

Accounting ethics education research: A historical review of the literature

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First published 2020

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ACCOUNTING ETHICS EDUCATION RESEARCH: A HISTORICAL REVIEW

General information

Chapter Title: Accounting ethics education research: A historical review

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Abstract

This study conducts a historical review of accounting ethics education literature over a 48 year period from 1970 to 2018. The study synthesizes accounting ethics education research published in academic research journals to identify trends and key themes. The study contributes to the body of accounting and education literature by giving meaning and shape to the development corpus of accounting ethics education research. Early research highlighted the need for ethics education in the accounting curriculum, while research in the latter part of the relevant period, moved toward understanding the impact of ethics education on students' cognitive moral development and decision making. Key topic themes inherent in the data include: teaching methods, the importance of ethics education, ethical decision making, moral development, the integration of ethics into accounting courses, and curriculum related issues. Alongside the rising number of publications during the relevant period, the findings suggest an increasing sophistication in teaching pedagogies and growing interest of ethics education research in developing countries. Overall, this study underlines the importance of ethics education research to the edification and ethics of future accountants.

Keywords: Accounting Education, Accounting Ethics, Ethics Education, Trends, Key Topics

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1 Introduction

The business ethics literature is littered with examples of corporate collapses, scandals, corruption, and audit failures impacting negatively on society's belief that accountants possess the ethical commitment to protect the public interest. The response from regulators and the profession has been multi-faceted including regulatory intervention (Sarbanes-Oxley Act in the United States; and the Corporate Law Economic Reform Program (CLERP) 9 Act in Australia); soft law enhancement with the promulgation of principles and guidelines on governance and ethics in codes of conduct; and calls for ethics education interventions in university accounting education and professional development programs. The present study is focused on examining research in the latter in which increased calls for an expanded ethics coverage in the accounting curriculum stems from a belief that ethics education can enhance professionalism among accountants in which the pressure to compromise personal and professional values is ever present (AICPA, 1988; Albrecht & Sack, 2000). The call for ethics interventions in the accounting curriculum is reinforced by accrediting bodies when education standards are revised to include ethics coverage at all levels. Responding to these calls, has seen ethics education firmly entrenched in the accounting curriculum (Blanthorne, Kovar, & Fisher, 2007; Dellaportas, Kanapathippillai, Khan, & Leung, 2014). This was followed a burgeoning body of research to understand and improve the impact of ethics interventions in accounting education. The present study will examine publications in academic research journals on accounting ethics education to capture and summarise what has been learned in four decades of research.

Since the first article on accounting ethics education was published by Loeb and Bedingfield (1972), this body of research has evolved to represent a significant stream of inquiry underpinned by a dedicated group of accounting and business scholars. Despite the decades-long scholarly work on ethics education in accounting, producing a substantial amount

of research from diverse perspectives and approaches, a comprehensive review of accounting ethics education research is scant. The purpose of this study is to synthesize the research on accounting ethics education by identifying and exploring trends and key themes of accounting ethics education research. The data in this study is comprised of published manuscripts in academic research journals to provide a profile on accounting ethics education research. Profiling occurs from the extrapolation of characteristics of published manuscripts such as the topic themes to draw inferences about the body of research on accounting ethics education. The analysis will facilitate a comprehensive review of contemporary research on accounting ethics education to provide a full overview of research on this very important topic. The information gained from this review will help identify and assess the nature of ethics education to assist educators in the development of pedagogy on accounting ethics as well as provide valuable guidance for future scholars in this area of research. This present study will complement this body of research by endeavouring to provide structure to accounting ethics education from the perspective of research.

Drawing from a key word search of major publication databases, the sample frame consists of 255 published articles on accounting ethics education. A detailed examination of published manuscripts will help understand the role of research in producing knowledge on accounting ethics education as well as provide an opportunity to examine how journals, have contributed to this body of research. While accounting ethics education research is represented by a vast number of published articles, two studies have undertaken a systematic review of the relevant literature (Bernardi, Bean, & Melton, 2008; Loeb, 2006). Loeb (2006) conducted a review of the literature, addressing ethics education in the accounting curriculum over a period of 18 years from 1988 to 2006. Loeb (2006) characterized issues on ethics education including the factors influencing the level of teaching ethics, the need for ethics education, also exploring the debate on who should teach ethics; ethicists or business faculty. This was followed by

Bernardi et al. (2008), who summarised academic research on accounting ethics education research in the top 40 journals in North America. Bernardi et al. (2008) analysed trends based on the number of publications, number of ethics authors, institutions affiliated with ethics publications and the approach to addressing ethics in the curriculum during the period 1986 to 2005. Bernardi et al. (2008) argued that the number of publications is evidence of growing expertise and engagement among accounting faculty, enhancing contributions to the teaching of ethics in accounting education. The present study will not only update the literature in this area of research but will also examine the characteristics of research on ethics education including key topic themes, and the purpose and motivation for ethics education research in accounting. This is an important topic not only for accounting researchers and educators but also for the academy in diverse disciplines who may be contemplating an extension or intervention of ethics education in their respective disciplines.

The remainder of this chapter is structured as follows. In section two, the typology and the rationale for article selection is outlined. This is followed by section three with an overview of accounting ethics education spanning five decades of research. The key topic themes are presented and described in section four and the study is concluded in section five.

2 Data Collection

Data is collected by collating the details of published articles to develop a profile of accounting ethics education research. Profiling relies on the methodological tool of ‘research profiling’ proposed by Porter, Kongthon, and Lu (2002). Research profiling aims to map research by scanning publications to address questions such as: What are the major topics studied within a particular field? How is the research informed? How has the research evolved? The present study is primarily focused on analysing publication descriptors at the level of the manuscript to help construct a comprehensive picture of accounting ethics education research. This will be achieved by identifying and analysing trends and key research themes inherent in

the underlying characteristics of published research on accounting ethics education. The findings provide insight on how accounting ethics education research has evolved from literature distribution patterns over five decades of research.

Profiling in this study relies on the collection and analysis of descriptor variables appearing in published articles as control words to construct and represent themes. Prominent university library databases were scanned to develop a preliminary list of manuscripts on accounting ethics education: Google scholar and Databases (ACER), Inform Global (Proquest), EBSCOHost Web Research Databases (EBSCO), PsycINFO (ProQuest), Science Direct, and SCOPUS (Elsevier). The search criteria for published articles relied on key-word and phrases comprising: ethics education in accounting, accounting ethics education, ethics in accounting and ethics education. To minimize the risk of missing compatible published research, the databases were scanned without restriction on the year of publication to develop a full repertoire of research on ‘accounting ethics education’. In addition to the key-word search, specific journals were also examined as they were expected to include research on ethics education: Journal of Business Ethics; Journal of Accounting Education; Issues in Accounting Education; Accounting Education¹; Managerial Auditing Journal; Research on Professional Responsibility and Ethics in Accounting; Business and Professional Ethics Journal; Critical Perspectives on Accounting and Journal of Business Ethics Education.

