), $t(229) = -4.20$, $p < .01$. This finding was consistent with Baird and Zelin (2007) and Eaton and Giacomino (2000), who found that accounting students were more ethical than their non-accounting counterparts.

Testing the relationship between personal values and ethical behaviour

Firstly, preliminary analysis was conducted to determine whether there were significant relationships between the different personal values subscales and ethical behaviour. Table 6 shows the results of Pearson's bivariate correlations. It was found that there were significant and negative relationships between the personal values subscales and ethical behaviour. Intellectualism ($r = -.14$, $p < .05$), honesty ($r = -.39$, $p < .01$), self control ($r = -.16$, $p < .05$) and religiousness ($r = -.26$, $p < .05$) were significantly and negatively related to ethical behaviour.

It was hypothesized that personal values subscales predict ethical behaviour (Hypothesis 3). Multiple linear regression analysis was performed to test this hypothesis. Controlling for gender, age and academic major, we used ethical behaviour as the dependent variable. Preliminary tests were done to assess multicollinearity. Given that the variance inflation factors did not exceed 2, multicollinearity was deemed not to be an important factor. Table 7 shows the results of the multiple regression analysis. It was found that honesty ($\beta = -.255$, $p < .01$) and self control ($\beta = -.131$, $p < .05$) significantly predicted ethical behaviour. These results are consistent with the findings of Giacomino and Akers (1998) and Conner and Becker (2003), who found support for personal values influencing ethical behaviour.

Further analysis was conducted to explore the following research question: Do personal values influence ethical behaviour whether one is an accounting student or not? This exploratory research question emerged as a result of the statistically significant finding of academic major (i.e., accounting vs. non-accounting) in Table 7. To answer the research question, the file was split into two groups (accounting vs. non-accounting students). Tables 8 and 9 show the results of the regression analyses for each group. It was found that intellectualism ($\beta = -.359$, $p < .01$) and

honesty ($\beta = -.196, p < .05$) significantly predicted ethical behaviour for accounting students (Table 8). It was found that only honesty ($\beta = -.302, p < .01$) significantly predicted ethical behaviour for non-accounting students (Table 9). Overall, these findings highlight the importance of honesty as an influential factor in promoting ethical behaviour between accounting and non-accounting students.

Conclusion

Key findings

This research examined the influence of personal values on ethical behaviours among undergraduate students in a Caribbean university. The study used a quantitative survey of 231 students. Findings revealed that students held high personal values and low intentions to engage in unethical behaviour. It was also found that females tended to be more honest, religious and ethical than males. However, males exhibited more self-control than females. Non-accounting students tended to show higher intellectualism and greater religiousness than accounting students. The finding of intellectualism is consistent with Baker's (1976) findings of wisdom being ranked higher by non-accounting students. However, accounting students perceived themselves to be more ethical than non-accounting students.

It was also found that the personal values subscales (honesty, intellectualism, self-control and religiousness) were significantly and negatively related to intentions to engage in unethical behaviour. Finally, this study found that honesty and self control predicted intentions to engage in unethical behaviour among the overall sample. However, when separate regression analyses were conducted to compare accounting and non-accounting students, the results showed that honesty was the most significant and consistent personal value factor between the two samples. For example, the findings indicated that intellectualism and honesty influenced accounting students' ethical behaviour, while only honesty influenced non-accounting students' ethical behaviour.

Implications of the findings

The finding that personal values do have an influence on ethical behaviour has implications for organizations and educational institutions that prepare future professionals for the workplace. Students' attitudes and behaviours, including personal values and ethical judgements and behaviour, may have implications for their ethical behaviour in the workplace (Ogilby, 1995; Ludlum & Moskaloinov, 2005). Given that the personal value of honesty was found to predict ethical behavioural intentions of both accounting and non-accounting students, organizations may need to ensure that their recruitment and selection practices include integrity testing to screen for prospective employees' degree of honesty and moral judgement. According to Finnegan (1994), individuals, who perceive honesty as very significant, may find that honesty influences ethical decisions.

