

FORENSIC ACCOUNTING IN SAUDI ACCOUNTING ACADEMIC CURRICULUMS

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ABSTRACT

The primary subject matter of this research is to gather opinions of accounting academicians and Saudi Organization of Certified Public Accountants (SOCPAs) practitioners regarding the importance, relevance and strategy of the inclusion of forensic accounting in Saudi Arabia universities accounting academic curriculums. Descriptive Statistics are used to present quantitative descriptions in a manageable form. Some explanation for the diverging views among accounting academicians and SOCPAs practitioners in relation to the inclusion of forensic accounting into Saudi universities will be presented. The collected data were analyzed with descriptive statistics using ordinary least square (OLS) regression and Chi-square. The study reveals that the more interest in forensic accounting is expected to continue to increase; more Saudi universities are planning to provide forensic accounting in their accounting curriculums; all groups of respondents viewed forensic accounting education as being relevant and beneficial to accounting students.

KEYWORDS: *Forensic Accounting, Anti-Fraud Education, Accounting Curriculums, and Saudi Arabia*

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INTRODUCTION

The integration of accounting, auditing and investigative skills results in the special field known as forensic accounting (Crumbley, 2008). Forensic accounting received more attention due to a series of corporate failures that affected not only those directly connected with the companies concerned (i.e., directors, shareholders and auditors) but also those affected by its existence like employees, customers, suppliers and the environment. The first well-documented failure of governance was the South Sea Bubble in the 1700s, which revolutionized business laws and practices in England (Iskander et al., 1999). The Asian financial crisis, which started with the devaluation of the Thai baht in July 1997, brought to the foreground the common occurrence of weak corporate governance which had allowed companies to engage in excessive over-leverage, some of which were aided by implicit state guarantees. The concepts of transparency, disclosure and accountability were largely ignored in the lead-up to the crisis as investors assumed a short-term outlook in order to derive increasing profits from the steadily rising regional financial markets.

The American Institute of CPAs (AICPA) anticipates significant growth in the field of forensic accounting. In a recent AICPA survey, current forensic accountants claimed to have witnessed an impressive 20 percent increase in demand in recent years (Davis et al., 2017). A 2016 report by the Association of Certified Fraud Examiners – the world's largest anti-fraud organization and is a provider of anti-fraud training and education – said that a typical organization loses 5 percent of its revenue to fraud each year. The report also mentioned that banking and finance were the most represented sectors in the fraud cases examined by the association.

Saudi Arabian corporations just like other international corporations in the rest of the world are subject to fraud risks. International large frauds and crises as mentioned above have led to the downfall of the entire corporations, significant legal costs and noticeable business and investment losses which effect the confidence of investors and stakeholders. The financial crises mainly driven by undetected fraud and the increased corporate governance weaknesses in Saudi corporations has led to the need for multi-dimensional relationship (that is inter-relationship between the audit committee, the external auditor and the management) in corporate governance as to protecting the interest of shareholders and other stakeholders with the common goal of improving oversight function and ensuring good corporate governance (Deloitte and Touch 2006). Weak corporate governance companied with financial fraud have led to poor performance and to corporate collapse resulting to huge lost of new investment (Rezae 2005). The abovementioned corporate structure failure has made academics and investigators realize that there is a great need for forensic accountants who can identify, expose and prevent corporate governance weaknesses and detect fraudulent financial statements.

Forensic Accountants could be identified as experienced investigators of financial data who are external and could be contracted to detect suspicions of fraudulent financial activities and improve corporate governance practices which will finally lead to better performance. Forensic accountants can play vital role to improve corporate governance in a company by improving the company's control and accounting systems that ensures a proper recording, classification and reporting of all relevant transactions. Forensic accountants should always put an eye on corporate governance practices to ensure good corporate governance and improve responsibilities and accountability. They should also ensure the integrity of financial statements by actively investigating for fraud, identifying areas of risk and associated fraud symptoms, pursuing each anomaly aggressively, and delving into the finest details of accounting and financial anomalies.