This process resulted in the collection of 320 articles. Most importantly, ‘ethics education’, ‘accounting students’ or ‘accounting curriculum’ were essential criteria in building the sample frame. Published articles on ‘business’ ethics education, rather than accounting ethics education, were not included in the sample frame unless the research comprised of sub-samples inclusive of accounting students. Furthermore, the term ‘accounting students’ for the

Formerly known as: ‘Accounting Education: an international journal’

purpose of data collection was defined liberally to include undergraduate students, postgraduate students and practicing accountants undertaking professional education in continuous professional education (CPE). The sample frame also includes research on instructors, lecturers and faculty members who delivered or had direct interaction with the accounting ethics education courses. Articles excluded from the sample include unpublished manuscripts (e.g. papers presented in conference proceedings) as well as articles exclusively or predominantly concerned with business ethics or students but not addressing accounting ethics or accounting students. The titles of these articles were scanned to remove duplicate articles and abstracts were examined to remove articles that did not meet the selection criteria. This process resulted in the removal of 65 articles leaving a total sample of 255 articles for data analyses ranging from 1972 to the end of 2018.

Data collection relies on inspecting and recording the details of each published article to gain a picture of ethics education research in accounting and infer generalisations about accounting ethics education research. Frequency counts were used to rank-order descriptor variables to help gain a picture of occurrence and regularity. The data was examined by undertaking a schematic categorisation of the published articles to uncover trends, topics, and other categorical themes and relationships to understand the research fields investigated by accounting researchers. Categorisation is an iterative process of investigating and tallying the characteristics of published articles to signify important and dominant artefacts. The categorisation of qualitative characteristics such as topic themes occurred in two iterative stages. In stage one, data was collected by examining key words nominated by authors in their publications and information contained in the abstract. Where this was unclear, the researchers delved deeper by reading the articles to obtain the relevant data. In stage two, the descriptors were assessed and classified into subject group domains to identify basic categories.

The findings are presented in two sections, the first section examines key trends through five decades of accounting ethics education research and section two delves deeper into the reasons and rationale for accounting ethics research illustrating the importance and benefits of accounting ethics education. The citations appearing in the discussion below is not intended to be exhaustive but representative of the assertions presented in the discussion to bring to the readers' attention a path to key readings.

3 Trends in research on ethics education in accounting

A total of 255 manuscripts from 88 journals were published during five decades of accounting education research (see Table 1). A large proportion of articles (111 manuscripts) were published in only three journals accounting for 44% of total publications. The Journal of Business Ethics ranks highest with a total of 58 published articles, more than 60% higher than the second rank journal, the Journal of Accounting Education with 36 published articles; and a little over 100% higher than the third ranked journal, Issues in Accounting Education with 17 published articles. The remaining articles were spread across 85 journals. Interestingly, the combined output of accounting education articles published in journals dedicated to the dissemination of research in 'accounting' (119 manuscripts) is less than the combined output of published articles in journals in the broader discipline of 'business' (136 manuscripts). Furthermore, the manuscripts published in accounting or business journals outnumber the manuscripts published in education journals, suggesting that authors favour non-education journals as their preferred publication outlet for accounting ethics education research. The diversity of accounting and non-accounting journals in which accounting ethics education research is published raises the question of whether a journal dedicated to accounting ethics education is warranted.

INSERT TABLE 1 HERE

Evidence of accounting education research first appeared in the 1970s with an article published in 'The Accounting Review' by Loeb and Bedingfield (1972). This article examines the importance of teaching ethics and how colleges and universities organize their ethics teaching. A small increase in publications occurred during the 1980s with six articles suggesting that accounting ethics education research is emergent in this period. The research content of published research in the 1980s did not change greatly from the work published by Loeb and Bedingfield (1972) focusing on the importance of accounting ethics education and investigating the nature and content of ethics education. Published research in this period emanated from the United States and discussed in detail, educational issues such as teaching methods (Scribner & Dillaway, 1989) and the integration of ethics into accounting courses (Cohen & Pant, 1989; Langenderfer & Rockness, 1989). Research in the 1980s also highlighted a need for more ethics education either through additional courses in accounting ethics or additional ethics subject matter in existing accounting courses (Cohen & Pant, 1989; Karnes & Sterner, 1988; Loeb, 1988; Scribner & Dillaway, 1989). The need to improve the impact of ethics education was raised by Scribner and Dillaway (1989) who claimed that case discussion on ethics can contribute greatly to the accounting curriculum which at the time, was lacking in accounting ethics instruction. During this period, ethics education was predominantly restricted to auditing courses focusing on the code of ethics and issues associated with auditor independence (Cohen & Pant, 1989).

Loeb (1991) noted an increase by universities and business colleges to engage with ethics education including accounting ethics education conferences and the development of materials for teaching ethics. The activities and investment in accounting ethics in the 1980s benefited the academic community with a marked increase in published research of 52 published articles in the 1990s. Research in the 1990s can be grouped into three broad categories: teaching accounting ethics; cognitive moral development, and perceptions on the relationship between

ethics education and other factors (for example, culture, religion, whistleblowing and cheating). In teaching, research examines different areas of accounting ethics education such as the curriculum content (see for example Sisaye & Lackman, 1994); teaching methods (see for example Awasthi & Staehelin, 1995; Kerr & Smith, 1995; Leung & Cooper, 1994); discussion on whether ethics should be integrated throughout many courses or taught in a stand-alone course (see for example Hildebeitel & Jones, 1992; Pizzolatto & Bevill, 1996); and issues related to the delivery of ethics education (see for example McDonald & Donleavy, 1995; McNair & Milam, 1993). In the second category, research examines whether ethics interventions enhanced student's moral development relying predominantly on Kohlberg's theory of cognitive moral development (see for example Eynon, Hill, Stevens, & Clarke, 1996; Shaub, 1994b; Wright, 1995) and other measures of ethical awareness and judgment (Ameen, Guffey, & McMillan, 1996a). Research in the third category is focused on eliciting the views or perceptions of accounting ethics education impacted or influenced by: culture and religion (see for example Whipple & Swords, 1992); gender (see for example Ameen, Guffey, & McMillan, 1996b; Davis & Welton, 1991); and whistleblowing and cheating (see for example Ameen et al., 1996a; Brody and Bowman, 1998).

The number of manuscripts increased markedly in the two decades that followed with 90 articles published during the 2000s and 106 articles published in the nine years period between 2010 and 2018. With the volume of published works in this period increasing, this might reasonably be considered the highpoint of accounting ethics education research. The significant increase in the latter two decades could be the result of an investment or accumulation of intellectual capital in accounting ethics from previous decades, combined with, or enticed by the presence of corporate scandals that occurred in this period. Although not included as part of the sample frame of this study, it is worth noting that PhD programs and doctoral students investigating accounting ethics education emerged within this decade (Buell, Cavico, Mujtaba,

& Rentfro, 2009; Cannon, 2001; Galla, 2007). A growing number of doctoral students on accounting ethics education research is not only expected to enhance research output on accounting ethics education but will also propagate further research when doctoral candidates become faculty and guide others in the pursuit of accounting ethics education research.

The wave of corporate scandals in the late 1980s (for example Bankers Trust, ESM Government Securities, MiniScribe scandal in United States, Barlow Clowes scandal in United Kingdom; and Bond Corporation and Christopher Quintex in Australia) gave spotlight to ethics in business and the accounting profession and the call for ethics interventions in the accounting curricula. It was at this point we see an increase in the number of articles published on accounting ethics education, particularly in the 1990s. The corporate scandals of the 1980s reoccurred in the early years of the 2000s with the collapse of major corporations such as Enron and WorldCom (in the US), Parmalat (in Europe), Satyam Computers (in India) and HIH Insurance (in Australia); and the implosion of the global accounting firm Arthur Andersen. This spate of corporate collapses, once again provided faculty with the impetus and opportunity to conduct research in accounting ethics education, appearing as published outputs in the 1990s and 2000s.