The finding that accounting students perceive themselves to be more ethical than non-accounting students, may be a result of the extent to which ethical dilemmas are addressed in the content of the curriculum. Educators in non-accounting disciplines may need to focus more on including ethics into more courses (Braun & Stallworth, 2009). This can be facilitated by using work related ethical scenarios and role-playing opportunities to raise ethical awareness and to tap into the desired personal values that need to be brought into the workplace. If value orientation develops prior to starting university, then the selection process for students to various academic majors may need to be addressed. In addition, for acceptance into professions where ethical decisions have far reaching consequences, the value system of students may need to be screened prior to admission to a specific major.

Similar to previous studies (e.g., Buckley et al., 1998; Ludlum & Moskaloinov, 2005), this study found that females perceived themselves to be more ethical than males. In addition, females perceived themselves to be more honest, religious and ethical, while males perceived themselves to have more self-control. Given the likely importance of

values to ethical behaviour and the likely gender differences, investigation of the importance of specific values to behaviour in organizations and ethical decision-making may be required, thus potentially having some consequences for the job selection process of organizations. Human resource development specialists may also need to take into account the specific needs of males and females in the workplace.

Overall, it appears that consensus regarding the definition, characteristics and level of importance of personal values will remain debatable. However, it may be safe to conclude that what constitutes personal values is based on personal choices or the inherent principles that are held in high esteem by an individual that can influence his or her attitudes and behaviour. Although personal values are primarily person-oriented, there is no denying the significant influence or role of societal and organisational values on the formation or shaping of personal values. It can also be argued that individual, organisational and contextual factors play an integral role in ethical decision-making (Alleyne, 2010).

Limitations and suggestions for future research

This study has several limitations. Firstly, this study relied on self-reports which can raise some concerns about common method variance (Podsakoff & Organ, 1986). Given that the data collected through specific measures in this study came from the same source, any deficiencies that may exist in the data source may contaminate the measures used. For example, this study did not control for social desirability bias. Future research should control for this bias. Secondly, the utility of research on personal values among professional accountants lies in the ability of values to explain or predict ethical judgements and behaviour (Shafer et al., 2001). If students' personal values are predictive of ethical behaviour within the workplace, then future studies should be performed in a longitudinal manner so as to compare their personal values and ethical behaviour in the workplace with those that they exhibited while at school.

Thirdly, to add another dimension to this study's emphasis on the collection of forced-choice, self-reported, quantitative data, a qualitative analysis may be warranted to ascertain the role of specific personal values on ethical behaviour. Fourthly, the study employed an opinion based survey rather than using empirical observations of actual behavior. Fifthly, it is acknowledged that a limitation exists in the use of a convenient sample of students in the Caribbean, which may not be representative of the population. Future research should use other sampling techniques to achieve more representative samples. Sixthly, it is possible, from a construct perspective, that the four personal values investigated in this paper (honesty, intellectualism, self-control and religiousness) may not account for all of the dimensions of personal values that may be relevant to ethical decision-making. Thus, future research should investigate the likely impact of other personal values (especially those values that may be considered relevant to accounting professionals) on ethical behaviour in the workplace. For example, future work can consider using other personal values such as academic achievement and independence from Scott's (1965) scale. Finally, future research should capture the student's level of study since a final year student would have been better indoctrinated in one's discipline compared to a first year student.

