

***Forensic Accounting Education in UAE: An exploratory study with diverse stakeholders**

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ABSTRACT

The increasing number of white-collar crime frauds puts pressure on accounting educators, students, and professional organizations to venture into the specialized field of fraud and forensic accounting. This creates a need to raise awareness of fraud and forensic accounting education. The well-known accounting scandal such as Enron's in 1997, and the big accounting scandal in 2015 by Toshiba raise the questions about the existence of accounting and auditing education. Although there are strong roots of accounting and auditing education, neither the accountant nor the auditor could be able to detect or control the fraud in full extent. This leads to a strong argument that these professions require more than basic accounting and auditing education. These facts bring Forensic Accounting education into the face of the world. Although forensic accounting practice is viewed as one the most important education the relationship between forensic accounting and education has not been fully explored. This paper explores the relevance of forensic accounting education from a broader perspective using the UAE as a case study. This paper uses information from various participants in UAE including educators, executives and students to assess importance and implementation of forensic accounting as a standalone course or infusion into accounting curriculum. The findings show that little attention is devoted by universities to the offering of forensic accounting curriculum at both graduate and postgraduate studies. The study concludes that providing an insight into the direction of forensic accounting education will provide students insight and improve forensic auditing substantially and reduce high incidence of various corporate scandals all over the world.

Keywords: Forensic Accounting Education, Corporate scandals, Accounting, Auditing, UAE Higher Education

INTRODUCTION

The last three decades have witnessed many high profile financial reporting fraud cases such as Enron, WorldCom, Parmalat, Satyam, sub-prime mortgages and Olympus which call for an introspection in the way the accounting profession is taught and practiced (Rezaee, Lo, Ha & Suen, 2016). In particular, after the 2007-2009 global financial crises, the focus on Financial Reporting Fraud (FRF) prevention and detection has become more important as policymakers, regulators, investors, and businesses worldwide become concerned about the existence and growth of FRF, as well as corporate malfeasance and misconduct. The Association of Certified Fraud Examiners estimate that, typically organizations lose in a given year an amount of \$3.7 trillion world-wide and the financial loss by fraud is about 5% of Gross World Product (ACFE, 2014).

Whereas the incidence of accounting fraud has been escalating (ACFE, 2016), there is evidence of considerable growth in forensic accounting careers (Accounting Web 2002), notably there are several professional organizations and associations promoting fraud examination and forensic accounting (Razaee, 2002) with three of the top six accounting services - business valuations, litigation support, and forensic/fraud (Covaleski, 2003) falling within the forensic accounting area. Moreover, there is continuous demand for accounting professionals with specialized qualifications in fraud and forensic accounting thus creating vast opportunity for colleges, universities, and other institutions offering accounting programs and courses to enroll more students, creating the need for awareness of fraud and forensic accounting education.

Most importantly, forensic accounting education and practice and its integration into the business curriculum is held in high esteem in the United States (Rezaee et al., 2004), however, in emerging economies such as the United Arab Emirates little is known about forensic accounting practice and education. Moreover, recent studies adduce to the fact that forensic accounting practice and education from the global perspective is rare (Zabihollah Rezaee, Daniel Lo, Michael Ha & Alexis Suen, 2016).

As academic institutions contemplate the addition of fraud and forensic accounting into their curricula, there is a need for an in-depth examination of the knowledge, skills and abilities necessary for individuals to function in these fields. Studies have suggested that the increase in the adoption of forensic accounting courses as part of the accounting curriculum in a growing number of universities is indicative of the demand for sets of competences and skills that are commensurate and sophisticated enough to confront the complexities that businesses faced with respect to growing threats arising from fraud. Furthermore, accounting education as a social and public good should reflect the identified needs of the society and especially of business where future graduate from these institutions would most probably work. Proponents of this line of argument contend that accounting students as members of the labour force should possess required skills (Mohamed and Lashine, 2003) to function in the work place. This also reinforces the argument that the educational institutions play major role in constructing, interpreting and reinforcing societal values through knowledge

dissemination and transfer that takes place within them (Rezaee and Burton, 1997). Therefore, societal ills could be confronted via increasing education on the causes and potential remedies to such problem. Similarly, fraud as a social problem could be tackled through education in the form of curricula development, such as the introduction of courses that could provide further clarifications on the nature and dimensions of the problems and therefore a better understanding and construction of the problem which would be eminently useful in devising potential solution to the problem. However, while fraud and forensic accounting modules or courses are being incorporated into the curriculum in many developed economies, this is not the case in developing economies. Despite the fact that anecdotal and evidence in the press suggest that these countries are in more dire need of these skills and competences.