Similar to the 1990s, research in the 2000s continued to pay attention to teaching related matters in accounting ethics education including the importance of ethics education and ethical decision making among students (Chan & Leung, 2006; Elias, 2006) and the impact of ethics education on students' ethical perceptions (Chan & Leung, 2006; Elias, 2006; Larres & Mulgrew, 2009; O'Leary & Mohamad, 2008). Research in the 1990s and 2000s extended the research in the 1980s to examine the impact of ethics education in specific contexts such as whistleblowing (see for example Liyanarachchi & Newdick, 2009; O'Leary & Radich, 2001; O'Leary & Cotter, 2000); bribe acceptance (O'Leary & Cotter, 2000) and exam cheating

(O'Leary & Radich, 2001; O'Leary & Cotter, 2000). Among this research, two key themes emerged demonstrating the highest number of published articles during this period. The first theme is centred on approaches to teaching ethics by comparing standalone ethics courses with a pervasive approach to teaching ethics where ethics is integrated across all or many required courses (see for example Cooper, Leung, Dellaportas, Jackling, & Wong, 2008; O'Leary & Mohamad, 2008; Shawver, 2009). The second theme is focused on the importance of ethics education and how ethics education may impact the ethical behaviour of the future accountants (Abdolmohammadi, 2008; Cooper et al., 2008; Gonzalo & Garvey, 2005; Rahman, 2003).

In addition to matters relating to ethics education, research during the 2000s found that ethics education in the accounting curricula, especially in undergraduate degree programs, had increased significantly. It was also during this period, new topics emerged with researchers' investigating the relationship between ethics and religion (Auyeung, Dagwell, Ng, & Sands, 2006; Burks & Sellani, 2008; Levy & Mitschow, 2008). The international spread of accounting ethics education research occurred in this decade with the study of ethics education in developing countries appearing in published research, including: Malaysia (O'Leary & Mohamad, 2006, 2008; Rahman, 2003); Turkey (Caliyurt & Crowther, 2006); China (Chan & Leung, 2006); and how and why to teach ethics in South Africa (Naudé, 2008)..

The nine years from 2010 to 2018 displayed the highest number of publications resulting in the peak period for published research on accounting ethics education. Whilst research in this period, built on the work carried out in previous decades, the location of such research extended to developing countries, increasing markedly the number of publications from non-western locations. In the 2000s, six articles were published in four distinct country contexts whereas in the 2010s, 28 manuscripts were published in 15 distinct countries. In the period from 1990 to 2018, there were 35 manuscripts published in 15 developing countries, displaying

the spread of this research across the globe, potentially reflecting the reach of accounting ethics education or the response to local and international business scandals. Research publications on developing or non-western countries include: Malaysia (8), Turkey (5), South Africa (4), China and Iran (3), Ghana and India (2) and one publication in Albania, Indonesia, Nigeria, Mexico, Philippines, Romania, Tunisia and Zimbabwe. The majority of country studies aimed to evaluate the importance and impact of ethics education, in countries including: Ghana (Singh & Vasudeva, 2006), Iran (Chafi, 2013; Royae, Ahmadi, & Jari, 2013), Malaysia (Graham, 2012; Koumbiadis & Pandit, 2014; Ghazali, 2015; Saat, Porter, & Woodbine, 2010a; 2012), South Africa (Fourie & Contogiannis, 2014), Nigeria (Salami, Sanni, & Uthman, 2018) and Turkey (ŞENGÜR, 2017; Uyar & GÜNGÖRMÜŞ, 2013). Three studies in particular differed from mainstream ethics education research to examine the implications of ethics education from a cultural perspective by examining ethics education using a non-western lens. Chang, Davis, and Kauffman (2012) examine the framework and process of Buddhist ethics education in India; Mahdavikhou and Khotanlou (2012) examine Islamic ethics in accounting education by developing ethical thinking among students; Özkan (2013) examine the constraint on accounting ethics education in Turkey among student diverse religious orientations.

While research is undertaken in diverse cultural contexts, the nature of the research did not vary greatly from previous decades. Han (2011) examine ethics education in China by investigating the approaches to improve the effectiveness of ethics education in relation to curriculum, course content, and the teaching methods. Billiot, Daniel, Glandon, and Glandon (2012) examine the effect of education on measures of ethical sensitivity and levels of moral reasoning among accounting students in Mexico. Arfaoui, Damak-Ayadi, Ghram, and Bouchekoua (2016) similarly examine the influence of ethics intervention on accounting students' level of moral development in Tunisia. Manalo (2013) explored the teaching strategies for a business ethics course in the accounting curriculum in the Philippines. In South

Africa, Taylor (2013) investigated ethics training for accounting students and Nathan (2015) examine how ethics education influences final year accounting students in attempting to raise ethical consciousness and responses to ethical situations. These two studies examine how societal and circumstantial factors impact the ethical attitudes of prospective accountants in South Africa. Finally, Warinda (2013) studied faculty views on three areas: the importance of ethics, the importance of goals of accounting ethics education and methods of teaching ethics (such as integration of ethics in cores accounting courses or teach ethics as a standalone course) in Zimbabwe.

In addition to the research in developing countries, further issues were investigated including: the benefits of teaching ethics (see for example Arfaoui et al., 2016; Singh & Vasudeva, 2006), the extent of teaching ethics and ethics subject matter incorporated in the curriculum (Ahmad, 2017; Marzuki, Subramaniam, Cooper, & Dellaportas, 2017; Onumah, Antwi-Gyamfi, Djin, & Adomako, 2012; ŞENGÜR, 2017; Simpson, Onumah, & Oppong-Nkrumah, 2016; Win, Ismail, & Hamid, 2014); the influence of ethics education on students' ethical attitude (including awareness, judgment, behaviour) (Fourie & Contogiannis, 2014; Ghazali, 2015; Saat et al., 2010a, 2012); and the relationship between ethics and accounting education to demonstrate that education is a valuable tool to improve ethics (Chafi, 2013). Win et al. (2014) examine the accounting educators' perceptions on ethics education curriculum and Ahmad (2017) and Marzuki et al. (2017), studied the integration of ethics into accounting curriculum. In this period, a large focus of research remained on teaching methods but extended to include alternative pedagogies such as presentations (Canarutto, Smith, & Smith, 2010; Faello, 2017), case studies (Manalo, 2013; Shawver, 2011), role plays, film/video (Manalo, 2013), web-based, multimedia-orientated teaching module (McManus, Subramaniam, & James, 2012).

4 Topic themes on research in ethics education in accounting

The topic areas of accounting ethics education research capture the key themes for the period 1972 to 2018 to appreciate and understand the importance and benefits of teaching ethics to accounting students (see Table 2). The topic themes are identified by mining each manuscript using the key words provided by the submitting authors and by examining the research aims and rationale of each manuscript. Key topic themes were collated, categorised and recategorized based on cognitive overlap to arrive at a list of main categories. Overall, the top six most frequently occurring themes accounted for 64% of published research on accounting ethics education between 1972 to 2018. Notably, the purpose and rationale for accounting ethics education research remained constant throughout the five decades of research. The most frequently occurring theme is concerned with the ‘methods of teaching ethics,’ accounting for 12.55% of the total of 255 manuscripts. The second most frequent theme deals in the ‘importance of accounting ethics education’ representing 11.37% of total publications. The next two most frequent themes, ‘ethical decision making’ and the ‘integration of ethics into the accounting curriculum’, were ranked equally in third position, with each theme accounting for 10.98% of the total sample population. Issues associated with ‘moral and ethical development’ examined in terms of moral capability, moral intensity and moral reasoning, is ranked fourth with only two fewer manuscripts than the themes ranked in third position, accounting for 10.2% of the total publications. The fifth theme relates to topics dealing in the ‘accounting curriculum’ accounting for 8.24% of overall publications. The remaining themes account for 36% of the total publications dealing in diverse and scattered topics. The findings below present a synthesis of accounting ethics education research for the period 1972 to 2018 based on the six major topic themes. The length of the discussion appearing in each section should not be interpreted as reflective of the quantity of research produced but the diversity of topics within each broad category.