The Kingdom of Saudi Arabia has had strict anti-bribery legislation in place since 1992 with the promulgation of Royal Decree No. M/36, known as the anti-bribery law. Saudi governmental and private regulators such as the General Auditing Bureau, the National Anti-Corruption Commission (Nazaha), the Saudi Capital Market Authority (CMA), the Saudi Arabia Monetary Agency (SAMA), the Ministry of Commerce and Investment, the Saudi Organization for Certified Public Accountant (SOCPA), and others have increased management's responsibilities for fraud risk management and prevention. Every corporation is susceptible to fraud, but not all fraud can be prevented, nor is it cost-effective to try. The provisions of the anti-bribery law are targeted at acts involving public officials, and Saudi Arabia's continued adherence to Sharia law provides an additional layer of protection to acts that fall outside of this specific sphere. Responsibility for overseeing anti-corruption efforts has been charged to the National Anti-Corruption Commission, also known as Nazaha, since its formation in 2012. Nazaha is responsible for investigating instances of graft in government contracts and ensuring that appropriate action is taken in cases where an offence has occurred.

On the forth of November 2017, the Saudi government declares a Royal Decree authorizing the formation of a new Anti-Corruption Committee ("The Anti-Corruption Committee"), led by the Crown Prince Mohammed bin Salman, with a view to eliminating illicit practices and corruption. The newly formed Committee has been granted enhanced powers to investigate and prosecute instances of corruption at all levels, and is comprised of high-ranking officials from across various government branches including security, finance, and existing anti-corruption bodies. Despite the ability of Nazaha to refer specific corruption cases to the relevant authorities and conduct subsequent follow-ups, the new Committee will benefit from greater powers to investigate and prosecute instances of graft, including the capacity to issue arrest warrants and order interim measures such as asset freezing and issuing travel bans.

The next section presents an overview of searching and evaluating the related literature. The research methodology is covered in the following section. Then the final section concludes with the research results and summarizes the main findings reported in this research.

LITERATURE REVIEW

Forensic Accounting is not as new term, however forensic accounting has been practiced since early 1940s. Auditors used to take responsibilities for fraud detection and play a forensic accountant roles. Therefore, it could be said that forensic accounting techniques were used in audit. Back in 1940's, auditors and the accounting profession began to redefine the duties of an audit. Auditors were no longer primarily responsible for fraud detection and that the prime purpose of an audit is to enable the auditor express an opinion as to whether the financial statements of an organization showed a true and fair view of the entity's transactions. Owojori and Asoula (2009) states that the Failure of Statutory audit to prevent and reduce misappropriation of corporate fraud and increase in corporate crime has put pressure on the professional accountant and legal practitioner to find a better way of exposing fraud in business world. With the strident calls and pressures on modern audit to once again assume responsibility for fraud, the signs are that Audit and Forensic Accounting will soon reunite again. Forensic accounting techniques by increasing the probability of fraud prevention and detection help in bridging the audit expectation gap as it relates to inability of an audit to detect fraud. Perception studies have shown that various stakeholder groups agree on the core skill sets required of the modern Forensic accountant.

PricewaterhouseCoopers' (PWC) 2003 Global Crime Survey shows that 37 percent of respondents in 50 different countries reported significant economic crimes with the average loss per company of \$2,199,930 (PWC, 2003). KPMG's Fraud Survey (2003) also concluded that more companies are: recently experiencing incidents of fraud than in prior years; taking measures to combat fraud; and launching new antifraud initiatives and programs in response to the Sarbanes-Oxley Act of 2002 (KPMG 2003).

A broad focus to forensic accounting among tertiary institutions has some benefits to educational stakeholders. Buckhoff and Schrader (2000) argue that incorporating forensic accounting as a course of study in the accounting curriculum benefits three major stakeholders in accounting education-academic institutions, students and employers of accounting graduates. In a survey on the importance of forensic accounting among tertiary institutions, Peterson and Reider (2001) report that accounting instructors in universities acknowledge the importance of forensic accounting.

Other studies examine the extent to which forensic-related courses are taught in the accounting curricula among tertiary institutions. Groomer and Heinz (1994) investigated whether forensic related topics were taught in internal audit courses in the United States and Canada universities. They found evidence that fraud-related topics were taught in more than 31percent of examined internal auditing courses. Rezaee et al. (1996) examine the coverage of forensic accounting in the accounting curriculum and found that few universities offer a course in fraud or forensic accounting, and suggest that the accounting curriculum provide a knowledge acquisition base in forensic accounting as part of curriculum changes in response to the mandated American Institute of Certified Public Accountants (AICPA) 150-hour accounting program. Buckhoff and Schrader (2000) examined the extent of forensic accounting education in the US and found that US universities considered forensic accounting to be moderately important for inclusion in the accounting curriculum. Peterson and Reider (2001) review forensic accounting course syllabi of universities and analyze the level of course offering, learning objectives, content of forensic accounting courses, and course requirements.