Several questions come to the fore when the issue of forensic accounting curriculum comes to mind. For example, what will be the effect of integrating a forensic accounting curriculum into higher education? If Higher Educations infuses accounting curriculum into higher education how will it influence the learner awareness in fraud detection? The early detection of financial scandals, fraud and related financial crises in organizations is contingent to the incorporation of standalone accounting curriculum in higher education? The introduction of special forensic accounting curriculum in higher education will significantly help in detection and prevention of fraud instead of using normal audit procedures?

This study therefore examines forensic accounting practice in tertiary institutions in UAE with the main objectives of presenting the current scenario of Forensic Accounting education. Data from educators, executives and students collected regarding the importance, demand, benefits and delivery of forensic accounting education in UAE will help in suggesting to institution involved in training of forensic accounting to integrate actionable components that will help to drive the awareness of the courses either as a stand-alone or infusion into several accounting curricula in higher education. The primary purpose of this paper is to explore the need and importance of incorporating forensic accounting curriculum courses into the studies of accounting education.

In the sections that follow, a review of literature on forensic accounting education is made and hypothesis developed for the study. The next section discusses methods and procedures used in gathering and analyzing data pertaining to forensic accounting. This is followed with the presentation of the results that discusses curriculum design of forensic accounting education, and the final section concludes the study.

LITERATURE REVIEW AND HYPOTHESIS

The literature on forensic accounting and its integration into accounting and finance curriculum is rather limited and they are mostly found in advanced economies. However, in attempt to situate our study within the prevailing literature on relevant studies, we have taken a broader examination of tangential issues to forensic accounting and how it has been adopted in accounting and finance curriculum.

Accounting plays a significant role in society and serves not only as a legitimate device for marketing economic system but also as a form of social language and also business language for communicating business performances to stakeholders. As such, accounting figure records are susceptible to manipulations and heavily exposed to fraud due to their influence on numerous crucial decisions that affect various key social actors with far reaching implications. For example, accounting figures are the bedrock upon which rewards for management are based and also form a basis for investors' decisions and a basis for the assessment of firm performance and grouping in the sense of profitable and none profitable firms. As a result of these trends, students and accounting and law enforcement professionals desiring to enter the specialized field of fraud and forensic accounting, as well as employers hiring entry-level professionals, have urged strongly that academic institutions need to enhance their fraud and forensic accounting course offerings and programs. In turn, academic institutions and professional training providers need to better understand the knowledge and skills required to enter this specialized field.

Detection and prevention of fraud especially financial fraud by using normal audit procedures has become an incredibly difficult task not only to auditor but also to other financial professional and stakeholders (Cynthia, 2005). Linda Bressler (2016), recently highlighted the importance of special skills required by the auditors to exorcise the myth surrounding accounting fraud. To accomplish this requires that financial auditors are trained in the areas of investigation, detection with various specialized forensic auditing techniques. Harris and Brown (2000) suggests that forensic accountants should be able to demonstrate specialized skills in rules of evidence and the law, analytics and investigative skills, excellent inter personal communication skills and business acumen. These researchers posed questions on the capabilities of the auditors and the methods used to detect fraud effectively and efficiently in the organizations.

Carnes and Gierlasinki (2001) have noted that inevitably, accountants are being held to higher standards in their ability to understand and discover fraudulent activities within organizations. However, what is not so clear is whether accountants are receiving the kind of education that will help them in this task. This has therefore led to calls for change in the way accounting is taught and indeed how the curriculum is designed. For example, Kullberg (1986) noted demand by some accounting firms in the US for curricular change and increased interaction between academia and practicing accountants in order to keep academic courses consistent with the challenges in the field as they are being faced by practitioners. Similarly, there is also another call for different perspective on the preparation for career in accounting (American Institute of Certified Public Accountants, AICPA, 1999). Against this background, we formulate our first hypothesis as;

H (1): The introduction of special forensic accounting curriculum in higher education will significantly help in detection and prevention of fraud instead of using normal audit procedures.

