

Accounting Indoctrination and Building Unquestionable Trust in Accounting Figures: The Case of Bahrain

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Due to a unique emphasis on the quantitative aspect of accounting measurements, the traditional accounting teaching process results in a unique type of indoctrination. Since this unique emphasis is not accompanied by a critical and evaluative approach to accounting figures, then an accounting student is deprived of knowledge about accounting figures. Education is replaced with indoctrination. On consequence of this lack of knowledge is indoctrinating an accounting student's mind with unquestionable trust in accounting figures. The indoctrination of unquestionable trust in accounting figures is a natural consequence of implicitly conveying to an accounting student the message that accounting figures do not suffer from any drawbacks.

Keywords: Accounting figures, accounting teaching process, indoctrination, quantitative aspects of accounting measurement, unquestionable trust in accounting figures.

1. Introduction

Measurements through figures (quantification) are ubiquitous (Porter 2001). They are ubiquitous and overwhelmingly hegemonistic in accounting. Mattessich (1964) gives quantification in accounting the status of a postulate. Chambers (2005) considers “measure” and “measurement” to be among the most common terms in modern accounting discourse. Riahi-Belkaoui (2004) considers accounting to be a measurement discipline. Sterling (1979) wrote a whole book in an attempt to prove that accounting in general and accounting measurements in particular could be made scientific. The dominance of the quantitative aspect of measurements in accounting is manifested through the prominent place given to this aspect of measurement in almost all definitions of accounting. Goldberg (1955) quoted by Sterling (1979), argues that “The principal functions in accounting are usually recognized as being those of recording, reporting and interpreting. But underlying all of these is the necessity of measuring. The problem facing the accountant is that of measuring something”. By “measuring something” is clearly meant assigning a numerical value (quantification) to a phenomenon. The position adopted by temporary accounting textbooks is not different. Various financial accounting textbooks either explicitly or implicitly adhere to the definition provided by Goldberg. For example, Kieso, Weygandt and Warfield (2007) suggest that one of the essential characteristics of accounting is measurement. ⁽¹⁾ Wild, Shaw and Chiappetta (2012) define accounting as an information and measurement system.

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This unprecedented prominence of the quantitative aspect of measurements is also prevalent in the teaching of accounting through textbooks, lectures and examinations. The teaching process could either lead to the creation of a critically thinking mind (education) or a passive mind ready for receiving ideas without critically evaluating them (indoctrination). The latter mind is orientated to accept the inculcation of beliefs. Since an accounting student is not usually trained to evaluate critically the meaning (essence) of accounting figures (Lee 2005) then putting an emphasis on the quantitative aspect of measurements in the teaching of accounting would definitely lead to an indoctrination of certain beliefs. One of such beliefs is an unquestionable trust in accounting figures.

Whenever financial accounting, cost accounting or management accounting is taught, lecturers, including the author of this paper, overwhelm an accounting student with the quantitative aspect of accounting measurements. Lecturers give the impression that they are obsessed with accounting figures. Usually lecturers devote no more than one lecture (a very rare case is that of two lectures) without the use of numerical exercises. The remaining lectures are totally devoted to the use of figures. There are many possible reasons for such an obsession with figures. First, it is easy to prepare the material of a lecture. For some repeatedly taught topics, there is no need to prepare the material of a lecture, e.g., various depreciation methods and any exercise can be immediately prepared inside the classroom. Second, it is easy to prepare and mark examination papers. Third, it is a time-killing approach. Exposing a numerical exercise on a board and explaining how figures are handled or how a specific quantitative outcome is derived through addition, subtraction, multiplication and division would definitely be time-consuming. Fourth, rightness and wrongness aside, almost all human beings have a tendency to prefer dealing with figures for describing various phenomena. The accounting teaching process with its emphasis on the quantitative aspect of accounting measurements would definitely enhance such a tendency. Thus, an accounting student's mentality is framed to understand accounting to be only the use of figures and framed to accept an accounting teaching means totally based on a quantitative approach. His mentality is geared to associate the teaching of accounting with an inevitable complete indulgence in figures. Complaints and grievances would emerge when there is a shift from a quantitative approach to a non-quantitative approach to the presentation of accounting topics.

Textbooks authored by very high profile authors must also be blamed for this obsession with the emphasis on the quantitative aspect of accounting measurements. Studying any textbook on financial accounting, cost accounting or management accounting would allow easier discovery of an indulgence in the calculative approach to various accounting topics (in the main body of various chapters as well as exercises, solutions manuals and testbanks).

Examinations follow suit, taking into consideration that numerically based accounting examinations nowadays are very easily prepared through the cut-paste approach extracted literally from testbanks of various textbooks.

Of course, there are other accounting courses such as accounting theory, auditing, current issues in accounting and international accounting that do not give greater weight or space to the quantitative approach to accounting topics. As a matter of fact, it is supposed that the main objective of an accounting theory course is to present to an accounting student different and contradictory theories which run counter to

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indoctrination. However, the influence of these other courses in creating an adequate balance between education and indoctrination is not usually material. There are three possible reasons for the dominance of indoctrination through accounting figures. First, discussion on measurement issues within the non-quantitatively orientated accounting courses is not absent since it is beyond doubt that accounting is a measurement discipline and, accordingly, a numerical representation is an inherent part of almost all accounting measurements. Thus, by the very nature of accounting, the non-quantitatively oriented courses include arguments and counter-arguments about accounting quantification. Second, sometimes, due to the lack of well-qualified lecturers on these non-quantitatively orientated accounting courses, various accounting topics are also tackled though a quantitative approach. Third, the overwhelmingly dominant influence of the quantitatively orientated accounting courses does not allow the non-quantitatively accounting orientated courses to bring about an adequate balance between education and indoctrination.

The most important issue of this paper is the role of emphasizing the quantitative aspect of accounting measurements in indoctrinating the mind of an accounting student with beliefs. The mere emphasis on the quantitative aspect of accounting measurements creates an impression in the mind of an accounting student of an utmost importance of accounting figures otherwise the quantitative aspect of accounting measurements would not be emphasized. Thus, indoctrination of beliefs is not carried out by discussing directly certain positive characteristics of accounting figures. It is simply carried out through exposing various accounting issues by using figures without discussing the essence of these figures. Put differently, a teaching process that covers accounting issues through the use of figures for the derivation of other figures and nothing else would definitely lead an accounting student to look positively at accounting figures. It is difficult to imagine the other possibility of looking at accounting figures in a negative way. It is a natural tendency of any human being to attach good qualities to things that are emphasized. Emphasis is equated with positive beliefs. One such belief is the possibility of having unquestionable trust in accounting figures reflecting the domination of absolutism rather than relativism.