In contrast, some studies document diverging views on whether forensic accounting courses should be incorporated into the academic curricula. Rezaee and Burtin (1997) found that forensic accountants prefer to have forensic accounting as a stand-alone course while academics prefer to integrate forensic accounting into existing accounting courses and conclude that the demand for forensic accounting services and education will continue to increase, and that practicing Certified Fraud Examiners (CFEs) favor offering a separate forensic accounting course whereas academicians prefer integrating forensic accounting topics throughout existing accounting courses. Rezaee et al. (1996) report some disagreements among practitioners and academics on the topical content of the forensic accounting curriculum. To date, the topical content of forensic accounting in the accounting curriculum is highly debated and remains a fruitful area for future research. Rezaee (2002) conducts a survey of a small sample of undergraduate and graduate accounting students and finds that responding students believed forensic accounting offers rewarding career opportunities, yet forensic accounting education is not getting adequate attention in the accounting curriculum and should be further promoted in colleges and universities.

Prior studies show evidence that forensic accounting practice appears to be gaining importance within academic institutions (e.g. Rezaee et al. 1996; Rezaee and Burton, 1997; Peterson and Reider, 1999, 2001; Rezaee, 2002; Crumbley et al, 2003), however, to the best of the researcher knowledge, only very few worldwide tertiary institutions are offering courses in Forensic accounting. Correspondingly, few researches are available in this area going by the extensive literature review undertaken by the researcher in the course of this study. Many of the abovementioned studies provide information on the “demand side,” the views of students and practitioners on the importance and delivery of forensic accounting. Thus, forensic accounting coverage in today’s accounting curricula is not well defined. This study focuses on both the supply and demand sides of forensic accounting education, and attempts to provide information that may be useful for faculty and universities considering offering a course in forensic accounting in light of most recent changes in the business environment and the accounting profession.

As forensic accounting is a new growth area in Saudi Arabia, it is important that perception studies are done particularly in respect of accounting academics that will drive the needed change in forensic accounting education. This is the gap this research will help to fill. A careful study of forensic accounting is important at the present time in Saudi Arabia especially in the wake of Saudi Arabia's headline-grabbing anti-corruption drive in November as mentioned earlier. Crown Prince Mohammed bin Salman instructed the Council of Economic and Development Affairs (the Council) to ensure that companies affiliated with individuals subject to investigations are not affected by the Kingdom's efforts to address the issue of corruption. This comes as a move to assure investors that they can continue to operate in Saudi Arabia with confidence. The Council emphasized that all anti-corruption investigations are in accordance with laws and regulations and that the new anti-corruption measures are a key part of the new Saudi Arabia Vision 2030 and creating a fair and level playing field for all.

To remain competitive in a changing world, Saudi corporations should update and control their corporate governance practices so that they can meet new demands and new opportunities. The Saudi government also has an important responsibility for shaping an effective regulatory framework that provides for sufficient flexibility to allow the Saudi market to function effectively and to respond to expectations of shareholders and other stakeholders. The way these principles should be adopted is the responsibility of the government and the market participants. Forensic Accountants can make significant contributions in the area of corporate governance, fraud prevention and investigation, creating positive work environment, establishing effective lines of communication and vigilant oversight.

METHODOLOGY

Two methods are used in this study to gather data pertaining to forensic accounting in Saudi Arabian accounting academic curriculums. First, content analyses of a sample of 14 international forensic accounting course syllabus were performed. Forensic accounting syllabi were obtained from some developed international universities' accounting programs' World Wide Web (Web) sites that offer forensic accounting in their programs. The compiled 14 syllabus were submitted to content analysis to identify the list of forensic accounting course description, objectives, and assignments. Forensic accounting topics included in 14 analyzed syllabi were organized and combined with other forensic accounting topics in developing the questionnaire.

Second, a nationwide survey of accounting academicians in the Saudi Arabian public universities and practicing Saudi Organization of Certified Public Accountants (SOCPAs) was conducted to determine the demand, benefits, coverage, and delivery of forensic accounting in Saudi Arabian accounting academic curriculums. A random sample of 100 accounting professors was selected from the business colleges' websites or by contacting the accounting programs' chair and a random sample of 100 practicing SOCPAs was selected from the Saudi Organization of Certified Public Accountants website.