INSERT TABLE 2 HERE

4.1 Methods of teaching ethics

The methods utilised in the classroom to teach ethics provides a significant motivation for research when new and innovative pedagogies have the potential to support students' learning as well as assist educators to deliver classes using more stimulating formats. This research stems from a desire to understand the impact of different pedagogies on ethics education. Several authors examine both inductively and empirically the pros and cons of diverse teaching methods. Interest in teaching methods and ethics education is reflected in a plethora of research investigating diverse pedagogies including: case problems (real or imaginary), film/video, role playing, ethical games, small group discussion, educational novels and published journal articles, the lecture method, group and collaborative learning through ethical discussion, exposure to alternative viewpoints, personal value journals; guest speakers, practitioner participation; service-learning, E-learning, written assignments identifying personal heroes, and a review of the AAA Casebook (Kerr & Smith, 1995; Naudé, 2008; Faello, 2017; Manalo, 2013; Scribner & Dillaway, 1989; Shawver, 2011; Ocampo-Gómez & Ortega-Guerrero, 2013; Apostolou & Apostolou, 1997; Gunz & McCutcheon, 1998). In early research, Gunz and McCutcheon (1998) identify an absence of case studies in accounting ethics education stemming from the lack of interest in embedding ethics in the accounting curriculum. Manalo (2013) find that the ethical discussion and collaborative learning are teaching strategies most preferred by students, and technology-enhanced learning or e-learning strategies are least preferred. Written vignettes are deemed by (McNair & Milam, 1993) to be the most effective of all methods but was not favoured among faculty to teach ethics, only 48% apply this method. McDonald and Donleavy (1995) engaged in this debate by challenging the resistance and misconceptions of the limitations of ethics education to enhance and encourage faculty understanding of effective ethics education.

While many authors advocate pedagogical diversity, the lecture is the most commonly used method to teach ethics (Loeb & Bedingfield, 1972; McNair & Milam, 1993). McNair and Milam (1993) find the reason behind the popularity of the lecture method is the relative ease in adding ethics dimensions to discussion across a wide variety of accounting classes. Furthermore, lectures can also be delivered with minimal preparation or grading time compared to case or vignette assignments. However, Han (2011) strongly argued that the lecture method is unsuitable to teach ethics. While the lecture method is easy to practice and enables students to learn knowledge in a passive non-threatening way in the shortest time, students tend to find this method tedious and ineffective (Han, 2011). An active learning approach to ethics education, is advocated by many researchers in preference to conventional methods of teaching (Armstrong, 1987; Han, 2011; Loeb, 2006; Massey & Van Hise, 2009). With this in mind, a number of authors link pedagogy with experiential learning such as individual journals/diaries and project reports to better understand ethics in accounting (Loeb, 2015; Naudé, 2008). Kuhn (1998) advocates pedagogy in real world situations to encourage students to confront diversity, ambiguity, market failures, and systemic injustices. Taplin, Singh, Kerr, and Lee (2018) are motivated by role-plays because they help students develop ethical awareness and prepare them for dealing with ethical dilemmas in the workplace. Deno and Flynn (2018) invested in authentic classroom exercises by familiarising students with audited financial statements and internal control shortcomings. Stephenson (2017) introduced a Reflective Ethical Decision Model offering a hands-on pedagogical approach to decision making. Kuhn (1998) supports games and simulations to accompany deeper probing of ethical theory. Taplin et al. (2018) reported how short 10-minute role-plays can be used as an effective tool for ethics education. This stream of research is based on the premise that real-world experiences enhances the critical thinking abilities of the participating students.

Research on the methods of teaching is derived from the belief that pedagogy in accounting ethics education contributes to enhancing the ethics of future accounting professionals. Understanding and developing teaching effectiveness is prompted by the question, on how ethics can be taught so that effective learning takes place (Armstrong, 1990, 1993; Christensen & Woodland, 2018; Frank, Ofobike, & Gradisher, 2009; Geary & Sims, 1994; Taylor, 2013). Many authors call for moral growth through ethics interventions, however, the need for ethics education is dependent upon whether or not such teaching would prove effective. In general, the impact of ethics education interventions with diverse teaching methods produce contrasting results. O’Leary and Stewart (2013) examine the interaction between learning styles and find that different teaching methodologies in an auditing course have a greater impact on active learners more than passive learners. Shawver (2011) explored the effectiveness of five components (cases, participation, textbook readings, a research paper, and exams) of teaching ethics in an Advanced Financial Accounting course. Both Scribner and Dillaway (1989) and Awasthi and Staehelin (1995) suggest that the case study approach to teaching as well as the ethics education effectively have positive influence on students.

4.2 Importance of ethics education

Research on ethics education in accounting stems from attempting to understand its importance to the development of future accounting professionals (Abdolmohammadi, 2008; Maruszewska, 2011; Caliyurt & Crowther, 2006; Uyar & GÜNGÖRMÜŞ, 2013; Warinda, 2013). This body of literature addresses the importance of ethics education in terms of its goals but also evaluates potential problems and issues in the delivery of accounting ethics education. The media attention and subsequent investigations into corporate collapses left commentators questioning the ethics of the accounting profession resulting in an upsurge of accounting ethics education, inspiring research on the reasons and benefits of accounting ethics education (Bean

& Bernardi, 2005; Costa, Pinheiro, & Ribeiro, 2016; Ferguson, Collison, Power, & Stevenson, 2011; Fisher, Swanson, & Schmidt, 2007; Fourie & Contogiannis, 2014; Gordon, 2011; Halbesleben, Wheeler, & Buckley, 2005; Koumbiadis & Okpara, 2008; Loeb, 2006; McManus & Subramaniam, 2009; Misiewicz, 2007; Ghazali, 2015; Saat et al., 2010a; ŞENGÜR, 2017; Sugahara & Boland, 2011; Van Hise & Massey, 2010; Win et al., 2014). Corporate scandals involving the accounting profession has thus become a major catalyst for accounting ethics education research (e.g. Canarutto et al., 2010; Jackling, Cooper, Leung, & Dellaportas, 2007; Jennings, 2004; Wilson, Strong, & Mooney, 2016). The rationale is prompted initially by the fraudulent activities of companies such as Enron, WorldCom, HealthSouth, and others, and the devastating effects on financial markets and investors, creating public concern toward accountants (Bean & Bernardi, 2005).

One stream of research attributes accounting frauds to the failure of educators to implement adequate ethics training in accounting education programs (Brown-Liburd & Porco, 2011; Ferguson et al., 2011; Miller & Shawver, 2018). Some authors suggest that the education system should bear some of the responsibility for the apparent low moral standards of the accounting profession highlighting the need to re-examine the level and type of ethics education (McPhail, 1999; Shawver, 2009). The implicit rationale calling for ethics education is to reduce the level of fraud in business by integrating ethics into accounting education programs (Uyar & GÜNGÖRMÜŞ, 2013). Support for critics who challenge the ability of the accounting profession to hold corporations to account, embed their claims in evidence questioning the ethicality of accounting students. For example, O’Leary & Cotter (2000) discovered a willingness among accounting students to accept a bribe and/or cheat in an exam. Ameen et al. (1996a) similarly investigated students' perceptions of questionable academic practices and their propensity to cheat. Elias and Farag (2010) considered the psychological variable, ‘the love of money’, in determining how accounting students view cheating actions

inside and outside the classroom, and (Burns, Tackett, & Wolf, 2015) examine the effect of ethics education on the incidence of student plagiarism in a college writing assignment.