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Table 1: Characteristics of the sample

Sample characteristics	N	Percentages %
Gender		
Male	91	39.4
Female	140	60.6
Total	231	100.0
Age		
20 years and under	48	20.8
21-25 years	111	48.0
Over 25 years	72	31.2
Total	231	100.0
Religious or not		
Religious	166	71.9
Not Religious	65	28.1
Total	231	100.0
Degree programme		
Accounting	78	33.8
Non-accounting	153	66.2
Total	231	100.0

Age: Mean = 25.72 years, SD = 7.80 years

Notes: SD = standard deviation

Table 2: Descriptive statistics – Personal values

	Items	Mean	SD	Cronbach's Alpha
	Intellectualism	5.36	0.89	.71
1	Having an active interest in all things scholarly	5.17	1.22	
2	Having a keen interest in international, national and local affairs	5.58	1.19	
3	Developing an appreciation of the fine arts – music, drama, literature and ballet	4.86	1.49	
4	Having a strong intellectual curiosity	5.84	1.00	
	Honesty	4.65	1.01	.58
5	Never cheating or having anything to do with cheating, even for a friend	4.39	2.07	
6	Always telling the truth even though it may hurt one's self or others	5.03	1.32	
7	Speaking one's mind truthfully, without regard for the consequences	5.10	1.35	
8	Volunteering information concerning wrongdoing, even if a friend is involved	4.10	1.33	
	Self control	4.83	1.02	.70
9	Never losing one's temper, no matter what the reason	4.32	1.48	
10	Practicing self-control	5.85	1.09	
11	Not expressing anger, even when one has reason for doing so	4.42	1.57	
12	Replying to anger with gentleness	4.72	1.45	
	Religiousness	5.13	1.23	.84
13	Being devout in one's religious faith	5.06	1.44	
14	Always living one's religion in one's daily life	4.80	1.43	
15	Always attending religious services regularly and faithfully	4.58	1.72	
16	Having faith in a being greater than man	6.06	1.36	

Notes: SD = standard deviation; Scales – 1 = strongly dislike to 7 = strongly like; Items, means and standard deviations in bold represent composite scores.

Table 3: Descriptive statistics for the six ethical dimensions of Akaah and Lund's (1994) ethical behaviour scale

Items		Mean	SD	Cronbach's Alpha
Personal use		3.45	1.54	.84
1	Using company services for personal use	4.13	1.90	
2	Doing personal business on company time	3.87	1.90	
3	Pilfering company materials and supplies	2.42	1.67	
4	Taking extra personal time (lunch hour, breaks, early departure)	3.37	2.00	
Passing blame		2.03	1.05	.71
5	Concealing one's errors	3.13	1.72	
6	Passing blame for errors to an innocent co-worker	1.56	1.20	
7	Claiming credit for someone else's work	1.41	0.98	
Bribery		2.00	1.58	.91
8	Giving gifts/favours in exchange for preferential treatment	1.99	1.63	
9	Accepting gifts/favors in exchange for preferential treatment	2.02	1.64	
Falsification		2.22	1.18	.73
10	Falsifying time/quality/quantity reports	1.62	1.36	
11	Calling in sick to take a day off	3.56	2.22	
12	Authorizing a subordinate to violate company rules	1.47	1.09	
Padding expenses		1.85	1.46	.87
13	Padding an expense account up to 10%	1.98	1.63	
14	Padding an expense account more than 10%	1.72	1.42	
Deception		2.34	1.02	.76
15	Taking longer than necessary to do a job	2.54	1.63	
16	Divulging confidential information	1.48	1.05	
17	Not reporting others' violations of company policies and rules	3.00	1.56	
Overall Ethical behaviour		2.43	1.01	.81

Notes: SD = standard deviation; Scales – 1 = extremely unlikely to 7 = extremely likely; Items, means and standard deviations in bold represent composite scores.