Survey is a flexible research approach used to investigate a wide range of topics and it will be the research methodology adopted for this study. The choice was predicted on the fact that descriptive survey method is one which looks with intense accuracy at the phenomena of the moment and then describes precisely what the researcher sees (Saunders et al, 2003). Surveys often employ the questionnaire as a tool for data collection and the use of questionnaires is the most widely used data collection technique in a survey and, in this study. The data collected are analysed using Chi-square statistical software and OLS regression analysis. The chi-square test of independence was used to test for differences in responses involving categorical dependent variables for the between subject analysis. The Kruskal-Wallis non-parametric analysis of variance was used to examine differences in responses in the ranked data. Following Campbell and Mutchler (1988), the author measured the strength of responses by taking the absolute value of the difference between the mean response of the group and the neutral response, which was 3.0. Mean responses that fall within .5 point of the midpoint (3.0) can be considered as neutral ratings. No additional statistically significant differences in the strength of response across the selected forensic accounting topics between academicians and practitioners other than those being identified by the use of a non-parametric test was found.

Table 1: Responses

	Accounting Academicians	SOCAPs	Total
Mailed Questionnaires	100	100	200
Undeliverable Questionnaires *	5	16	21
Complete Questionnaires	28	22	50
Incomplete Questionnaires	3	2	5
Unreturned Questionnaires	64	60	124
Response Rate	31%	24%	28%

The undeliverable questionnaires were due to full or wrong email addresses.

The questionnaire was prepared, pre-tested, revised, and then e-mailed to the respondents. The questions included in the questionnaire were meticulously chosen to ensure the attainment of the research objectives. About 200 online survey copies of the questionnaire were electronically distributed on respondents. The researcher was able to enlist the help of fellow lecturers at Qassim University and the other Saudi public universities and the fellow SOCPAs who facilitated the delivery and return of the questionnaires. The response rate was acceptable at 28 percent given that 50 copies of the questionnaire were completed and emailed back. However, 5 copies of the questionnaire were invalid as they were not properly filled out and 145 copies were not returned or undeliverable (see Table 1). Simple percentages were used to analyze the distribution of responses. While this response rate is lower than might be desired, response rates of this level are not uncommon when certain types of individuals are surveyed (Dillman 1978; Hodge 2003). The author compared late responses with early responses and find no significant differences.

RESULTS

This section is concerned with the presentation and analysis of data gathered from the research questionnaire administered on accounting academicians in Saudi Arabian public universities. Main analysis of this study was done here and results obtained in line with the objectives of study. The analysis was carried out in such a way that allowed a smooth flow that enabled implications to be drawn for tertiary institutions and policy making.

Starting with the demographic data analysis, a nonparametric t-test was performed to examine differences in the responses between accounting academicians and the practicing SOCPAs. There were only a few statistically significant differences between these two groups of respondents. Accounting academicians placed more importance than practicing SOCPAs on satisfying society's demand for forensic accounting education and practice. SOCPAs, however, placed more importance in preparing students to engage in an official fraud examination as primary benefits of forensic accounting education. The mean responses on other questions were not statistically significant. No variable being statistically correlated with academic rank (e.g., assistant, associate, or full professors) or professional rank (e.g., assistant accountant, supervisor, manager, or partner) was found. The researcher also differentiated academic respondents in terms of size. University size was divided into three categories: small, medium, and large universities, according to their undergraduate student number (e.g., a small university is the one with 20,000 students or less, medium university is the one that has between 20,000-40,000 students, and large university is the one with more than 40,000 students. Results indicate that respondents from medium sized universities reported lack of administrative interest and support to forensic accounting integration in accounting curricula than their counterparts at small and large universities. The SOCPA firm size was also divided into two categories: small and large firms (e.g., a small firm is the one with 10 employees or less and a large firm is the one with 11 employees or more). The mean responses between the two groups were not statistically significant.

Table 2: University Size (How Many Undergraduate Students Does Your University Have?)

University Size	Small	Medium	Large
Percentage of Responses	6	5	17

Table 3: SOCPA firm size (How many employees does your firm have?)