Accounting indoctrination, through an emphasis on the quantitative aspect of accounting measurements, creates an accounting student's mind with crippled reflective capacities. These crippled reflective capacities are brought about by training an accounting student's mind to look favourably at accounting figures without verifying their essence, to have an absolute belief in the literal existence of accounting figures in the outside world without paying attention to possibilities in this outside world and, most importantly, not to search for their causes. An unquestionable trust in accounting figures would be a natural consequence of the crippled reflective capacities.

This paper has four inter-related contributions. The first is to bring the attention to the indoctrination enigma in the accounting teaching process. Although this enigma is as old as the teaching of accounting, it is not given any attention in the accounting education literature. The second is to find out ways in which indoctrination in accounting teaching process is practised. The essence of the second contribution is to show how the reflective thinking based on relativism is neglected in favour of passive thinking based on absolutism. The third is to investigate empirically the magnitude of indoctrination in the accounting teaching process. The third contribution is about the existence of the indoctrination phenomenon. The fourth is to investigate empirically the

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role played by the constituents of the accounting teaching process; i.e., sources or means of indoctrination, that contribute individually or collectively to the indoctrination of unquestionable trust in accounting figures.

The structure of the remaining sections of this paper has the following sequence. Section 2 formulates the research question. Section 3 consists of the literature review. Section 4 develops three main hypotheses. Each main hypothesis is divided into sub-hypotheses. Section 5 explains the various elements of the instrument of the empirical study, i.e., the questionnaire and presents the goal behind each group of variables constituting the questionnaire. Section 6 relates to population and data collection. Section 7 introduces the statistical techniques used in the analysis. Section 8 deals with the analysis and discussion of statistical results. Section 8 is divided into three sub-sections. Each sub-section deals with one of the three main hypotheses and its related sub-hypotheses. Finally, section 9 introduces both a summary and conclusions.

2. Research Question

This paper aims at answering the following four inter-related questions. The first, does accounting indoctrination in the form of trust in accounting figures exist in the accounting teaching process? The second, does this type of trust in accounting figures have the characteristic of being unquestionable? The third, does the existence of an unquestionable trust in accounting figures have the characteristics of a phenomenon? The fourth, do the constituents of the accounting teaching process (the lecturers, textbooks and examinations) play a real role in indoctrinating an unquestionable trust in accounting figures. Accordingly, the research question focuses on bringing the phenomenon of indoctrinating unquestionable trust in accounting figures to the surface and finding out the forces or reasons that contribute individually and collectively to its existence.

3. Literature Review

The education literature is replete with articles on the education-indoctrination dichotomy. These two concepts are considered in the education literature as though they are the two sides of the same coin (e.g., Hanks 2008). Any discussion of education ought to lead to a discussion on indoctrination and vice versa. In general, education is assumed to be an important quality in any teaching process (Watty 2006). In general, too, indoctrination is an unwelcome orientation in the teaching process since it runs counter to emancipation of the human mind with an obvious consequence of a lack of critical thinking (Sturm 1993) caused mainly by a total domination of rhetoric over logic (McDonough 2011).

To start with, indoctrination is defined to be a teaching feature with the intention of compelling the mind of a human being to be receptive of beliefs without questioning why such beliefs exist in the first place. This is a black and white training of a human's mind which makes unnecessary the questioning of the essence of a point of a view. For some, such questioning is regarded as a rational approach dictated by nature (Seigle 1988) and necessitated by seeking knowledge not belief (Hocutt 2005).

Therefore, with indoctrination, creative mind is replaced with manufactured mind; the structuring or moulding of a specific consciousness (Wilson, 1972). Put differently,

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indoctrination is an intentionally or unintentionally created consciousness that is not accompanied by any awareness of the essence of what is created in the receptive mind. A critical and evaluative mind is lacking since the teaching process is solely concerned about absolute final results. The implication is that the inculcated answer is not accompanied by a justification. The end result is a teaching process that does not allow the passing of an idea through the usual mental process of critically investigating the essence of an idea, since, according to Green (1972), in indoctrination there is a lack of genuine reasons and arguments. Merry (2005) gives an even more gloomy picture since for him 'indoctrination involves a process of knowledge or belief transmission whereby persons are left with crippled reflective capacities with respect to particular content'. Thus, indoctrination could result in paralyzing one's mind.

On the other hand, education is given totally different qualities to those attributed to indoctrination. Education represents the transformation of a human's mind to be critically evaluative. It is not concerned solely about an outcome but about both reason and outcome (Watty 2005). Any approach giving adequate emphasis to reason or causation must lead to an inquisitive/questioning mind. As such, education is the training of a human's mind to be critical and in a state of continuous search for reason-based outcomes or, at least, a mind that insists on the synchronous attendance of both reason and outcome. This would naturally entail developing a human's mind to have mental competencies that only accept logically and relatively based final results.

The above discussion on the differences between education and indoctrination is really centred on one fundamental consequence for both. For education, the fundamental consequence is the possibility of the existence of different worlds. For indoctrination, the fundamental consequence is the possibility of the existence of only one certain world. Education is a training process that aims at constructing interpretation of a phenomenon based on relativism. Absolutism has no place in education. Indoctrination does not allow relativism to be an important constituent of a human's thinking; phenomena are considered as either to be absolutely good or absolutely bad. The implication of this difference is that a human's mind is not trained to accept the possibility of alternatives. Indoctrination trains a human's mind to look either favourably or unfavourably at a phenomenon without verifying its essence, to be absolutely content with what is told about a specific phenomenon rather than checking the possible existence of its counter-part in the real world and, most importantly, not to search for its causes. On the other hand, education trains a human's mind to verify the essence of a phenomenon, to search for a correspondence between a told phenomenon and its counter-part in the real world and to search for causes of a multi-faceted phenomenon; i.e., different possibilities of a phenomenon.

Although the general stream of research in the education literature is to bless education and curse indoctrination, there is a school of thought in this literature which gives some credits to indoctrination and opposes excessive education (e.g. Passmore 1967, Cuypers and Hagi 2006, Hanks 2008). Thiessen (1985), quoting Passmore (1967), suggests that it is inevitable and indispensable to bond of knowledge build up with inculcation of a "fixed body of beliefs". However, this should not be used as continuous strategy in the teaching process since it may imply an unwarranted extreme clinging to faith. Instead, it could be considered as a necessary preliminary or transmission stage. That is, it is quite reasonable and practicable to adopt at some stages of the teaching process a deliberate indoctrinating approach. The case in point is the upbringing of a child. Since a child cannot think for himself/herself, then instilling

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beliefs is a necessity (Hanks 2008). Another situation which requires adequately thought indoctrination is a student attending a very preliminary course in accounting. On the other hand, excessive education is very dangerous in that it abandons certainty altogether and creates an unstable, indecisive and shaky mind without a belief in anything (Siegel 1997). Another negative side effect of excessive education is that an excessively critical mind accompanied by excessive tendency towards curiosity is always out of control. For example, morality would not be considered a priority (e.g. biological experiments).