It is highly recognized that, inadequate emphasis on fraud deterrent practice and on education contribute to fraudulent activities in large and mid-size US companies (KPMG Peat Marwick Survey, 1994). It is the expectation of many groups for accountants to assume a more active role in guaranteeing a reasonable assurance with respect to reliable financial reporting, creation of fraud awareness and detecting and preventing fraudulent financial activities. According to the US General Accounting Office (GAO) (1996), there is now a strong emphasis on fraud prevention and detection during statutory audits. In fact, the United States and international standards setters have increased the responsibility of auditors to consider the risks of fraud while conducting audits of financial statements. There is even a call for stronger forensic skills in those who perform these audits. What remains is the creation of awareness in fraud detection through the infusing of fraud awareness programs in accounting curriculum.

Fraud in accounting has been discoursed along two main steams, that is fraudulent financial reporting and misappropriation of firm resources. Fraudulent financial reporting refers to deliberate and calculated activities and attempts to misrepresent transactions in the financial statement in order to derive or take undue advantage. On the other hand, misappropriation of assets refers to deliberate and calculated activities to take firms resources without authorization, which include acts like stealing and embezzlement. Such acts start gradually across the firm, and in some case difficult to trace the starting point of the fraudulent activity.

A study conducted by Seda, Mike, and Peterson Kramer, Bonita K (2014) found through their results that 95% of the respondents supported that the demand for forensic accountants will increase in foreseeable future. This emphasizes the importance for this education in the world. Rezaee, Z. E., Lander, G. H., & Reinstein, A. (1996) identified four universities that taught forensic accounting and discussed the course content in detail. Seda, Mike, and Peterson Kramer, Bonita K. (2015) mentioned that very little research exists pertaining to international forensic accounting education. Adrian Nicholas Koh, Lawrence Arokiasam, Cristal Lee Ah Suat (2009) discussed in their study that the increasing demand of forensic accounting is a recognized feature of most companies. Forensic accounting arises as a discipline, it encompasses fraud knowledge, financial expertise, and a sound knowledge and understanding of business reality and the working of the legal system (Bologna & Lindquist, 1987). This given an indication that this curriculum can bring more perceived benefits to society. Forensic accounting and fraud examination continuously became a debatable topic for the past few years. Although there are many authors studied the big corporate scandals (Shaikh & Talha, 2003) and few authors mentioned the significance of forensic accounting. There are no studies available on forensic accounting in higher education throwing a light on bringing perceived benefits to the stake holders. Based on the above discussion and to cover the gap of perceived benefits of forensic accounting we formulated the second hypothesis as;

H (2): Forensic Accounting in Higher Education can bring perceived benefits to the Academics and Executives