University Size	Small	Large
Percentage of Responses	16	6

Participants' responses to the demographical questions stated in Table 4 shows that 75 percent of the participating academicians were positive regarding their administration willingness to support business colleges when offering forensic accounting course. Interestingly, 21 percent of participants' business colleges were nationally or internationally accredited. Table 5 shows that the majority of the participating academicians were assistant professors. A t-test was performed to examine differences in the responses between academicians in the accredited versus non-accredited schools. There were only a few statistically significant differences between these two groups of respondents. Participating academicians from nationally or internationally accredited colleges placed more importance than those from non-accredited schools on satisfying society's demand for forensic accounting education and practice, and preparing students to engage in fraud examination as primary benefits of forensic accounting education. The mean responses on other questions were not statistically significant, indicating that there is a general agreement between these two groups of academicians regarding the importance, delivery, and topical coverage of forensic accounting. The author did not find any variable being statistically correlated with academic rank (e.g., assistant, associate, or full professors). He divided academic respondents (in terms of size) into three categories of those from small, medium, and large universities, according to their undergraduate business enrollment (e.g., small 50, 100 < medium < 200, and large 200 students and above). Results indicate respondents from medium sized universities reported lack of administrative willingness to support and lack of instructional materials as of less significant impediments to forensic accounting integration in accounting curricula than their counterparts at small and large universities.

Table 4: Demographical Data

	Yes		No		Not Sure	
	#	%	#	%	#	%
Would your administration supports offering a forensic accounting course?	21	75	5	18	2	7
Is your school NCAAA or AACSB accredited?	6	21	19	68	3	11

Table 5: Participants' Academic Ranks

Participants' academic ranks	Full	Associate	Assistant	Other
What is your current position?	6	9	12	1

Responses from the participating academicians and practicing SOCPAs to the questions related to the importance and need for a new curriculum development to include forensic accounting in the Saudi universities accounting programs' curriculums are presented in Tables 6 and Table 7. Table 6 shows that 55 percent of the respondents agree to the inclusion of forensic accounting in the accounting curricula. Unexpectedly, the agreement percentage of the accounting academicians of 51 percent was less than the SOCPAs agreement percentage to the inclusion of forensic accounting in the accounting curricula, which was 57 percent. That could be justified to the fact that professional accountants (SOCPAs) are a crucial part of strong national governance architectures that confront corruption, in partnership with good government and strong businesses and a key to a country positive impact in tackling corruption. Bologna and Lindquist (1995) argued that a forensic accountant can be seen as those who are specialists in fraud detection, particularly in documenting the needed evidence required for successful criminal prosecution; able to work in complex regulatory and litigation environments; and with reasonable accuracy, can reconstruct missing, destroyed, or deceptive accounting records (Chariri, 2009).

Table 6: The Importance of Including Forensic Accounting in the Accounting Curricula (in A Scale of one to Five, How Importance it is to Include Forensic Accounting in the Accounting Curricula?)

	1 (strongly disagree)	2 (disagree)	3 (Do not know)	4 (agree)	5 (strongly agree)
Accounting Academicians	11%	6%	32%	36%	15%
SOCPAs	7%	14%	22%	41%	16%
Average	9%	10%	27%	39%	16%

Responses from academicians pertaining to the curriculum development of forensic accounting are presented in Table 7. Two different approaches for Saudi Arabian universities to cover forensic accounting education in their accounting program curricula are possible. The first approach is to integrate forensic accounting through accounting or auditing courses in their current accounting programs. However, this approach has a few major impediments. First, adding forensic accounting to existing accounting and auditing courses can overburden faculty and students alike in dealing with courses already saturated with related materials. Second, accounting faculty may not wish to add forensic accounting topics to their courses primarily because of their own lack of comfort with forensic accounting topics. Finally, instructors may have to drop some of the existing accounting and auditing subjects in order to add forensic accounting topics. The second approach is to offer a stand-alone forensic accounting course. A third option was also given to the participants as shown in Table 7 which was not to agree to cover forensic accounting at all in their accounting programs.

Table 7 indicates that only 11 percent of the respondents reported they do not agree to cover forensic accounting at all in their accounting programs, 16 percent on average agreed to have a separate forensic accounting course, and 78 percent on average indicated that forensic accounting should be integrated through other accounting or auditing course. It also could be noticed that SOCPAs were leaning more on having a separate forensic accounting program with a 27 percent, whereas only 7 percent of accounting academicians agreed to have a separate forensic accounting program. The above results argue that forensic accounting topics better be infused into existing upper-level accounting and auditing courses. This process assures coverage of all critical aspects of forensic accounting, without having to add a new course into already saturated accounting curricula. Results are encouraging in the sense that more than 16 percent on average of this study sample respondents reported that they prefer to offer separate forensic accounting courses, whereas the Buckhoff and Schrader (2000) study reported only about nine percent of their responding institutions were offering or planning to offer a course in forensic accounting. Offering a separate forensic accounting can give more focus to forensic accounting topics, particularly anti-fraud education, and ensure adequate coverage of forensic accounting education.