The relationship between recruiting aspiring accountants and accounting ethics education was also the aim of a small quantity of articles. From the viewpoint of the recruiter, Ahadiat and Mackie (1993) identify the relative importance of ethical behaviour compared with the more traditional personal characteristics utilised by public accounting firms during their recruiting process. Breaux, Chiasson, Mauldin, and Whitney (2009) explore ethical coverage in accounting programs as an important factor affecting recruiting decisions for entry-level accounting positions. Research on CPE and members of the profession eventually turned to professional accounting bodies and their perceptions toward ethical training. Jackling et al. (2007) sought the viewpoint of professional accounting bodies on: the likelihood of ethical issues arising in different types of organisations; the perceived causes of ethical failure; and on their role in ethics education. Fleming (1996) also discussed the factors preventing professional accounting bodies from successfully integrating an effective ethics education into their assessment schemes for prospective members.

The viewpoint of accounting faculty on the importance of ethics education was sought and compared with that of accounting students to identify differences in the way the two cohorts perceive the goals and benefits of accounting ethics education (Adkins & Radtke, 2004). This stream of research finds that students embrace the importance of accounting ethics education and value their experience in ethics education (Cooper et al., 2008; Gonzalo & Garvey, 2005; Rahman, 2003). Blanthorne et al. (2007) provided faculty opinions on whether ethics should be included in the accounting curriculum, who should teach ethics, and how and where in the curriculum ethics should be taught. Miller and Shawver (2018) similarly examine faculty perceptions on what is being taught and how much time is dedicated to ethics training.

The authors suggest that ethics training is insufficient and had not changed a great deal in two decades. Hurtt and Thomas (2008) find support from educators on the implementation of a course in ethics as a prerequisite requirement for CPA examination candidates. Evidence suggests that faculty give credence to importance of ethics education and call for the integration of ethics throughout required accounting courses (Loeb, 1988; Milam & McNair, 1992). Smith, Smith, and Mulig (2005) find that students accept the importance of ethics education and called on educators to encourage students to learn how to do the 'right thing' within ethics education.

Cultural issues in accounting expanded the debate on accounting ethics education to consider the globalisation of business and accounting to draw attention to the importance of cross-cultural factors in the ethics of accountants. Tweedie, Dyball, Hazelton, and Wright (2013) emphasize that ethical beliefs are highly diverse and often deeply held, especially when intertwined with local cultural or religious practices. Understanding guanxi is popular in the relational society of China in which loyalty to one's superior tends to take precedence over one's commitment to professional and ethical obligations (Yang & Wu, 2009). Singh & Vasudeva (2006); Caliyurt & Crowther (2006) identify important shortcomings in the ethics education imparted to future accounting professionals in India. Ramirez (2017) examine the impact of the financial corruption in Spain on the accounting curriculum and the development of ethical competencies among students. Research moved from analysing cultural issues and ethics in accounting to the ethics of individual students in diverse cultural settings (Auyeung et al., 2006; Ge & Thomas, 2008; Ho & Lin, 2008; Waldmann, 2000). For example, Irsyadillah and Lasyoud (2018) examine the ethical development of accounting students in Indonesia. Further research compares the ethical perceptions of students from different nations: United States and Ireland (Eynon et al., 1996); English-Canada and the United States (Thorne, 1999); Canada and China (Ge & Thomas, 2008); Anglo-Australian, Chinese and Muslim, (Auyeung et al., 2006); Malaysia, Australia and Ireland, (O'Leary & Mohamad, 2006); United States and

United Kingdom (Whipple & Swords, 1992); United States and Taiwan (Ho & Lin, 2008; Su, Kan, & Yang, 2010). This stream of research tends to rely on the cultural dimensions developed by Hofstede and Bond (1984) in describing the effects of society's culture on the values and behaviour of its members.

4.3 Ethical decision making

The impact of education on students' ethical decision-making was the focus of several studies stemming from a belief that education and decision making is the key to reducing unethical behaviour (Gray, Bebbington, & McPhail, 1994; Leitsch, 2004; Singh & Vasudeva, 2006; Sweeney & Costello, 2009; Williams & Elson, 2010a). Sweeney and Costello (2009) demonstrate a relationship between the students' moral intensity and their ethical decision-making. Christensen and Woodland (2018) find that the ethics education is positively and significantly associated with moral judgment and ethical decision making. Ramirez (2017) provides students with the tools to make ethical decision when facing prohibited acts. O'Leary and Pangemanan (2007) analysed the effect of group decision-making on ethical issues and find that the group approach is not conducive to optimal or complex ethical decisions. While the majority of research on ethical decision making infers improved ethical behaviour, some studies focus on the behavioural choices of specific issues such as whistleblowing to help root out fraud (Brody & Bowman, 1998; Shawver, 2011). This research is aimed at examining the relationship between accounting ethics education and whistleblowing when faced with a serious wrongdoing. Liyanarachchi and Newdick (2009) find that the strength of retaliation and participants' level of moral reasoning is positively associated with the propensity to blow the whistle. McManus et al. (2012) find that students exposed to a web-based ethics instruction module are more likely to blow the whistle than students exposed to a traditional in-class textbook ethics instruction. Elias (2008) investigated students' perceptions toward internal and

external whistleblowing and find that senior students demonstrate a commitment to the profession and more likely to blow the whistle on illegal management actions.

Much of the work on ethics education and ethical decision making, stems from the theoretical framework of Rest's (1986) four component model in which ethical decision making is the result of four interlinking components: ethical sensitivity, ethical judgment, ethical intention, and ethical behaviour. Developing students' ethical sensitivity, representing the first component of Rest (1986) model, is considered important because ethical conflicts occur when accountants perceive their duties differently between stakeholder groups or when self-interest is central. Several studies refer to enhancing ethical sensitivity so that students are better able to recognize issues in accounting and by implication, change students' behaviour (Armstrong, 1993; O'Leary, 2009; Welton, Lagrone, & Davis, 1994; Wright, Dyball, Byers, & Radich, 2012). Developing ethical awareness and sensitivity is critically important when ethical violations result from ignorance rather than deliberate action (Williams & Elson, 2010b). Shawver and Sennetti (2009) examine diverse measures of ethical sensitivity moving discussion on measurement away from the well-established Defining Issues Test, such as multidimensional ethical scale (MES), to measure the effects of undergraduate accounting ethics education.