Table 4: Independent samples T-test showing gender differences

	Males (n = 91)		Females (n = 140)		T value
	Mean	SD	Mean	SD	
Intellectualism	5.40	1.02	5.34	0.81	0.46
Honesty	4.47	0.88	4.77	1.06	-2.21*
Self control	5.04	0.89	4.69	1.07	2.56*
Religiousness	4.89	1.14	5.28	1.27	-2.36*
Ethical behaviour	2.92	1.04	2.11	0.86	6.47**

Notes: SD = standard deviation; * p < .05, ** p < .01

Table 5: Independent samples T-test showing differences by academic majors – Accounting vs. non-accounting students

	Accounting students (n = 78)		Non-accounting students (n = 153)		T value
	Mean	SD	Mean	SD	
Intellectualism	5.18	0.83	5.46	0.92	-2.26*
Honesty	4.82	0.90	4.56	1.04	1.82
Self control	4.94	1.06	4.77	0.99	1.21
Religiousness	5.37	1.15	5.00	1.25	2.20*
Ethical behaviour	2.05	0.96	2.62	0.99	-4.20**

Notes: SD = standard deviation; * p < .05, ** p < .01

Table 6: Pearson's correlations

	Mean	SD	1	2	3	4	5	6	7	8
1. Age	25.72	7.80	1							
2. Gender	1.61	0.49	-.09	1						
3. Academic major	1.66	0.47	.20**	-.13	1					
4. Intellectualism	5.36	0.89	.17**	-.03	.15*	1				
5. Honesty	4.65	1.00	.02	.15*	-.12	.26**	1			
6. Self control	4.83	1.01	-.09	-.17*	-.08	.11	.16*	1		
7. Religiousness	5.13	1.23	.12	.15*	-.14*	.12	.23**	.17*	1	
8. Ethical behaviour	2.43	1.01	.08	-.39**	.27**	-.14*	-.39**	-.16*	-.26*	1

Notes: SD = standard deviation; * p < .05, ** p < .01

Table 7: Regression analysis for effects of demographic, personal values on ethical behaviour for the complete sample

Variables	Unstandardized coefficients B	SE B	Beta (β)
Gender	-.707	.119	-.342**
Age	.003	.007	.025
Academic major	.382	.123	.179**
Intellectualism	-.104	.066	-.092
Honesty	-.257	.060	-.255**
Self control	.131	.058	-.131*
Religiousness	-.077	.048	-.094
Constant	5.63	.554	
F		16.607***	
R squared		.343	
Adjusted R squared		.322	
Sample size		231	

Notes: ** p < 0.01, * p < 0.05

Dependent variable: Ethical behaviour; SE B = Standard errors

Table 8: Regression analysis for effects of demographic and personal values on ethical behaviour - Accounting students

Variables	Unstandardized Coefficients B	SE B	Beta (β)
Gender	-.745	.191	-.362**
Age	.006	.018	.030
Intellectualism	-.415	.126	-.359**
Honesty	-.207	.104	-.196*
Self control	-.119	.090	-.132
Religiousness	.067	.048	.082
Constant	6.53	.809	
F		10.018**	
R squared		.458	
Adjusted R squared		.413	
Sample size		78	

Notes: ** p < 0.01, * p < 0.05

Dependent variable: Ethical behaviour; SE B = Standard errors

Table 9: Regression analysis for effects of demographic and personal values on ethical behaviour - Non-accounting students

Variables	Unstandardized coefficients B	SE B	Beta (β)
Gender	-.647	.156	-.325**
Age	.001	.009	.012
Intellectualism	-.008	.083	-.008
Honesty	-.286	.073	-.302**
Self control	-.096	.077	-.097
Religiousness	-.096	.059	-.122
Constant	5.89	.740	
F		8.042**	
R squared		.248	
Adjusted R squared		.218	
Sample size		153	

Notes: ** $p < 0.01$, * $p < 0.05$

Dependent variable: Ethical behaviour

SE B = Standard errors

Appendix A**Personal Values and Ethical Behaviours Survey**

Dear Respondent:

Thank you for participating in this study. This study seeks to understand students' opinions on various behaviours within the workplace. The results of the study will help us to understand the importance of values on workplace behaviour.