Despite the demand for serious fraud detection in accounting curriculum (Rezaee and Burton, 1997), Gierlasinski et al. (1998) observed a very slow, if any, curricular change in accounting education. The reasons always given during surveys for the slow pace in change of accounting curricular include: not having enough room in the curricular to include additional training in fraud or forensic accounting, or /and, that the school must stick to the traditional basics of intermediate, cost and audit accounting. But it is now very clear that a lot have changed. For instance, forensic accounting is now very popular with students rating it 9.14 on a ten-point satisfaction scale in the US (Buckhoff and Schrader, 2000) and many other developed countries. This change may have been propelled by the fact that the Accounting Education Change Commission (AECC) in 1990 and the AICPA in 1998 have advanced the idea of 150-hours requirement for competency in the accounting profession (Doost, 1999) and by 2001, 48 states in the US had passed legislation to require 150 semester hours for accounting students and as a prerequisite for writing Certified Public Accountant (CPA) examination. This provided the needed impetus for the introduction of standalone new courses, including forensic accounting, into the accounting curriculum. Recent corporate accounting scandals have led to increased legal and regulatory requirements (e.g., Sarbanes-Oxley Act of 2002, Public Company Accounting Oversight Board (PCAOB)) for improved corporate governance. These requirements address internal controls for detecting and deterring fraud and encourage financial statement auditors to be more aggressive in searching for fraud. This, in turn, has resulted in increased demand for entry-level practitioners and professionals who have greater fraud awareness, as well as knowledge and skills related to fraud and forensic accounting. On a more basic level, traditional accounting graduates entering the profession as corporate accountants and internal and external auditors are expected to have a greater understanding of fraud and forensic accounting. Furthermore, as a result of the threat of terror activities and corruption and racketeering, the Department of Justice, the Department of Homeland Security, and law enforcement agencies have placed greater emphasis on white collar crime, money laundering, and terrorist financing (e.g., USA Patriot Act). In addition, there is a growing demand for accountants in forensic and litigation advisory services. Zabihollah Rezaee Daniel Lo Michael Ha Alexis Suen (2016) stated through their study that the present financial scandals, fraud and related financial crises have motivated more interest for forensic accounting and fraud examination practices. Business schools and accounting programs worldwide are incorporating ethical practices in the curriculum and paying attention on integrating forensic accounting education into the accounting curriculum. Diane M. Matson (2016) highlighted through his study that there are many opportunities in fraud auditing, forensic accounting and fraud investigations. He also added that just one course in forensic accounting is not enough background to prepare student to become forensic accountants. Students need have a scope for basic diploma courses to masters, professional courses in forensic accounting. Another unfortunate reality is the increasing victimization of individuals targeted in fraud (e.g., identity theft). No doubt raising awareness of fraud prevention measures and assisting in remediation procedures are crucial to effectively addressing this growing problem in society. At the same time how strong the forensic accounting curriculum should be? What kind of topics in the curriculum of forensic accounting will increase the chances of fraud prevention? Consequently, we hypothesize that;

H (3): The integration of various topics forensic accounting curriculum topics into higher education will increase the likelihood of fraud prevention

Fraud from UAE perspective

Fraud is a problem that costs an estimated \$3.7 trillion each year globally (ACFE 2014). According to the results of KPMG's Fraud Survey of 2014, organizations are reporting more experiences of fraud than in prior years. In 2014, 75% of companies reported that they experienced an instance of fraud, an increase of 13% as compared with 2003. Furthermore, Ernst & Young's (2013) Global Survey pointed out that the main contributing factors to the prevalence of fraud are the growing complexity of organizations and systems, changes in business processes and activities and so on. UAE is not an exceptional to this. According to PWC Global Economic Crime Survey (2014) 31% of respondents in the UAE reported accounting fraud in their organizations, significantly above the average for the Middle East 22%. It was also stated that Asset misappropriation (78%) is the most common economic crime in the UAE, followed by cybercrime, procurement fraud and bribery and corruption. These deplorable results raise the concerns for fraud investigation procedures and strengthening the need for forensic accounting curriculum in UAE.

RESERCH METHOD

The five-point Likert scale was used in the questionnaire and the respondents were asked to indicate 1 (Strongly Disagree) to 5 (Strongly Agree). The first part of the questionnaire relates to the background information of the participates and the second part essentially pertains forensic accounting education. Overall a response rate of 85% was received and found to be adequate to provide a statistically significant information of the study. The Cronbach's alpha widely used to test the internal consistency of a scale. Hence, it was applied in this study and the alpha was found to be 0.848 for all the variables. Any value of this measure above 0.75 indicates a good reliability of the instruments.

DATA ANALYSIS AND RESULTS

A total of 476 responses were received from the participants in the distribution of 26 corporate executives, 12 educators and 450 students. In terms of academic qualifications, 7 educators and 3 students were having doctoral level degrees. Five educators, 36 students, and 5 corporate executives were having post-graduate degrees. Nine corporate executives and 408 students were undertaking their under-graduate or equivalent degrees. Out of 12 educators, 4 were having professional qualifications of CA/ACCA/CPA. All corporate executives were having a professional qualification, the majority (57%) were having ACCA qualification. There were one each with CA, CPA, ACGP, CAMS, CFE, CEH, and CMA. Most of the educators were from the age group of 35 years an above, and most of the students were in age group of 15 to 25 years.

Present Scenario of Forensic Accounting Education in UAE

Out of 14 corporate executives, 13 have indicated a need of forensic accounting in UAE. 50% of the educators and 63% of the students reported their awareness about the Forensic Accounting course. But only 12% of students reported having courses of Forensic Accounting infused in their course syllabus. 11 out of 12 educators suggested to offer a course on Forensic Accounting in either undergraduate level, or post graduate level, or both. No qualified faculty member was reported who could teach forensic accounting courses, and only 25% of the educators who participated in the survey mentioned their willingness to teach forensic accounting courses.