A delicate balance between education and indoctrination must be sought. An accounting student attending a preliminary course in accounting ought not to be told about the relative and uncertain nature of accounting figures since this may lead to infer that accounting figures are useless for decisive actions. Balancing education and indoctrination in the teaching process is not an easy matter. The teaching process must not seek the creation of an unconsciously receptive mind; rather it must seek the creation of a critical mind. On the other hand, excessive critical thinking must be avoided since it can create an indecisive, timid, uncontrolled and unethically orientated mind.

Unlike the education literature, the accounting literature generally and accounting education literature particularly lack an adequately critical evaluation or even descriptive argument of the education-indoctrination dichotomy. This is evidenced by the fact that indoctrination in the accounting teaching process is either given scant attention or neglected in the accounting literature. Although matters related to education are perhaps fully discussed, indoctrination is not discussed. As a matter of fact the indoctrination concept is totally overlooked. None of the available reviews of the accounting education literature mentions even a single article related to the indoctrination concept in accounting. Table 1 gives a summary of these reviews.

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Table 1: Review of Accounting Education Literature ^{(2) (3)}

Authors/ year of review/ period covered/ number of papers reviewed/ Journals reviewed.	Topics covered
Rebel, J E and Tiller, M G/1986/1970-1984/155 papers. Various accounting journals	Characteristics of accounting students, accounting instruction, Accounting program structures, curricula, course content, student recruitment, job selection, faculty concerns.
Rebele, J E et al/1991/1985-1991/ 213 papers. 1. Journal of Accounting Edu. 2. Advances in Accounting 3. Issues in Accounting Edu. 4. The Accounting Educator's Journal and, 5. The Accounting Review.	Faculty issues, accounting curricula, course content, program structure, characteristics of accounting students, course delivery and teaching methods, computer-based instruction, examination format/policy, prior performance and exposure to accounting/ bookkeeping, endemic factors and their relationship to performance in accounting courses, student recruitment and job selection.
Rebele, J E et al/1998a/ Part I/ 1991-1997/ 186 papers 1. Accounting Edu. : A Journal of Theory, Practice and Research 2. Issues in Accounting Edu.3. Journal of Accounting Edu., and 4. The Accounting Educator's Journal.	Curriculum and instructional approaches.
Rebele, J E et al /1998b/ Part II/ 1991-1997/ 163 papers. 1. Accounting Edu. : A Journal of Theory, Practice and Research 2. Accounting Perspectives 3. Issues in Accounting Edu. 4. Journal of Accounting Edu, and 5. The Accounting Educator's Journal,	Students, educational technology, assessment and faculty issues.
Apostolou, Barbara et al /2001/ 1997-1999/ 216 papers. 1. Accounting Edu. 2. Advances in Accounting Edu. 3. Issues in Accounting Edu. 4. Journal of Accounting Edu., and 5. The Accounting Educator's Journal.	Assessment, curriculum and instruction, educational technology, faculty issues and students.
Watson, S F et al/2003/ 2000-2002/ 206 papers. 1. Accounting Edu. 2. Advances in Accounting Edu. 3. Issues in Accounting Edu, and, 4. Journal of Accounting Edu.	Assessment, curriculum and instruction, educational technology, faculty issues and students.
Watson, S F et al /2007/ 2003-2005/ 223 papers. 1. Journal of Accounting Edu. 2. Accounting Edu.: An International Journal 3. Advances in Accounting Edu. 4. Global Perspectives on Accounting Edu., and 5. Issues in Accounting Edu.	Assessment, curriculum and instruction, educational technology, faculty issues and students.
Apostolou, Barbara et al /2010/ 2006-2009/ 330 papers. 1. Accounting Edu.: An International Journal 2. Advances in Accounting Edu. 3. Global Perspectives on Accounting Edu., 4. Issues in Accounting Edu. 5. Journal of Accounting Edu., and 6. The Accounting Educator's Journal.	Assessment, curriculum and instruction, educational technology, faculty issues and students.
Apostolou, Barbara et al /2013/ 2010-2012 / 291 papers. 1. Accounting Edu. : An International Journal 2. Advances in Accounting Edu. 3. Global Perspectives on Accounting Edu. and 4. Issues in Accounting Edu. 5. Journal of Accounting Edu. and, 6. The Accounting Educator's Journal.	Curriculum, technology, faculty, and students.
Paisey, C & Paisey, N J/2004/ ⁽⁴⁾ / 1992-2001/ 209 papers. Accounting Edu.: An International Journal.	Accounting curricula, course content and programme structures, course delivery and teaching methods, characteristics of accounting students and faculty issue.

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However, Doost (1999) is an exception. In an article issued in a journal not specializing in accounting education, Doost suggests

that the education process should be a process of discovery; that we should not indoctrinate our students, that we should give them space to learn, that we should help our students to open up and discover and learn for themselves; that we should help lead our students to their own inner beings.

He also acknowledges the existence of the learning habit of indoctrination in the teaching of accounting. Therefore, indoctrination phenomenon in accounting exists on a very large scale. On the other hand, Doost neither explains how indoctrination in the accounting teaching process is practised, nor does he explain how indoctrination can be avoided or at least balanced with true and adequate education.

This paper represents, perhaps, the first attempt to tackle accounting indoctrination brought about by the accounting teaching process. A case in point is the indoctrination of unquestionable trust in accounting figures. There are two urgent issues that need to be resolved at this preliminary stage. The first is to investigate the existence of the phenomenon of unquestionable trust in accounting figures. Once the first issue is resolved then the second complementary issue is to find out the sources that cause the phenomenon to exist.

4. Development of the Hypotheses

Accounting figures are the results of an interaction of two constituents; methods and procedures on the one hand and people processing them on the other hand. Accounting, internal auditing and external auditing methods and procedures contribute to the determination of specific accounting figures. Accountants, internal auditors and external auditors constitute the people that also contribute to the determination of specific accounting figures through various choices made by them among methods and procedures to fulfill their assigned duties. The collection of all accounting concepts and methods allowed for use by business entities is called Generally Accepted Accounting Principles (GAAP). GAAP implemented to derive specific accounting figures by an accountant are audited twice. The first audit is carried out through the methods and procedures of the internal auditing system. The second audit is carried out through the methods and procedures of the external auditing system which are based on Generally Accepted Auditing Standards (GAAS). The methods and procedures of an internal auditing system are not governed by GAAS. At best, it is hoped that these methods and procedures are well established. Therefore, GAAP, internal auditing methods and procedures and GAAS represent one group of determinants of accounting figures. On the other hand, the objective, neutral and ethical implementation of GAAP, internal auditing methods and procedures and GAAS are totally dependent on human beings (accountants, internal auditors and external auditors). Human beings are the second group of determinants of financial accounting figures. The appearance of neatness, order, regularity and the exactitude of the simple arithmetic calculations leads to attaching certain positive/favourable characteristics to the determinants of accounting figures. Therefore, the first hypothesis is:

H1: The emphasis on the quantitative aspect of accounting measurements leads an accounting student to attach certain positive characteristics to the determinants of accounting figures.