On the second component of Rest's model, Koumbiadis and Pandit (2014) examine the influence of ethics instruction on the moral judgment of two groups of accountants, graduates of programs with 120-credits and graduates of programs with 150-credits. The results find no significant difference in the domains of self-Interest, efficiency, social responsibility, or legal compliance between the two groups. Saat et al. (2012) find that a moral education program is able to enhance the levels of moral judgement and that practical training contributed significantly to the observed improvement. Dellaportas (2006) similarly find that a dedicated

course on ethics has a positive effect on students' moral judgement. Koumbiadis and Okpara (2008) and Coate and Frey (2000) test the third and fourth components of Rest's model, and evaluate how accounting ethics education impacts students' behavioural intent and ethical behaviour. Koumbiadis and Okpara (2008) reveal that accounting students are more likely to be aware of the importance of ethical behaviour as a result of the demise of large corporations and the ripple effect of these catastrophes on the economy. Miller, Becker, & Pernsteiner (2014) studied the impact of a course on accounting ethics course incorporating a formal 'Ethics Education Framework and associated Toolkit', on students' ethical development, moral sensitivity/awareness, and the intent to take ethical actions. Miller et al. (2014) find that accounting ethics education has a positive impact on the four stages of Rest's framework: ethical awareness, judgment, intention and behaviour.

One stream of research aims to facilitate structured decision making by socialising students into accepting and adhering to the principles of the code of professional conduct and integrate the principles of the code into students' personal ethical code and behaviour (Loeb, 1994; McCarthy, 1997; Persons, 2009). With this rationale, McCarthy (1997) examine students' affinity with the code of ethics and find no significant difference between beginning and advanced level accounting students, or students who had or had not taken the ethics course. The results indicate that ethical orientation does not significantly improve with exposure to the AICPA Code of Conduct in collegiate courses in accounting. Persons (2009) examine the factors related to the code of ethics that could potentially influence students' ethicality and find that gender, academic major, work experience, and the number of work placements providing ethics training have a positive influence on students' ethicality measured in terms of the code of ethics. A similar stream of research among accounting professionals examine their commitment to the code of ethics, acting as a barometer to the quality of work carried out with honesty and integrity. This research emphasises the importance of character, integrity, and

responsibility in accounting education, augmenting the need for instruction on the code of ethics (Haas, 2005) combined with a more general discussion of ethical behaviour (Larres & Mulgrew, 2009). Research evidence suggests that training on codes of ethical allow organisations to improve employees' conduct by working through and increasing employees' perceptions of their immediate ethical context (Valentine & Fleischman, 2004).

4.4 Moral reasoning, development and capability

Moral reasoning, development and capability is ranked fourth in the list of key topic themes and is implicit in ethical decision making and behaviour and therefore discussed following the discussion on ethical decision making above. Research on moral development among accounting students relies predominantly on Kohlberg (1981) theory of moral reasoning and development to understand and measure improvements in student's ethical reasoning (Arfaoui et al., 2016; Dellaportas, 2006; Irsyadillah & Lasyoud, 2018; Shaub, 1994a; Thorne, 1999). Whereas research on ethical decision making relies on Rest's (1986) four component model, Kohlberg's (1981) theory is the most widely used theory to explain elevations in moral and ethical reasoning, following an ethics intervention in accounting education. This research is motivated in part by empirical evidence suggesting that accounting students lack moral reasoning skills compared with students in other disciplines such as medicine or law (e.g. Liu, Yao, & Hu, 2012). The impact of ethics education on student's moral capability is mixed (Tweedie et al., 2013). While many studies find accounting ethics education contributes to students' moral thinking and behaviour (e.g., Dellaportas, 2006; Melé, 2005; Thorne, 2001; Williams & Elson, 2010a), additional studies find that ethics education does not have significant influence on students' ethical attitude (Low, Davey, & Hooper, 2008; Ponemon, 1993). Ponemon (1993) find that ethics interventions had no effect on accounting students' level of ethical reasoning and did not curtail students' free-riding behaviour. While Low et al.

(2008) find that students do not believe that ethics education will have a significant influence on their ethical attitude, the authors continue to advocate for an ethics course deeming it an essential component of learning for future accounting professionals. Research also finds that the gains on students' moral reasoning from an ethics intervention are transitory and did not persist after graduation (LaGrone, Welton, & Davis, 1996; Welton & Guffey, 2009). Overall, the research evidence shows that the research findings are inconsistent.

The factors elevating moral reasoning and development has drawn attention from many researchers (Billiot et al., 2012; Brown-Liburd & Porco, 2011; D. M. Fleming, Lightner, & Romanus, 2009; Fourie & Contogiannis, 2014). Both Shaub (1994b) and Thorne (1999) evaluate the relationship between demographic variables and student's moral reasoning and development. While Shaub (1994b) debated potential weaknesses in implementing ethics in the classroom. Thorne (1999) find that the moral development among a sample of Canadian accounting students is associated with years of education and gender but is not associated with age or audit experience. Research evaluates the perception of ethical behaviour and moral development of accounting students, to examine the effectiveness of ethics education (Saat et al., 2010b) or by the individual factors (gender, age, work experience, and attendance of a course on ethics) (Costa et al., 2016). These studies also indicate that ethics education significantly influences ethical conduct and moral development (Gonzalo & Garvey, 2005; Rahman, 2003; Saat et al., 2010b); while Costa et al. (2016) find that gender, age and work experience influences students' initiative, obedience and integrity. In spite of the positive findings, authors continue to claim a need for a more ethics education by business schools and accounting programs and future accountants (Abdolmohammadi, 2008).

4.5 Extent of ethics into the accounting curriculum

In order to assess the adequacy of ethics instruction in accounting programs, one stream of research (ranked third in the list of key themes) investigates the extent of ethics coverage in the accounting curriculum (Dellaportas et al., 2014; D. M. Fleming et al., 2009; Low et al., 2008; Marzuki et al., 2017; Massey & Van Hise, 2009; Williams & Elson, 2010a). Research evidence suggests that the integration of ethics education in accounting programs has steadily expanded with time (Massey & Van Hise, 2009), however, there is a widely held perception among accounting faculty that more needs to be done to improve the quality of ethics education (Farnsworth & Kleiner, 2003). Research findings indicate that accounting ethics education is not covered in a significant way in university education (Armstrong & Mintz, 1989; Cohen & Pant, 1989; Karnes & Sterner, 1988). Frank et al. (2009) similarly argue that ethics coverage has not yet reached the point of supporting students effectively in developing their moral attitudes. Additional evidence suggests that accounting education lacks ethics ‘subject matter’ (Borkowski & Ugras, 1992; Rahman, 2003), or provides little ethics training to accounting students (Cowton & Cummins, 2003; Hildebeitel & Jones, 1992; Loeb, 1988). In the US, Miller and Becker (2011) find that the average level of coverage of all ethics topics in a course is approximately 3.4 hours in total (9% of the course). Their findings were similar to 3.18 hours reported by McNair and Milam (1993) and 4 hours reported by Fisher et al. (2007). While the level of ethics coverage through both required and elective offerings has increased during the period 2003 to 2016, it remained quite low overall (Miller and Shawver, 2018). This research is premised on improving ethics coverage in accounting education by calling for an increase of ethics education in the accounting curriculum which appears inadequately addressed (Cohen & Pant, 1989; Haas, 2005; Marzuki et al., 2017; Miller & Becker, 2011; Cohen & Pant, 1989; Loeb & Rockness, 1992).