Significance of Forensic Accounting Education in Detection and Prevention of Fraud

This is the first hypothesis of the paper, we framed questions (given in Table 1) based on this to collect information from the stated stakeholders.

Table 1. Descriptive Statistics of Significance of Forensic Accounting Education Statements

Respondent/Statements		Educators	Executives	Students
Minimization of accounting frauds	Mean	4.00	3.29	4.08
	Std. Deviation	0.95	1.07	0.83
Possibility of early detection of financial scandals and frauds	Mean	3.75	3.57	3.97
	Std. Deviation	0.87	1.28	0.85
Usefulness in fraud prevention	Mean	3.92	3.57	3.91
	Std. Deviation	0.90	0.94	0.91
Larger effectiveness than normal financial audit in detection and prevention of frauds.	Mean	4.00	3.64	3.65
	Std. Deviation	0.74	0.93	1.13

The reliability of the scale consisting of the four items to measure the significance of Forensic Accounting Education was found high (Cronbach Alpha: 0.755). The objective of these questions was to obtain the level of agreements (using Likert Scale) on the possible impact of integrating Financial Accounting courses in Higher Education. The impacts included were: 1. minimization of accounting frauds, 2. possibility of early detection of financial scandals and frauds, 3. usefulness in fraud prevention, and 4. larger effectiveness than normal financial audit in detection and prevention of frauds.

In case of statement 1, minimization of accounting frauds, 29% corporate executives did not agree, but the percentage of disagreement on this statement among students was less than 3%. This difference was also found statistically significant in t-test (t value: 3.5, p value: 0.01). No other significant differences were found between the three groups of respondents (educators, executives, and students) in any other statement in this section. Results for the first and fourth statement of this section were particularly interesting. For the first statement, a larger number of executives disagreed as compared to the other three statements. And more than 90% educators agreed or strongly agreed to the first three statements, but 25% educators disagreed to the last statement. Mean values and standard deviations of the four statements are presented in table 1.

Perceived Benefits of Forensic Accounting in Higher Education

The survey items denoting the perceived benefits were included only for the educators and executives. The reliability of the scale consisting of the seven items to measure the perceived benefits of Forensic Accounting Education and Practice was found high (Cronbach Alpha: 0.871). There were two subscales of the perceived benefits based on the hypothesis two. The first subscale consisting of 3 items related to the benefits for the society and practice (Cronbach Alpha: 0.800): satisfying society's demand, strengthening the credibility of financial reporting and promoting the responsible corporate governance; and the second subscale consisted of 4 items related to the benefits for students (Cronbach Alpha: 0.826): making students more desirable in marketplace, preparing students to examine frauds, engage in litigation consulting, and in expert witnessing. Table 2 presents the descriptive statistics of items in the scale for measuring the perceived benefits of Forensic Accounting education and practice.

Table 2. Descriptive statistics of perceive benefits of Forensic Accounting in Higher Education

Perceive Benefit Items/ Stements	Academics		Executives	
	Mean	Std. Deviation	Mean	Std. Deviation
Satisfy society's demand for forensic accounting education and practice	4.08	0.51	3.21	1.19
Strengthen the credibility of financial reporting	4.42	0.67	4.00	1.04
Promote responsible corporate governance	3.83	1.03	3.86	1.17
Make students more desirable in the market place	3.75	0.87	3.36	1.22
Prepare students to engage in fraud examination	3.58	0.90	3.29	1.33
Prepare students to engage in litigation consulting	3.83	0.72	3.36	1.01
Prepare students to engage in expert witnessing	4.00	0.95	3.36	1.22

Only for the first item, a significant difference in the mean rating between the educators and executives was found (t test: t value: 2.346, p value: 0.028). High rating scores in all the items (more than 3.5 by educators, and more than 3.2 by executives) show the high level of agreement on the perceived benefits of Forensic Accounting education and practice from both categories of respondents, educators and executives.