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Hypothesis 1 can be divided into two sub-hypotheses as follows:

H1.1: The emphasis on the quantitative aspect of accounting measurements leads an accounting student to attach certain positive characteristics to accounting, internal auditing and external auditing methods and procedures.

H1.2: The emphasis on the quantitative aspect of accounting measurements leads an accounting student to attach certain positive characteristics to accountants, internal auditors and external auditors.

Once an accounting student attaches certain positive characteristics to the determinants of accounting figures, then an unquestionable trust in accounting figures would be a possible consequence. Although this unquestionable trust is attributed to the appearance of neatness, order, regularity and the exactitude of the simple arithmetic calculations, it is possible to attribute this unquestionable trust to characteristics related to dealing with accounting figures per se, characteristics related to the existence of routine and standardized processes for the derivation of accounting figures and the traditional qualitative characteristics of accounting figures. Therefore, the second hypothesis is:

H2: The emphasis on the quantitative aspects of accounting measurements leads to the creation in the mind of an accounting student of an unquestionable trust in accounting figures.

The second hypothesis can be sub-divided into three sub-hypotheses;

H2.1: The unquestionable trust in accounting figures is due to positive characteristics related to a mere dealing with accounting figures per se.

H2.2: The unquestionable trust in accounting figures is due to positive characteristics related to a mere existence of routine and standardized procedures for the derivation of accounting figures.

H2.3: The unquestionable trust in accounting figures is due to the traditional qualitative characteristics of accounting figures.

The manufactured consciousness of an unquestionable trust in the mind of an accounting student is brought about by the means of the accounting teaching process. These consist of accounting instructors (lecturing style), accounting textbooks and accounting examinations. These are the more usual and traditional means capable of influencing the mentality of an accounting student and, accordingly, can be considered as tools that inculcate an unquestionable trust in accounting figures. Therefore, the third hypothesis is:

H3: The unquestionable trust in accounting figures is caused by accounting instructors (lecturing style), accounting textbooks and accounting examinations.

The third hypothesis can be divided into three sub-hypotheses:

H3.1: The unquestionable trust in accounting figures is caused by accounting instructors (lecturing style).

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H3.2: The unquestionable trust in accounting figures is caused by accounting textbooks.

H3.3: The unquestionable trust in accounting figures is caused by accounting examinations.

5. The Questionnaire

The empirical part of this study is based on a questionnaire. The responses to the questionnaire are given the scales shown in Table 2.

Table 2: Scale of responses

Scale	Points
Strongly agree	5
Agree	4
Neither Agree nor Disagree	3
Disagree	2
Strongly Disagree	1

The distributed questionnaire consists of 37 variables. The 37 variables are grouped into three main parts following the number and sequence of the three main hypotheses.

Part A consists of 6 variables as is shown in Table 3. The goal of part A is to find out an accounting student's perception about characteristics of the determinants of accounting figures.

Part B contains 16 variables. The goal of part B is to find out an accounting student's reasons for having unquestionable trust in accounting figures. Part B is divided into three groups as is shown in Table 4.

Part C, the final part of the questionnaire, contains 15 items. The goal of this part is to find out the role played by the means of the accounting teaching process in indoctrinating an accounting student's mind to have unquestionable trust in accounting figures. These means are divided into three possible types representing the constituents of the accounting teaching process as is shown in Table 5.

Table 3: Part A of the questionnaire

Variables related to H1	Variables' number	Number o variables of each group
1. H1.1: Variables related to characteristics of GAAP, internal auditing methods and procedures and GASS (determinants of accounting figures).	1-3	3
2. H1.2: Variables related to characteristics of the accountant, internal auditor, external auditor (determinants of accounting figures)	4-6	3

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Table 4: Part B of the questionnaire

Variables related to H2	Variables' number	Number of variables of each group
H2.1: Variables related to unquestionable trust in accounting figures based on dealing with accounting figures per se	7-11	5
H2.2: Variables related to unquestionable trust in accounting figures based on the neatness of the technical procedures of double-entry system leading to the derivation of accounting figures.	12-16	5
H2.3: Variables related to unquestionable trust in accounting figures based on the qualitative characteristics of accounting figures	17-22	6

Table 5: Part C of the questionnaire

Variables related to H3	Variables' number	Number of variables of each group
H4.1: Variables related to accounting instructors (lecturing style) as a means of creating unquestionable trust in accounting figures.	23-27	5
H4.2: Variables related to accounting textbooks as a means of creating unquestionable trust in accounting figures.	28-32	5
H4.3: Variables related to accounting examinations as a means of creating unquestionable trust in accounting figures.	33-37	5

6. Population and Data Collection

The targeted population of the study was 69 students expected to be graduated in the accounting department at the University of Bahrain in the second semester of the 2010-2011 academic year. The 69 students represent all accounting students (population) who passed three levels of accounting courses (100 level, 200 level and 300 level) and they were at the end of 400 level. This represents a complete survey and accordingly sampling techniques are not used. Thus, copies of the questionnaire were distributed to the whole population. The reason for choosing the students expected to be graduated is that they have attended all accounting courses especially those related to financial accounting since the items in the questionnaire are directly and indirectly related to financial accounting issues (practical as well as theoretical). Of course, it would be better to distribute the questionnaire to those just graduated with fresh information. However, distribution and collection of copies of the questionnaire would be difficult and even an unsuccessful adventure. Once graduated, it is difficult to trace students and even if the distribution stage is successful there is the possibility that they might not answer and return copies of the questionnaire. It was with the magnificent and indispensable help of many lecturers inside and outside the classrooms that 49 copies of the questionnaire were successfully collected from the respondents.

Out of 69 copies of questionnaire distributed at the end of the second semester of the academic year of 2010-2011, 49 copies were collected. One copy was dropped out because it was incomplete. Accordingly, 48 copies were used for data analysis. Thus, nearly 69.6% of the distributed copies were used for statistical analysis.

7. Statistical Techniques

The statistical techniques used include the mean as a measure of tendency, standard deviation and one-tailed z-test. Since the sample size is greater than 30, which usually renders results that have normal distribution, the z-test is used. The reason for using the z-test is to see whether the difference between the values and their mean (3) is significant or not at the significance level of $(\alpha) = 0.05$.

8. Analysis and Discussion of Statistical Results

8.1 Statistical Results Related to H1

Table 6 shows statistical results related to H1. Variables 1, 2 and 3 are related to accounting, internal auditing and external auditing systems. Variables 4, 5 and 6 are related to the human beings operating these systems.