Table 7: Accounting Programs' Curriculum Development to Include Forensic Accounting

Questionnaire Questions	Accounting Academicians		SOCPAs	
	#	%	#	%
How would you recommend forensic accounting to be offered at a university?				
Integrate through accounting or auditing course	23	82	16	73
Through a separate forensic accounting course	2	7	6	27
Do not agree to cover forensic accounting at all	3	11	0	0

If Saudi Arabian universities' accounting programs decided to offer a forensic accounting course, should they offer it at the undergraduate or graduate level? To answer this question, the author examined 14 international forensic accounting syllabi and found that the majority of international accounting programs offered their forensic accounting courses at the graduate and/or undergraduate level. International universities were eager to ensure that students have had a

sufficient understanding of the various accounting new concepts such as forensic accounting. Saudi Arabian universities may offer forensic accounting at the undergraduate level based on the expectation that graduating accounting students should have exposure to forensic accounting topics at the undergraduate level in order to be successful in the ethically challenging and practically scrutinized and regulated business environment. However, any undergraduate forensic accounting course may be best placed toward the end of the undergraduate curriculum as an elective course or may be integrated to an existing high-level accounting or auditing course.

Table 8: Future Demands on Forensic Accounting in Saudi Arabian Universities

Questionnaire Questions	Accounting Academicians		SOCPCAs	
	#	%	#	%
Do you expect future demand on forensic accounting in Saudi Arabia universities to:				
Increase	19	68	12	55
Decrease	4	14	2	9
Remain the same	5	18	8	36
Chi-square	1.037		0.827	

Table 8 shows the results of the expected future demand on forensic accounting in Saudi Arabian universities. It could be noticed that the majority of both groups of respondents reported that they believe the future demand on forensic accounting in Saudi Arabian universities will increase. Differences in responses on the expected future demand on forensic accounting in Saudi Arabian universities between the two groups of respondents are statistically insignificant which indicates that SOCPCAs and accounting academics expect similar growth in forensic accounting. In fact, academicians were more positive that future demand on forensic accounting in Saudi Arabian universities will increase with a higher percentage of 68 percent comparing to 55 percent of SOCPCAs believing that demand on forensic accounting will increase. Surprisingly 36 percent of SOCPCAs felt that the demand on forensic accounting in Saudi universities will remain the same comparing to only 18 percent of accounting academicians felt the same. SOCPCAs may have believed that there are current high demands on forensic accounting in Saudi universities so they may have thought the demand will just still the same. Both accounting academicians and SOCPCAs felt the demand on forensic accounting in Saudi Arabian universities will decrease.

Table 9: Expected Benefits of Forensic Accounting in Saudi Universities

Benefits	Accounting Academicians		SOCPCAs		Chi-square
	Mean	Standard Deviation	Mean	Standard Deviation	
Make graduates more desirable in the marketplace	4.24	0.92	4.55	1.18	9.839 *
Distinguished accounting departments	3.85	1.01	3.12	0.99	3.986
Prepare students to engage in fraud examination	4.05	0.83	4.26	1.01	0.783
Satisfy society's demand for forensic accounting	3.98	0.96	3.94	0.87	12.984 *
Prepare faculty members to engage in litigation support consulting	3.16	1.09	3.47	0.92	3.846
Prepare graduates to engage in litigation support consulting	3.28	0.89	3.92	0.94	7.365 *
Increase students' knowledge	3.84	0.99	4.06	0.89	10.538 *
Support faculty members' desire for research	3.91	0.93	4.18	0.91	1.838

Significant at 1%

Table 9 provides evidence to the expected benefits of forensic accounting in Saudi universities. A five-point Likert scale, with "5" indicating "very important" and "1" representing "not important" was used to the participants to rank the importance of perceived benefits of forensic accounting in Saudi universities. Results show that accounting

academicians considered the following benefits as being important (mean response of higher than 3.5): (1) make graduates more desirable in the marketplace; (2) distinguished accounting departments; (3) prepare students to engage in fraud examination; (4) satisfy society's demand for forensic accounting; (5) increase students' knowledge; and (6) support faculty members' desire for research. SOCPAs on the other side also viewed the importance of the above benefits and placed more emphasis on the importance of the following benefits as being important (mean response of higher than 3.5): (1) make graduates more desirable in the marketplace; (2) prepare students to engage in fraud examination; (3) satisfy society's demand for forensic accounting; (4) prepare graduates to engage in litigation support consulting; (5) increase students' knowledge; and (6) support faculty members' desire for research.