When researchers accept the premise that ethics education should be enhanced, research turns to the question of whether ethics should be integrated throughout required accounting courses or taught as a stand-alone course. For example, Abdolmohammadi (2008) encourages discussion on the implications of ethics education between stand-alone and integrated ethics courses. Ellis (2013) presents the advantages of a stand-alone accounting ethics course addressing specific ethics applications across the curriculum, and Caliyurt and Crowther (2006) call upon accounting academics to revise course materials to educate students on ethics by integrating ethics subject matter into diverse accounting courses. A large amount of literature supports the integration of ethics education in the accounting curriculum (see for example Blanthorne et al., 2007; Burns et al., 2015; Chen, Chen, & Chenoweth, 2013; Jackling et al., 2007; Langenderfer & Rockness, 1989; Levy & Mitschow, 2008; Mintchik & Farmer, 2009; Simpson et al., 2016; Sisaye & Lackman, 1994; Thomas, 2004; West & Buckby, 2018). Bampton and Cowton (2002) argue that integration provides an opportunity to expose students to a variety of ethical issues as well as reflect on broader ethical scenarios which accounting students may face in real life. Research evidence suggests that accounting faculty support the inclusion of ethics subject matter in several accounting courses rather than a standalone course (Blanthorne et al., 2007; Milam & McNair, 1992). However, there are a number of factors at play that limit the integration of ethics in the accounting curriculum: lack of training or faculty specialised in ethics; lack of teaching materials; lack of time and space to prepare for student for working environment on ethical issues; lack of motivated or qualified accounting faculty to teach ethics; and minimising of the importance of ethics course (Adkins & Radtke, 2004; Bampton & Cowton, 2002; Dellaportas, 2014; Langenderfer & Rockness, 1989; Naudé, 2008). The integration of ethics into the curriculum requires all accounting faculty to have a basic understanding of what is taught on ethics and would require them to link ethical insights to their areas of expertise (Naudé, 2008).

The alternative to integrating ethics into courses in accounting, is the development of a stand-alone course dedicated to ethics instruction. Proponents claim that a stand-alone course is superior because it offers a clearer focus to students on accounting ethics and provides a more profound rationale for ethics training and preparation for the workplace (Bean & Bernardi, 2005; Graham, 2012; Jackling et al., 2007; O'Leary, 2009; Williams & Elson, 2010b). Graham (2012) find that students favour of stand-alone course compared with integration because it enables the study of a wide range of issues in one place enhancing students' awareness of ethical problems and how to solve them. However, a stand-alone course on ethics has been criticised when the ethical issues are limited to one area of practice creating a narrow impression of ethics in accounting (Low et al., 2008). A single course in ethics education is inadequate if it is too brief, lacks depth and would not have a lasting effect on students' ethical sensitivity (Hiltebeitel & Jones, 1991; Karnes & Sterner, 1988). Armstrong (1993) in particular calls for both integration and separation by advocating a 'sandwich approach' for teaching business ethics in which students are exposed to a general business ethics course, a strong ethics component in other accounting classes and a dedicated capstone course on accounting ethics.

4.6 Curriculum issues

The subject matter of ethics education is the final key topic theme in Table 2 raising considerable discussion among researchers. Kidwell, Fisher, Braun, and Swanson (2013) highlight a lack of rigorous discussion on curriculum content particularly the core-knowledge learning objectives in accounting ethics education. Critics of accounting education claim that the curriculum has become so technical, it fails to deliver more liberally educated accountants (Levy & Mitschow, 2008). Gray et al. (1994) advocate the acquisition of moral expertise particularly when the accounting curricula is focused on the technical aspects of accounting squeezing out softer topics such as ethical behaviour. However, when discipline specific

knowledge, pertinent to the accounting curriculum is considered fixed by faculty, it is unlikely to be replaced with requests to include ethics subject matter (Madison & Schmidt, 2006; Miller & Becker, 2011). In spite of this claim, proponents of ethics education continue to call for specific topics to be incorporated in the curriculum, for example, accounting manipulations and earnings management (Fiolleau & Kaplan, 2017; Fischer & Rosenzweig, 1995; Tormo-Carbó, Seguí-Mas, & Oltra, 2016). However, more than topics, some authors call for conceptual underpinnings in ethics education such as Kohlberg's theory of cognitive moral development to enhance students' ability to recognise ethical issues (Cooper et al., 2008; Dellaportas, Jackling, Leung, & Cooper, 2011; Han, 2011; Miller et al., 2014). Miller et al. (2014) argue that the application of ethical theory in more complex ethical scenarios over an extended period of time enhances the ability to recognize ethical components in a given scenario and the intention to do the right thing. Kidwell et al. (2013) propose a comprehensive framework based on six areas: codes of ethical conduct, corporate governance, the accounting profession, moral development, classical ethics theories, and decision models. Han (2011) propose an ethical decision-making model to deepen relevant ethical requirements and sharpen professional skills to encourage students to undergo self-questioning in accordance with the profession's code of ethics. Research in the latter stages of the sample period emphasise the inclusion of issues on corporate social responsibility and sustainability (Jorge, Andrades Pena, & Muriel de los Reyes, 2015; Sisaye, 2011; Tormo-Carbó, Seguí-Mas, & Oltra, 2018). Sisaye (2011) examine the development in sustainability management for ethics integration in the accounting and business curriculum. The social sustainability approach to accounting education is considered crucial by proponents to improve the effectiveness of business ethics and corporate social responsibility helping to improve business students' awareness of ethical issues (Tormo-Carbó et al., 2018).

The intellectual debate on what should be taught in ethics education was paralleled by who should teach ethics. This research raises the question of whether accounting faculty possess the embedded expertise to teach accounting ethics (Bernardi et al., 2008). Cohen and Pant (1989) conducted a survey of accounting department chairpersons and find that accounting faculty were well qualified to teach ethics. Blanthorne et al. (2007) suggest that faculty are well-equipped to teach ethical dilemmas in accounting, whereas, Williams and Elson (2010a) argue that accounting faculty lack the necessary training and interest to teach ethics. Dellaportas et al. (2014) analysed the barriers to enhancing ethics education highlighting a shortage of qualified staff teaching ethics education in accounting. The alternative to accounting faculty teaching ethics are philosophers who are better equipped to teach theories of moral reasoning to students, However, overly theoretical applications of knowledge may lack relevance to the discipline of accounting (Loeb, 1988; Williams & Elson, 2010a) Langerfer and Rockness (1989). Other solutions include co-lecturing or team teaching (Williams & Elson, 2010a).

5 Conclusion

Overall, the present study reviewed and profiled published research on accounting ethics education during the period 1972 to 2018. This study contributes to the current state of accounting ethics education research providing insight into the field's strengths and weaknesses. Strengths include the development of increasingly more complex methods of teaching ethics, the enhancement of students' ethical decision-making and ethical behaviour (such as cheating, whistleblowing). Major weakness includes a lack of theoretical grounding and a specific tool to measure the effectiveness of ethics education particularly when research ventures beyond experimental methods of research. This study highlights the impact and educational response immediately following the prevalence of illegal and unethical corporate behaviour, fuelling scepticism and uncertainty about the role of ethics in modern business and

accounting practice. The analysis in this study provides a level of comfort to stakeholder groups with increasing attention on accounting ethics education, evidenced by the growing published research on this topic. It is our hope that the present study will stimulate additional research in this important area.