Table 6: Mean and Z-value related to H1

Variables related to H1	Mean	Z-Value (z-critical one-tail =1.6449)
1. Double-entry system is based on clear-cut and well-established GAAP (including various characteristics/qualities of accounting figures).	3.875	7.207
2. Internal auditing system is based on clear-cut and well-established methods and procedures.	3.813	6.318
3. External auditing function is based on clear-cut and well-established GAAS.	3.958	7.031
H1.1 ACCEPTED (Variables 1, 2 and 3)	3.882	11.906
4. Any accountant implementing GAAP for the derivation of accounting figures is objective, neutral and ethically minded person.	3.208	1.186
5. Any internal auditor auditing the implemented GAAP for the derivation of accounting figures is objective, neutral and ethically minded person.	3.375	2.441
6. Any external auditor auditing the implemented GAAP for the derivation of accounting figures is objective, neutral and ethically minded person.	3.729	4.568
H 1.2 ACCEPTED (Variables 4, 5 and 6)	3.438	4.586
H1 ACCEPTED (Variables 1 through 6)	3.66	10.693

The mean values (3.875, 3.813 and 3.958) of variables 1, 2 and 3, respectively, indicate that an accounting student believes that GAAP, internal auditing methods and procedures and GAAS have two characteristics; they are clear-cut and well-established. External auditing enjoys the highest ranking.

The mean value (3.882) and z-value (11.9061) of variables 1, 2 and 3 together lead to the acceptance of H1.1.

Although the mean value of variable 4 is greater than 3 (3.208), the z-value (1.1836) indicates that an accounting student does not accept that any accountant implementing GAAP for the derivation of accounting figures is objective, neutral and ethically minded person.

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The mean value (3.375) of variable 5 indicates that an accounting student has a tendency to believe in the objectivity, neutrality and ethicality of the internal auditor.

The mean value (3.729) related to variable 6 has two implications. First, the external auditor, as a professional, is ranked the highest (among variables 4, 5 and 6) for being objective, neutral and an ethically minded person. Second, this result is consistent with that of external auditing, as a system, which is ranked the highest among variables 1, 2 and 3 for being based on clear-cut and well-established GAAS.

In addition, unlike the accountant, internal and external auditors are favourably rated by an accounting student indicating a strong belief in the qualities of both the internal and external auditors.

The mean value (3.882) and z-value (4.5856) of variables 4, 5 and 6 together lead to the acceptance of H1.2.

The mean value (3.66) and z-value (10.6926) of the variables 1 through 6 together lead to the acceptance of H1.

Generally, the results related to variables 1 through 6 clearly reflect the biased beliefs held by an accounting student in the determinants of accounting figures. Based on the mean values and z-values of H1.1 and H1.2, an accounting student ranks the possession of certain characteristics by GAAP, the methods and procedures of internal auditing and GAAS higher than those possessed by accountants, internal auditors and external auditors. This gives an indication that the accounting teaching process gives more emphasis to the systems implemented in comparison to the people implementing systems. GAAP, for example, are never discussed critically in accounting textbooks including those on accounting theory. An accounting student is told repeatedly in various accounting textbooks (e.g., Kieso, Weygandt and Warfield 2007; Wild, Shaw and Chiappetta 2009) and lecturers (including the author of this paper) that there are certain accounting methods constituting a specific body called generally accepted accounting principles that must be followed. As a matter of fact, the mere use of “generally”, “accepted” and “principles” imply favourable characteristics. This is not accompanied by any critical arguments on GAAP. Do they really represent principles? What is the essence of these principles? What is meant by “Generally” and “Accepted”?⁽⁵⁾ Do they really enjoy general acceptance? Who are parties endorsing and authorizing such acceptance? Neither these questions nor their answers are usually tackled in accounting textbooks and lectures. The same problem is true for GAAS.

8.2 Statistical Results Related to H2

Table 7 shows statistical results related to H2. The statistics in Table 7 reflect the perception of an accounting student about the existence of the phenomenon of unquestionable trust in accounting figures. Variables 7 through 22 represent an attempt to investigate the existence of the phenomenon of unquestionable trust in accounting figures held by an accounting student.

Variables and statistics are divided into three groups to test three sub-hypotheses. The first five variables (7 through 11) are related to dealing with accounting figures. It is interesting to note that accounting figures are unquestionably trusted for being

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accounting figures per se. This is reflected by the mean value (3.229) of variable 7. The mean value (3.583) of variable 8 is added evidence of a general tendency of an unquestionable trust in accounting figures since an accounting student cannot imagine that accounting figures cannot be trusted. The statistical results of variables 7 and 8 indicate the indoctrination of an unquestionable trust in accounting figures without associating this trust with any characteristics that can be attributed to accounting figures. This is definitely a type of abstractionism since there is unquestionable trust in accounting figures for only being accounting figures.

Variables 9, 10 and 11 deal with characteristics (reasons) for having unquestionable trust in accounting figures. These characteristics are peculiar to any human's mind dealing with information (storage of information, processing of information and retrieval of information). With the mean values (3.854), (3.938) and (3.667) ⁽⁶⁾, accounting figures are respectively assumed by an accounting student to be always easier to store (variable 9), always easier to process (variable 10) and always easier to retrieve (variable 11) than words or sentences once they are dealt with by an accountant's mind. Again, there is a general tendency to accept absolutism through the word "always".

It is worthwhile noting that the average of responses to variables 7 and 8 together (3.489) is less than the average of responses to variables 9, 10 and 11 together (3.819). This has three implications. First, even the use of certain characteristics related to mental activities (i.e., storage, processing and retrieval) dealing with accounting figures does not influence an accounting student's unquestionable trust in accounting figures. Second, not just accounting figures per se are unquestionably trusted; the mental activities dealing with accounting figures are considered generally to enjoy a type of absolutism. That is, there is a general tendency by an accounting student to believe that the mere dealing with accounting figures through certain mental activities confer characteristics having a type of absolute nature on the activities themselves. For an accounting student, mental activities are conferred favourable characteristics by accounting figures rather than accounting figures are conferred favourable characteristics by activities or operations. Third, even words and sentences used with the same mental activities dealing with figures do not reduce the general tendency of having unquestionable trust in accounting figures. All these implications indicate absolutism.