Various topics of Forensic Accounting Curriculum and their importance in prevention of fraud

Sixteen topics were included in the survey with an objective to obtain the perception of participants on the level of importance of these topics in a Forensic Accounting Curriculum. Though all the topics were rated as important (more than 3.5 by educators and students and more than 3 by executives), 3 topics were common in terms of high rating across all the three categories of the respondents. These were: 'Bribery and Corruption Investigation' - ranked highest by all categories of the respondents, 'Corporate Governance' – rated second highest by educators and students, and third highest by of executives, and 'Financial Statements Fraud' – rated amongst the top five across all the participants. Educators rated topics 'Effective Report Writing' and 'legal elements of fraud' in the top five, but these topics were not rated so high by the students and executives. Students rated 'Scrutiny and Privacy' and 'Types of Frauds' in their top five. Executives rated the topic 'Conflicts of Interest Investigating Techniques' as the second highest. Table 3 presents the mean and standard deviation values of the ratings obtained in the survey for the sixteen topics.

Table 3. Mean and standard deviation values of the ratings for the curriculum topics.

Topics/Content	Academics		Executives		Students	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Fundamentals of fraud	4.00	0.85	4.14	0.86	3.67	0.94
Theory and methodology of fraud examination	4.08	0.90	3.79	1.05	3.81	0.90
Valuation expert in divorce	4.00	1.04	3.00	1.30	3.52	1.08
Careers in forensic accounting	3.58	1.00	3.93	0.73	3.73	1.05
Professional organisations sponsoring forensic accounting	4.17	0.83	3.93	0.92	3.73	1.05
Anti-fraud criteria, education, controls & training	3.67	1.15	4.07	0.83	3.77	1.03
Professional standards pertaining to forensic accounting	3.50	1.00	3.79	0.80	3.71	1.00
Types of frauds	3.75	0.97	4.29	0.73	3.82	0.99
Financial statements frauds	4.50	0.67	4.36	0.63	3.85	0.97
Scrutiny and privacy	4.00	1.04	4.36	0.63	3.83	0.94
Analytical review procedures	3.92	1.08	4.07	0.73	3.79	0.97
Conflicts of interest investigating techniques	3.92	1.16	4.43	0.85	3.78	0.97
Effective report writing	4.33	0.89	4.21	0.70	3.78	1.04
Legal elements of fraud	4.33	1.07	4.21	0.80	3.77	1.05
Corporate governance	4.33	0.89	4.36	0.74	3.90	0.91
Bribery and corruption investigation	4.50	0.80	4.64	0.50	3.96	0.98

Out of the seven learning mechanisms presented to the educators in the survey, the top three in rating were: Research Projects, Videos, and Webinars. Field trips was rated as the fourth most important learning mechanism. Table 4 provides the results of the data analysis of this section of the survey linked to hypothesis three of this study.

Table 4: Data Analysis Result: Ratings by Educators to different learning mechanisms in teaching forensic accounting course

Learning Mechanisms	Mean	Median	Mode	Std. Deviation
Textbooks	4.00	4.00	4.00	0.43
Research Projects	4.42	4.50	5.00	0.67
Videos	4.17	4.00	4.00	0.72
Cases	3.92	4.00	4.00	0.90
Guest speakers	4.00	4.00	4.00	0.95
Field trips	4.08	4.00	4.00	0.67
Webinars	4.17	4.00	5.00	0.83

From correlation of the variable Table 5, it is apparent that of all the variables, except financial statement fraud, effective reporting report writing, legal elements of fraud, and corporate governance have a significant relationship with each other. However, Valuation expert in divorce is found to be associated with effective report writing, legal elements of fraud and corporate governance. The implication of it is that forensic accounting is a multi-factor function, which has a significant policy implication.

The implication of it is that entrepreneurship is a multi-factor function, which has a significant policy implication of providing an entrepreneurial friendly business, environment and ease of doing business.