There is a difference of opinions between accounting academicians and SOCPAs with respect to the expected benefits of forensic accounting in Saudi universities. SOCPAs generally were more positive about the expected benefits of forensic accounting in Saudi universities than accounting academicians. Mean responses for SOCPAs for making graduates more desirable in the marketplace, preparing graduates to engage in litigation support consulting, and increasing students' knowledge were higher for SOCPAs than accounting academicians (4.55 and 4.24, 3.92 and 3.28, and 4.06 and 3.84 respectively), which are statistically significant at the one percent level. These results suggest that making graduates more desirable in the marketplace, preparing graduates to engage in litigation support consulting, and increasing students' knowledge do not have the same support at the university level as in practitioners (SOCPAs). SOCPAs placed more emphasis on these three areas of forensic accounting. Accounting academicians placed slightly more importance than SOCPAs practitioners on this debatable issue that about satisfying society's demand for forensic accounting (3.98 versus 3.94 respectively), which are statistically significant at the one percent level. There are statistically insignificant differences in responses between the two groups with respect to preparing students to engage in fraud examination, preparing faculty members to engage in litigation support consulting, and supporting faculty members' desire for research in the sense that SOCPAs practitioners realize the importance of these three benefits than accounting academicians, whereas, one benefit (distinguished accounting departments) was given more importance by accounting academicians than by SOCPAs, which was again insignificant. Reported financial scandals and regulatory responses have galvanized more interest in corporate governance and its role in improving quality, reliability, and transparency of financial statements. Corporate governance participants, including the board of directors, the audit committee, top executives, internal auditors, and external auditors, are being held more accountable and responsible for business activities and financial reports in the wake of the Enron, Andersen, and other reported scandals. These results are consistent with the recent report of the Ethics Education Task Force of the AACSB, which states "knowing the principles and practices of sound, responsible corporate governance can also be an important deterrent to unethical behavior" (AACSB 2004).

CONCLUSIONS

On the basis of this study findings, the author concludes that forensic accountants in Saudi universities is still raw and needs more development and intensive care to provide Saudi universities and companies with the necessary tools to deter fraudulent activities. The past two decades have witnessed significant changes in the business environment in Saudi Arabia including globalization, technological advances and now with internationally reported high-profile financial scandals, ways to improve public trust and investor confidence in Saudi companies' financial reports. Lack of formal training schools in forensic accounting techniques could contribute to high rate of financial fraud and other fraud related activities in the Saudi business economy. Presently, there is no public university in Saudi Arabia that is offering a separate forensic accounting

course in their accounting departments. This study conducted a nationwide survey of accounting academicians and SOCPAs practitioners to determine the importance, relevance, and delivery of forensic accounting in Saudi Arabian universities. Results should aid in setting the future direction and role of forensic accounting practices and education. Results indicate that (1) the demand for and interest in forensic accounting is expected to continue to increase; (2) more universities are planning to provide forensic accounting education; (3) both groups of respondents viewed forensic accounting education relevant and beneficial to accounting students, the business community, the accounting profession, and accounting programs; (4) the majority of forensic accounting topics are considered as very important for integration into the accounting curriculum by both groups of surveyed accounting academicians and SOCPAs practitioners; and (5) the relative importance of these topics varies between the two groups, however, there is a general consensus as to the importance of these topics in forensic accounting. Results of this research indicates that the including of forensic accounting education in Saudi would be consistent with the Kingdom of Saudi Arabia 2030 Vision. It is therefore recommended that forensic accounting should constitute an aspect of the curriculum for the training of undergraduate accountants in Saudi universities and that Saudi universities should continue to explore innovative teaching methods and a more integral approach to the coverage of forensic accounting education. Also, specialization in forensic accounting at the post-graduate level should be encouraged. Furthermore, the Saudi Organization of Certified Public Accountants (SOCPAs) and other regulating bodies in Saudi Arabia should include forensic accounting in the curriculum of their professional examination. Forensic accounting is a fast-developing accounting area, especially given today's fraudulent business practices and international financial scandals, litigious business environment, and regulatory initiatives. Forensic accounting education clearly has not received adequate coverage in the accounting curriculum as demanded by the marketplace in Saudi Arabia.