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Table 7: Mean values and Z-values related to H2

Variables related to H2	Mean	Z-Value (z-critical one-tail =1.6449)
7. You have unquestionable trust in accounting figures for being accounting figures per se.	3.229	1.961
8. You have unquestionable trust in accounting figures because you cannot imagine that they cannot be trusted otherwise they ought not to be used in the first place.	3.646	4.574
9. You have unquestionable trust in accounting figures because accounting figures are always easier to store in an accountant's mind than words or sentences.	3.854	5.153
10. You have unquestionable trust in accounting figures because accounting figures are always easier to process in an accountant's mind than words or sentences.	3.938	6.015
11. You have unquestionable trust in accounting figures because accounting figures are always easier to retrieve than words or sentences once they are stored in an accountant's mind.	3.667	3.584
H2.1 ACCEPTED (variables 7 through 11)	3.679	9.514
12. You have unquestionable trust in accounting figures because the double-entry system provides standardized processes to tackle all accounting issues in an efficient manner.	4.125	9.559
13. You have unquestionable trust in accounting figures because the standardized processes include a clear-cut sequence of steps to tackle the derivation/ determination of all accounting figures in a decisive manner.	3.708	6.368
14. You have unquestionable trust in accounting figures because the standardized processes for the derivation/ determination of all accounting figures are well-established and well-known by all accountants.	3.563	3.786
15. You have unquestionable trust in accounting figures because all accountants apply precisely all the standardized processes to arrive at a specific accounting figure.	3.229	1.335
16. You have unquestionable trust in accounting figures because all accountants apply sequentially all the standardized processes to arrive at a specific accounting figure.	3.563	3.786
H2.2 ACCEPTED (variables 12 through 16)	3.675	9.745
17. You have unquestionable trust in accounting figures because accounting figures are easily used to give representations to all transactions, activities and behaviors (all phenomena) of a business entity.	3.417	2.164
18. You have unquestionable trust in accounting figures because accounting figures are neutral (free from bias); they give precise/perfect reflections of all phenomena as they exist in reality.	3.271	1.490
19. You have unquestionable trust in accounting figures because they are objective (all accountants dealing with a specific accounting phenomenon would always assign the same figure to the phenomenon).	3.25	1.520
20. You have unquestionable trust in accounting figures because they are relevant (useful) for achieving all the objectives sought/targeted.	4	9.695
21. You unquestionably trust in accounting figures because they possess complete description of all phenomena.	3.354	2.508
22. You have unquestionable trust in accounting figures because they are always understandable for whatever phenomena they represent.	2.179	-0.540
H2.3 (variables 17 through 22)	3.368	5.569
H2 ACCEPTED (variables 7 through 22)	3.549	13.948

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The emphasis on the quantitative aspect of accounting measurements is definitely responsible for creating this absolute thinking in the mind of an accounting student.

Variables 7 through 11, as one group, yield a mean value of (3.679) and a z-value of (9.514). Thus, H2.1 is accepted.

The second five variables (12 through 16) are related to the general characteristics of the double-entry accounting system. Respondents are presented in all these variables with the ability of double-entry system to possess an absolute characteristic through the use of the word [all]. Besides, the word [all] is accompanied by other characteristic(s). Variable 12 suggests that the reason for unquestionably trusting accounting figures is because the double-entry system provides standardized processes to tackle [all] accounting issues in an efficient manner. Therefore, the two characteristics are [all] and efficient. Variable 13 includes three characteristics: 1. clear-cut sequence of steps to tackle the issue of the derivation of 2. [all] accounting figures and 3. in a decisive manner. Variable 14 includes three characteristics: the reason for unquestionably trusting accounting figures because the standardized processes for the derivation of 1. [all] accounting figures are 2. well established and 3. well known by [all] accountants. Both variables 15 and 16 include [all] twice. Variable 15 states that the reason for unquestionably trusting accounting figures because [all] accountants apply precisely [all] the standardized processes to derive a specific accounting figure. Variable 16 states that the reason for unquestionably trusting accounting figures is that [all] accountants apply sequentially [all] the standardized processes to arrive at a specific accounting figure.

Collectively, responses to variables 12 through 16, as one group, yield a mean value of (3.675) and Z-value of (9.745). Thus, H2.2 is accepted.

Variables 17 through 22 are specifically related to the traditionally taught qualitative characteristics of accounting figures. These are representation ability, neutrality, objectivity, relevance, completeness and understandability. Absolutism is also used in the wording of these variables through the use of [all] and other descriptions. Variable 17 includes two characteristics: the reason for unquestionably trusting accounting figures because accounting figures are 1. easily used to give representations for 2. all transactions, activities and behaviours (all phenomena) of a business entity. Variable 18 includes three characteristics. These are neutrality (freedom from bias), precise/perfect reflection and all accounting phenomena as they exist in reality. Variable 19 implies absolutism since the reason for unquestionably trusting accounting figures is that 1. [all] accountants dealing with a specific phenomenon would 2. (always) assign the same figure to the phenomenon. Variable 20 includes two characteristics: accounting figures are 1. relevant, i.e., useful for achieving 2. [all] the objectives sought/targeted. Variable 21 consists of two characteristics: accounting figures 1. always possess 2. complete descriptions of phenomenon. "Always" also reflects absolutism. Finally, variable 22 includes two characteristics: accounting figures 1. are [always] understandable for 2. whatever phenomenon they represent.

[All] is again accepted by an accounting student through the mean value of variables 17, 18, 19, 20, 21 and 22. The wording of variable 22 includes [always] and [whatever phenomenon] which are equivalent to [all].

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In addition, [all] is accepted with representation ability, neutrality, objectivity, relevance, complete description and understandability despite the fact that [all] leads to a non-existential statement. This is an interesting phenomenon. The attendance of other descriptions (qualitative characteristics) with [all] does not deter an accounting student to accept [all].

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Table 8: Mean values and Z-values related to H3

Variables related to H3	Mean Value	Z-Value (z-critical one-tail =1.6449)
1. Accounting instructors (lecturing style)		
23. Accounting instructors give you the impression that accounting figures are eligible for unquestionable trust for being accounting figures per se.	3.458	3.021
24. Accounting instructors give greater emphasis to accounting figures and less (if any) emphasis to the words beside these figures (e.g., Depreciation Expense BD500. Greater emphasis is given to the BD500 as a representation of the depreciation phenomenon).	3.021	0.556
25. Accounting instructors give more emphasis to accounting figures and less emphasis to the essence of these figures when they discuss various accounting topics.	2.896	0.114
26. Accounting instructors never mention or discuss unacceptable /undesirable characteristics related to accounting figures.	2.604	-2.398
27. Accounting instructors do not critically discuss non-quantitative issues.	2.604	-2.919
H3.1 REJECTED (Variables 23 through 27)	3.001	-0.728
2. Accounting textbooks		
28. Accounting textbooks give you the impression that accounting figures are eligible for unquestionable trust for being accounting figures per se.	3.417	2.520
29. Accounting textbooks give greater emphasis to accounting figures and less (if any) emphasis to the words beside these figures (e.g., Net Income BD20, 000. Greater emphasis is given to the BD20,000 as a representation of the performance phenomenon)	2.833	-0.929
30. Accounting textbooks give more emphasis to accounting figures and less emphasis to the essence of these figures when they discuss various accounting topics.	2.958	-0.223
31. Accounting textbooks never mention or discuss unacceptable /undesirable characteristics related to accounting figures.	2.833	-1
32. Accounting textbooks do not critically discuss non-quantitative issues.	2.542	-2.767
H3.2 REJECTED (variables 28 through 32)	2.993	-1.068
3. Accounting examinations		
33. Accounting examinations give you the impression that accounting figures are eligible for unquestionable trust for being accounting figures per se.	3.563	3.244
34. Accounting examinations give greater emphasis to accounting figures and less (if any) emphasis to the words beside these figures (e.g., Maintenance Expense BD10, 000. Greater emphasis is given to the BD10, 000 as a representation of the maintenance phenomenon).	3.25	1.473
35. Accounting examinations in all accounting topics give more emphasis to accounting figures and less emphasis to the essence of these figures.	3.104	0.626
36. Accounting examinations never include even a single question related to characteristics of accounting figures of whatever kind.	3.042	0.256
37. Accounting examinations do not include critically-oriented questions related to non-quantitative issues.	2.833	-0.646
H3.3 ACCEPTED (Variables 33-37)	3.158	2.094
H3 REJECTED (Variables 23-37)	2.997	-0.063