Table 5: Inter-correlation of the variables (Composite-Students/ Academics/ Practitioners)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Fundamentals of fraud	1															
Theory and methodology of fraud examination	.588**	1														
Valuation expert in divorce	.542**	.545**	1													
Careers in forensic accounting	.123*	.124**	.114*	1												
Professional organisations sponsoring forensic accounting	.217**	.103*	.159**	.593**	1											
Anti-fraud criteria, education, controls & training	.244**	.240**	.217**	.184**	.207**	1										
Professional standards pertaining to forensic accounting	.443**	.341**	.347**	.131**	.212**	.475**	1									
Types of frauds	.438**	.306**	.325**	.173**	.211**	.336**	.448**	1								
Financial statements frauds	-.114	.060	.041	.094*	.051	.151**	.003	.010	1							
Scrutiny and privacy	.289**	.004	.114*	.016	.028	.026*	.022	.026	.244	1						
Analytical review procedures	.352**	.198*	.159**	.095	.192*	.402**	.164	.148	.025	.076	1					
Conflicts of interest investigating techniques	.213*	.004*	.217**	.065*	.028**	.408*	.029	.063	.020	.100	.025	1				
Effective report writing	.321*	.019*	-.103*	.009*	.492*	.452**	.168	.429	.064	-.092	.054	.029	1			
Legal elements of fraud	.232*	.044*	-.116*	.550*	.124*	.315**	.092	.023	.350*	.033*	.018	.042	.029	1		
Corporate governance	.222	-.190	-.078	.340*	.092*	-.225*	-.102	.149	.047*	.367*	.103	.064	.022	.086	1	
Bribery and corruption investigation	.321*	.218	.065*	.016*	.228	.065*	-.022	.063	.451	-.325	.216	.210*	.024	.019	.045	1

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

DISCUSSION

There have been calls for introducing and expanding forensic accounting education, very few countries, and higher education institutions have answered this call till now. This study explores not only the present situation of the forensic accounting education in UAE, but it also presents the perceptions of different stakeholders - corporate executives, students and educators, about its need, significance and benefits, the curriculum content and the relevant learning mechanisms to be used. At present, forensic accounting education in UAE is at a nascent stage. The number of educators who are ready to teach forensic accounting, the number of courses with forensic accounting content, and the number of graduates with forensic accounting education are not adequate in UAE.

There is a high level of agreement amongst the corporate executives, students and educators about the impact of forensic accounting education on financial frauds. Where there is an overall agreement about the possibility of minimization of frauds, early detection and prevention as an impact of the forensic accounting education, the level of agreement varies. Corporate executives' level of agreement is significantly lower as compared to that of students and educators. While educators and students may hope that frauds will reduce due to the forensic accounting education, practitioners' knowledge and experience indicate that a complete reliance on only education for any major impact on fraud practices seems too sagacious.

This study specifies the perceived benefits of forensic accounting education for the society and practice, and for the students who are the future practitioners. Overall, the level of agreements with all the perceived benefits of forensic accounting education was high with both educators and executives, but executives indicated a significantly lower level of agreement with the courses on forensic accounting education satisfying the society's demand for forensic accounting education and practice. This difference reinforces the finding that only education may not completely transform the practice, and there is a need for other initiatives also.

Though this study found some topics which were accepted as important by all the groups, there is still a need to finalize the topics in consultation with the practitioner of the region based on their needs. Topics related to bribery and corruption investigation, corporate governance, and financial frauds are considered important by all the three groups in this study. Where effective report writing and legal elements of frauds were considered more important by educators, practitioners preferred conflicts of interest investigation techniques as more important. Educators suggested the use of research projects, videos and webinars as major learning mechanism for the forensic accounting courses. This indicates the importance of not only the theories, but also the use of activities, practical training and experiential learning methods in teaching forensic accounting.

This study needs to be seen as a catalyst or a harbinger of the forensic accounting education in the region. After establishing the need, significance and benefits of forensic

accounting education, a list of topics and learning mechanisms for teaching forensic accounting courses are also presented by this study. With the help of the insights from this comprehensive study, education institutions can design and start offering courses in the area of forensic accounting education.

This study can also be extended to other parts of the world and the perceptions and views of large number of professional bodies and other stakeholders can also be included in the future studies. But, what is certain is a need to train the educators and to work consistently with the industry practitioners. Forensic accounting courses or programs need to be dynamic in nature and should get evolved according to the need of the society and practice. The major achievement and success of education will be realized only if the impact is felt in the society, in this case, with an evidence of reduction in financial frauds due to a well-planned and designed education with the cooperation of industry and professional bodies who share the responsibility with the higher education institutions in producing the next generation of the practitioners.

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