REFERENCES

1. Association to Advance Collegiate Schools of Business (AACSB), *Ethics Education Task Force 2004 Ethics Education in Business Schools Available at: <http://www.aacsb.edu/eerc/EETF-Draft-Report-02-03-04.pdf>*
2. Balogna, J. & Lindquist, R. (1995). *Fraud auditing and forensic accounting*, New York: Willey and Sons.
3. Buckhoff, T. A. & Schrader, R. W. (2000). *The Teaching of Forensic Accounting Journal of Forensic Accounting*, 1 (1), 135-146.
4. Buckhoff, T. A., & Schrader, R. W. 2000. *The teaching of forensic accounting Journal of Forensic Accounting*, 1.1, 135–146.
5. Campbell, J. E., and J. F. Mutchler. 1988. *The "expectation gap" and going-concern uncertainties. Accounting Horizons (March): 42–49.*
6. Chambers, Andrew (2002), *"Corporate Governance Handbook," Lexis Nexis Grou.*
7. Chariri, Anis (2009). *The Relevance of Forensic Accounting in Detecting Financial Frauds. Centre for Accountability, Shariah & Forensic Accounting Studies (CASAFSA).*
8. Crumbley, D. L. (2008). *What is Forensic Accounting? Journal of Forensic Accounting*, IX(1),1
9. Crumbley, D.L, Heitger, L.E and Smith, G.S. (2003) *Forensic and Investigative Accounting Chicago: CCH Incorporated.*

10. Davis, Charles, Ramona Farrell, and Suzanne Ogilby (2017), " Characteristics and Skills of the Forensic Accountant," The American Institute of CPAs (AICPA): <https://www.aicpa.org/InterestAreas/ForensicAndValuation/Resources/PractAidsGuidance/DownloadableDocuments/ForensicAccountingResearchWhitePaper.pdf>
11. Deloitte and Touche (2006), "Integrity and Quality corporate Governance", available at <https://www.google.com.ng/search?q=Deloitte+and+Touche> .
12. Dillman, D. A. 1978. *Mail and telephone surveys: The total design method*. New York: John Wiley and Sons, Inc.
13. Groomer, S. M., & Heinz, J. (1994). *A survey of advanced auditing courses in the United States and Canada*. *Issues in Accounting Education*, 9: 91-108
14. Hodge, F.D. 2003. *Investors' perceptions of earnings quality, auditor independence, and the usefulness of audited financial information*. *Accounting Horizons* 17 (Supplement): 37– 48.
15. Iskander, M and Chamlou, N. (1999) "Corporate Governance: A Framework for Implementation", World Bank Group.
16. KMPG Forensic (2003), "Fraud Survey 2003".
17. KMPG Forensic. 2003. *Fraud Survey 2003*. Montvale, NJ.
18. Owojori, A.A. and Asaolu, T.O. (2009), "The Role of forensic Accounting in solving the vexed problem of corporate world". *European Journal of scientific Research*, 29 No (2) P183-187.
19. Peterson, B. K., & Reider, B. P. (1999). *Fraud Education of Accounting Students: A Survey of Accounting Educators*. *The National Accounting Journal*, 23-30.
20. Peterson, B. K., & Reider, B. P. (2001). *An Examination of Forensic Accounting Courses: Content and Learning Activities*. *Journal of Forensic Accounting*, 2 (1), 25-42.
21. Price Waterhouse Coopers (PWC) (2003), "Global economic crime survey 2003", Available at <http://www.pwc.com/extweb/ncsurvers.nsf>.
22. Rezae, Z. (2005), "Causes, Consequence and Deterrence of financial statement fraud". *Critical perspectives on Accounting*, (April 2005) 277-298.
23. Rezaee, Z. (2002). *Forensic Accounting Practices, Education, and Certifications*. *Journal of Forensic Accounting*, 3 (2), 207-223.
24. Rezaee, Z., & Burton, E. J. (1997). *Forensic Accounting Education: Insights from Academicians and Certified Fraud Examiner Practitioners*. *Managerial Auditing Journal*, 12 (9), 479-489. <http://dx.doi.org/10.1108/02686909710185206>.
25. Rezaee, Z., Reinstein, A., & Lander, G. H. (1996). *Integrating Forensic Accounting into the Accounting Curriculum*. *Accounting Education*, 1 (2), 147-162.
26. Saunders, M., Lewis, P., & Thornhill, A. (2003), "Research method for business students", 3rd edition. New York: Prentice Hall.