The mean value and Z-value of the variables 17 through 22 as one group are respectively (3.368) and (5.569). Thus, H2.3 is accepted.

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It is interesting to note that the mean values related to H2.1, H2.2 and H2.3 reflect a descending order. The highest is the one related to H2.1 and the lowest is the one related to H2.3. This could be interpreted in the following way. An unquestionable trust in accounting figures is adhered to when accounting figures are dealt with as accounting figures per se.

The mean value and Z-value of the variables 7 through 22 as one group are respectively (3.549) and (13.949) and, accordingly, result in accepting H2.

It can be concluded that an accounting student is generally indoctrinated to have unquestionable trust in accounting figures based on abstractionism (i.e. per se) and absolutism through a belief in the existence of non-existential statements since [all] is never rejected by him/her.

8.3 Statistical Results Related to H3

Table 8 shows statistical results related to H3. This section tries to investigate the role played by the means of accounting teaching process in creating an unquestionable trust in accounting figures. There are three means within the accounting teaching process that might create unquestionable trust in accounting figures: instructors (lecturing style), textbooks and examinations. For all these three means, five variables are repeated. These five variables reflect characteristics that must be avoided when dealing with accounting figures if education rather than indoctrination is sought.

Responses by an accounting student are hoped to give two indications. First, whether or not an emphasis is placed on accounting figures as though they are abstract figures. Second, whether or not a critical evaluation is adopted. In the accounting teaching process, these two indications are inseparable. Treating figures in a practical field like accounting as though they are abstract figures would strip the teaching process of giving an emphasis on a critical approach.

Variables 23 through 27 explore the possibility of having a relationship between accounting lecturing style and inculcating unquestionable trust in accounting figures in the mind of an accounting student. The mean value (3.458) of responses to variable 23 indicate that an accounting student, as a general tendency, unquestionably trust accounting figures because their instructors (lecturing style) give them the impression that accounting figures are worthy of unquestionable trust for being accounting figures per se. This is the only variable picked up by an accounting student among the five variables constituting the characteristics of the lecturing style as a cause for indoctrinating unquestionable trust in accounting figure.

Variables 24, 25, 26 and 27 are individually rejected as possible explanations for creating unquestionable trust in accounting figures because their mean values are less than 3.

The mean value (3,001) and z-value (-0.728) of variables 23 through 27, as one group, indicate a rejection by an accounting student to attribute to accounting instructors (lecturing style) the responsibility of inducing them to have unquestionable trust in accounting numbers. Thus, H3.1 is rejected.

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Variables 28 through 32 explore the possibility of having a relationship between accounting textbooks and inculcating unquestionable trust in the accounting figures in the mind of an accounting student. The mean value (3.417) of responses to variable 28 indicate that an accounting student has a general tendency to believe that accounting textbooks induce them to have unquestionable trust in accounting figures for being accounting figures per se. Again, this is the only variable picked up by an accounting student among the five variables constituting the characteristics of a teaching means as a cause for indoctrinating unquestionable trust in accounting figures.

Variables 29, 30, 31 and 32 are individually rejected as possible explanations for creating unquestionable trust in accounting figures because their mean values are less than 3.

The mean value (2.992) and z-value (-1.068) of responses to variables 28 through 32, as one group, indicate a rejection by an accounting student to attribute to accounting textbooks the responsibility of inducing him to have unquestionable trust in accounting numbers. Thus, H3.2 is rejected.

Variables 33 through 37 explore the possibility of having a relationship between accounting examinations and inculcating unquestionable trust in accounting figures in the mind of an accounting student. It is very interesting to note that an accounting student believes through the mean value of (3.458) of responses to variable 33 that accounting examinations contribute to unquestionable trust in accounting figures for being accounting figures per se. For the third time, this is the only variable picked up by an accounting student among the five variables constituting the characteristics of a teaching means as a cause for indoctrinating an unquestionable trust in accounting figure.

Variables 34, 35 and 36, based on z-values, and variable 37, based on their mean values and z-values, are individually rejected as possible explanations for creating unquestionable trust in accounting figures.

The mean value (3.158) and z-value (2.094) of variables 33 through 37, as one group, indicate that an accounting student attributes to accounting examinations the responsibility to have unquestionable trust in accounting numbers. Thus, H3.3 is accepted. This result is in harmony with the general tendency of accounting examinations oriented to the derivation of figures through the application of accounting methods. Accounting examinations usually do not require discussions on the methods used in the derivation of accounting figures and the essence of the derived figures.

The mean value (2.997) and z-value (-0.063) of variables 23 through 37, as one group, indicate a general tendency to reject lecturing style, accounting textbooks and accounting examinations together as causes for creating an unquestionable trust in accounting figures. Thus, H3 is rejected.

However, based only on the mean values, accounting examinations would emerge as the worst in creating unquestionable trust in accounting figures. Four out of five variables within the examinations' group have mean values greater than 3. This could be taken as indication that the other two means of the accounting teaching process contribute less than accounting examinations in creating unquestionable trust in accounting figures.

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If variables 23, 28 and 32 are considered as one group (see Table 9), then the specific role played by the three means in creating an unquestionable trust in accounting figures in the mind of an accounting student could be made more prominent. The mean value of each of these variables is above 3 and the highest among its own group in Table 8. The mean value and z-value of these three variables as one group are respectively 3.479 and 5.098. The mean values and z-values of responses to variables 23, 28 and 32 individually and collectively lead to conclude that these variables indoctrinate that the very existence of accounting figures allow having an unquestionable trust in accounting figures. On the other hand, the statistics related to these three variables represent also a strong indication of the far reaching consequences of putting too much emphasis on the quantitative aspects of accounting measurements. Based on the statistics of table 9, there is not an outright rejection by an accounting student of the role played by the accounting teaching process in creating unquestionable trust in accounting figures. A partial acceptance of H3 is, perhaps, a more adequate description of an accounting student's position as far as H3 is concerned.