Demographics

Please indicate your response by circling the appropriate number and/or fill in the blanks:

1. Age _____ years
2. Gender: Male: 1 Female: 2
3. Major: Accounting: 1 Management: 2 Psychology: 3
 Other: 4 (*please specify*) _____
4. a) Religious: Yes _____ No _____
 b) If yes, please state religious affiliation: _____
5. Number of courses done with an ethics component: _____

Read the following statements carefully. Respond to each statement by circling the appropriate number corresponding to the 7-point scale:

Key:

1 = Strongly Dislike It; 2 = Moderately Dislike It; 3 = Slightly Dislike It; 4 = Neutral; 5 = Slightly Like It; 6 = Moderately Like It; 7 = Strongly Like It

Indicate the extent to which you like, or dislike, the following traits/characteristics listed below (1 = Strongly Dislike it and 7 = Strongly Like It).

	Intellectualism							
6	Having an active interest in all things scholarly	1	2	3	4	5	6	7
7	Having a keen interest in international, national and local affairs	1	2	3	4	5	6	7
8	Developing an appreciation of the fine arts – music, drama, literature, and ballet	1	2	3	4	5	6	7
9	Having a strong intellectual curiosity	1	2	3	4	5	6	7
	Honesty							
10	Never cheating or having anything to do with cheating, even for a friend	1	2	3	4	5	6	7
11	Always telling the truth even though it may hurt one's self or others	1	2	3	4	5	6	7
12	Speaking one's mind truthfully, without regard for the consequences	1	2	3	4	5	6	7
13	Volunteering information concerning wrongdoing, even if friend are involved	1	2	3	4	5	6	7
	Self-control							
14	Never losing one's temper, no matter what the reason	1	2	3	4	5	6	7
15	Practicing self-control	1	2	3	4	5	6	7
16	Not expressing anger, even when one has reason for doing so	1	2	3	4	5	6	7
17	Replying to anger with gentleness	1	2	3	4	5	6	7
	Religiousness							
18	Being devout in one's religious faith	1	2	3	4	5	6	7
19	Always living one's religion in one's daily life	1	2	3	4	5	6	7
20	Always attending religious services regularly and faithfully	1	2	3	4	5	6	7
21	Having faith in a being greater than man	1	2	3	4	5	6	7

Adapted from Akaah and Lund (1994) and Scott (1965)

Please indicate the extent to which you are likely to engage in the following behaviours below in an organization.

Key:

1 = Extremely Unlikely; 2 = Moderately Unlikely; 3 = Slightly Unlikely; 4 = Neutral; 5 = Slightly Likely; 6 = Moderately Likely; 7 = Extremely Likely

22	Using company services for personal use	1	2	3	4	5	6	7
23	Doing personal business on company time	1	2	3	4	5	6	7
24	Pilfering company materials and supplies	1	2	3	4	5	6	7
25	Taking extra personal time (lunch hour, breaks, early departure)	1	2	3	4	5	6	7
26	Concealing one's errors	1	2	3	4	5	6	7
27	Passing blame for errors to an innocent co-worker	1	2	3	4	5	6	7
28	Claiming credit for someone else's work	1	2	3	4	5	6	7
29	Giving gifts/favors in exchange for preferential treatment	1	2	3	4	5	6	7
30	Accepting gifts/favors in exchange for preferential treatment	1	2	3	4	5	6	7
31	Falsifying time/quality/quantity reports	1	2	3	4	5	6	7
32	Calling in sick to take a day off	1	2	3	4	5	6	7
33	Authorizing a subordinate to violate company rules	1	2	3	4	5	6	7
34	Padding an expense account up to 10%	1	2	3	4	5	6	7
35	Padding an expense account more than 10%	1	2	3	4	5	6	7
36	Taking longer than necessary to do a job	1	2	3	4	5	6	7
37	Divulging confidential information	1	2	3	4	5	6	7
38	Not reporting others' violations of company policies and rules	1	2	3	4	5	6	7

Adapted from Akaah and Lund (1994)

Thank you for completing this questionnaire.