The findings are presented in two major sections. The first section highlights the trends of accounting ethics education in five decades of research between 1972 to 2018. While major themes do not vary greatly between the decades, the depth, rigour and quantum of research is enhanced over time. Early research on accounting ethics education relied on interpretive analysis while research in the latter period relied on complex or sophisticated models of analysis such as (regressions, experiment, ground theory, meta-analysis). Early research tends to question the value and extent of ethics education (Hiltebeitel & Jones, 1991; Levy & Mitschow, 2008; Loeb, 1988; Ponemon, 1993; Smith et al., 2005) while later research tends to focus on the ethics of the individual and ethical decision making (Costa et al., 2016; Faello, 2017; Fiolleau & Kaplan, 2017; Ghazali, 2015; Ramirez, 2017; Waldron & Fisher, 2017), and perspectives on ethics education from the practicing profession (Caglio & Cameran, 2017; Loeb, 2012; Rockness & Rockness, 2010; Wilson et al., 2016) and from educators and instructors (Jones & Spraakman, 2011; Liu et al., 2012; Miller & Shawver, 2018). Similarly, teaching pedagogies changed over time to include case studies, role-plays, games, video presentations and novels, influenced in part by the introduction of learning technology platforms such as a web base multimedia-orientated teaching module (McManus et al., 2012). The number of publications in developing countries also increase overtime, peaking during the 2010s, implying a recognition of the importance of ethics education by faculty in developing and non-western countries. The trends in accounting ethics education research and the number of publications is in part reflective of the number of corporate scandals appearing in the media, increasing over time. The research trends shifted from a discussion the need for having ethics

in accounting education, moving to how accounting ethics education can educate students to support ethical decision making and moral development. These trends and ethics education development contributed greatly to the ethics development of future accountants.

The second section on findings highlights six key topic themes of accounting ethics education research and its components occurring in five decades of research: teaching methods, the importance of ethics education, ethical decision making, moral development the integration of ethics into accounting courses, and curriculum issues. Discussion on the key themes is not intended to be exhaustive, particularly when each theme is comprised of many sub categories, but illustrative of the research appearing in academic journals under these broad headings. Research on accounting ethics education, for the most part, is motivated by a narrow frame of thinking based on whether ethics education has an impact on students' moral or ethical sensitivity and decision making; and how can ethics be taught so that it makes a difference. Numerous issues were raised in this body of research and can be categorised in two broad groups: the ethics of the individual in which moral cognition and sensitivity is central; and pedagogical issues to help elevate moral cognition and sensitivity with an ultimate to improve ethical decision making.

The process involved in identifying major trends and the categorisation of key themes is not a precise science, introducing an element of subjectivity in categorizing and frequency counts which may not be replicated precisely by other researchers. However, the discussion in this study is general and unlikely to differ significantly from different methods of data collection and analysis. Further research could delve more deeply into particular issues and rely on more sophisticated methods of analysis. Furthermore, the cognitive overlap between business ethics and accounting ethics suggests that the issues raised in 'ethics education research' are applicable to all business disciplines. Critical issues raised in the non-accounting

literatures could have been overlooked in the present study suggesting that future research could expand the search criteria to include all business ethics education research. Whilst the analysis in the present study provides a broad overview of accounting ethics education research, author co-citation and journal co-citation analysis would give an indication of the attention authors give to accounting ethics education and the impact of individual authors and manuscripts.

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Table 1: Articles per journal

No.	Journal title	1970s	1980s	1990s	2000s	2010s	Total
1	Journal of Business Ethics			21	20	17	58
2	Journal of Accounting Education		2	16	9	9	36
3	Issues in Accounting Education		3	2	9	3	17
4	Accounting Education: An International Journal				2	5	7
5	Managerial Auditing Journal				4	3	7
6	Research on Professional Responsibility and Ethics in Accounting			1	4	2	7
7	Business and Professional Ethics Journal			6			6
8	Critical Perspectives on Accounting			2	3	1	6
9	Journal of Education for Business				3	3	6
10	Business Ethics: A European Review				3	1	4
11	Journal of Business Ethics Education				2	2	4
12	Teaching Business Ethics				3	1	4
13	Journal of Leadership, Accountability and Ethics				1	2	3
14	Malaysian Accounting Review				2	1	3
15	Social Responsibility Journal				3		3
16	Academy of Educational Leadership Journal					2	2
17	American Journal of Business Education					2	2
18	Asian Social Science					2	2
19	Global Perspectives on Accounting Education				1	1	2
20	International Journal of Ethics Education					2	2
21	Journal of Academic Ethics				1	1	2
22	Journal of Accounting and Management Information Systems					2	2
23	Meditari Accountancy Research					2	2
24	South African Journal of Accounting Research				1	1	2
25	The Accounting Educators' Journal		1			1	2
26	The CPA Journal				2		2
27	Abacus					1	1
28	Academic Journal of Economic Studies					1	1
29	Academy of Accounting and Financial Studies				1		1
30	Academy of Management Learning & Education					1	1
31	Accounting & Finance				1		1
32	Accounting and The Public Interest					1	1
33	Accounting Horizons			1			1
34	Accounting Perspectives					1	1
35	Accounting Research Journal				1		1
36	African Journal of Business Ethics					1	1
37	Asian Academy of Management Journal					1	1
38	Asian Journal of Business Ethics					1	1
39	Asian Review of Accounting					1	1
40	Australian Accounting Review				1		1
41	Business and Society Review					1	1

No.	Journal title	1970s	1980s	1990s	2000s	2010s	Total
42	College Student Journal			1			1
43	DLSU Business & Economics Review					1	1
44	Ethics & Behavior				1		1
45	Etikk I Praksis-Nordic Journal of Applied Ethics					1	1
46	European Accounting Review				1		1
47	European Integration - Realities and Perspectives					1	1
48	General and Professional Education					1	1
49	Indian Journal of Accounting					1	1
50	International Journal of Economics & Finance Research & Applications					1	1
51	International Journal of Education Research					1	1
52	International Review of Business Research Papers				1		1
53	Journal of Accounting and Finance					1	1
54	Journal of Accounting and Organizational Change					1	1
55	Journal of Asia Business Studies					1	1
56	Journal of Business and Accounting					1	1
57	Journal of Business and Educational Leadership					1	1
58	Journal of Business Disciplines				1		1
59	Journal of College Teaching and Learning				1		1
60	Journal of Economics and Management				1		1
61	Journal of Financial Reporting and Accounting					1	1
62	Journal of Global Business Issues					1	1
63	Journal of International Business Disciplines					1	1
64	Journal of Legal, Ethical and Regulatory Issues					1	1
65	Journal of Moral Education				1		1
66	Journal of Religion and Business Ethics					1	1
67	Journal of Teaching in International Business				1		1
68	Journal of The Academy of Business Education					1	1
69	Malaysia Journal of Society and Space					1	1
70	Management Accounting Research			1			1
71	Management Accounting Quarterly					1	1
72	Management and Service Science					1	1
73	Management Decision			1			1
74	Management Research News				1		1
75	Ohio CPA Journal				1		1
76	Pacific Accounting Review					1	1
77	Procedia Social and Behavioral Sciences					1	1
78	Research in Accounting in Emerging Economies					1	1
79	Social Behavior and Personality				1		1
80	Southern Business Review					1	1
81	Sustainability					1	1
82	Technical Journal of Engineering and Applied Sciences					1	1
83	The Accounting Review	1					1

No.	Journal title	1970s	1980s	1990s	2000s	2010s	Total
84	The British Accounting Review				1		1
85	The International Journal of Educational Management				1		1
86	The International Journal of Organizational Innovation					1	1
87	The Journal of International Social Research					1	1
88	World of Accounting Science					1	1
	Total	1	6	52	90	106	255

Table 2: Research Themes

Rank	Research Themes	%	Total
1	Methods of teaching accounting ethics education	12.55%	32
2	Important and the effectiveness of accounting ethics education	11.37%	29
=3	Ethical decision making	10.98%	28
=3	Integrate ethics into the accounting curriculum or stand-alone course	10.98%	28
4	Moral development, moral capability, moral intensity, moral reasoning	10.20%	26
5	Accounting ethics education curriculum	8.24%	21
	Other	35.68	91