Table 9: Variables 23, 28, and 32.

Variables 23, 28 and 32	Mean Value	Z-Value (z-critical one-tail =1.6449)
23. Accounting instructors give you the impression that accounting figures are eligible for unquestionable trust for being accounting figures per se.	3.458	3.021
28. Accounting textbooks give you the impression that accounting figures are eligible for unquestionable trust for being accounting figures per se.	3.417	2.520
32. Accounting examinations give you the impression that accounting figures are eligible for unquestionable trust for being accounting figures per se.	3.563	3.244
(Variables 23, 28 and 32 as one group)	3.479	5.098

9. Summary and Conclusion

Two hypotheses (H1 and H2) are accepted and one hypothesis (H3) is partially accepted. The accounting teaching process indoctrinates beliefs in certain characteristics of accounting figures (H1). These beliefs represent a threshold for creating an unquestionable trust in accounting figures (H2). The existence of these beliefs is checked through an investigation of the types of perception held in the mind of an accounting student about the determinants of the double-entry system. An accounting student is indoctrinated to have beliefs in favourable characteristics attributed to the determinants of the double-entry system (GAAP, GAAS, internal auditing methods and procedures, accountants, internal auditors and external auditors). The two hypotheses related to H2 are accepted.

An unquestionable trust in accounting figures (H2) is brought about through dealing with figures (H2.1), the existence of routine and standardized procedures (H2.2) and the qualitative characteristics of accounting figures (H2.3). All the three sub-hypotheses related to H2 are accepted. However, the highest mean value is that of H2.1. This gives the indication that accounting figures per se lead an accounting student to unquestionably trust them.

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Indoctrination of beliefs must be done through means. Three means are hypothesized to be responsible for indoctrinating unquestionable trust in accounting figures (H3). Accounting examinations are chosen by an accounting student to be the means that is responsible for indoctrinating unquestionable trust in accounting figures (H3.3). This is a reasonable choice since the lecturing style and textbooks are geared to train and structure an accounting student's mind to answer questions in an examination context. This seems natural result of a tendency of accounting lecturing style and accounting textbooks to be examination-driven rather than knowledge-driven. Both H3.1 and H3.2 are rejected.

An interesting tendency is that all three means of the teaching process are considered to be responsible for indoctrinating a belief that "accounting figures are eligible for unquestionable trust for being accounting figures per se". The implication of this belief is that an accounting student is trained to accept answers without questioning their essence. That is, an accounting student is generally trained to accept absolute final answers or results rather than logically and relatively based final answers or results. Accordingly, there is a general tendency to treat accounting figures as though they are applied in an abstract world. Another implication is that, such a belief reflects a blind faith in accounting figures. Therefore, the general tendency is that to be an accounting figure is enough to generate unquestionable trust.

The study suffers from many limitations. Instead of restricting the sample to accounting students just before graduation, more than one sample could be structured. Since accounting at the University of Bahrain is taught at four levels, four samples could be used each of which includes accounting students at a specific level. This is helpful to check whether indoctrination takes a descending order or an ascending order. It is also helpful to check the impact of accounting courses at each level on indoctrination. Another possible approach is to choose two samples; students before attending accounting theory and students after attending accounting theory. This is important for investigating the role of accounting theory courses in creating a balancing role or any impact on indoctrination since an accounting theory course is supposed to lean more towards critical and evaluative thinking. It is also possible to choose two samples from two countries in order to see the different impact on indoctrination created by the constituents of the accounting teaching process. Another limitation is related to restricting the items of the questionnaire to financial accounting matters. It is necessary to find out the existence of accounting indoctrination within cost and management accounting issues. Even indoctrination in auditing could be investigated.

Endnotes

⁽¹⁾ Both these two books are currently used in the accounting teaching process for lecturing and examinations at the University of Bahrain. They are used in four accounting courses: accounting principles I (ACC112), accounting principles II (ACC113), intermediate accounting I (ACC211), and intermediate II (ACC221).

⁽²⁾ It should not be inferred that these reviews are exhaustive. It is quite possible that there are articles that may tackle indoctrination in the accounting teaching process somewhere in the accounting literature that the author of this paper has not managed to be aware of.

⁽³⁾ Articles reviewed by the authors in Table 1 cover a period up to the end of 2012. The author of this paper has reviewed the titles and summaries of all articles in the Journals covered in Table 1 for the period beyond 2012. The conclusion that can be drawn is that there is not a single article that tackles the issue of indoctrination in the accounting teaching process.

⁽⁴⁾ This Journal was already investigated by all previous studies included in Table 1. However, the main difference between Paisley and Paisley (2004) and other studies is that emphasis is put in Paisley and

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Paisley (2004) on research methods in accounting education research. It discusses methods of research related to the topics covered by various articles issued over the first ten years of *Accounting Education: An International Journal*.

⁽⁵⁾ Rubin (1984) tries to convince us that there is a GAAP's house which consists of four floors with clearly identified family members. It is actually a house without doors and windows. It accepts almost everything as a principle. Any house includes only those members who are in a very clear-cut way identified as constituting one family. The admission of members in the GAAP's family is continuous without any control mechanism to accept or reject a new family member. For example, the fourth floor includes, among many accounting literatures as a source of accounting principle, principles presented in articles and textbooks. On this point Rubin suggests the following: "Accounting textbooks and articles present the considered opinions of authors on specific accounting issues. No one book or article, however, should be regarded as substantial or sufficient support. But a consensus of several writers on a question may be a good indication of generally accepted principles not dealt with elsewhere in the literature." There are at least two myths in this quotation. The first myth concerns the assumption that this or that author's opinion represents a considered one. The second myth concerns the assumption that this or that number of articles or textbooks represents a consensus. The GAAP house theory is echoed by many textbooks (e.g. Kieso, Weygandt and Warfield 2007; Riahi-Belkaoui 2004). Riahi-Belkaoui (2004) tries under the heading "The Meaning of GAAP" to define GAAP, but he offers no definition. As an evidence of the inability to define GAAP, Riahi-Belkaoui relies on Statement No 4 of the Accounting Principles Board to convince us that there is a definition of GAAP. GAAP, according to Statement No. 4, are noted in "experience, reason, custom, usage and practical necessity" and they "..... encompass the convention, rules and procedures necessary to define accepted accounting practice at a particular time" (Accounting Principles Board 1970).

⁽⁶⁾ Accounting information systems literature does not discuss which of the figures or words is easier to receive/store process and retrieve. This is confirmed through a direct discussion with two lecturers on accounting information systems in the Accounting Department/ University of Bahrain.

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