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By Muqattash

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Factors affecting internal auditors' objectivity: individual-level evidence from the United Arab Emirates

Dr. Riham S. Muqattash*

College of Business, Accounting Department
Al Ain University of Science and Technology
Abu Dhabi, UAE

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Internal auditors are considered part of an organization's management team. However, because internal auditors are expected to review management's performance, this can create significant tension within an organization, since auditors' independence from management is crucial to an objective assessment of management's actions. This paper explores the individual-level factors affecting internal auditors' objectivity in companies in two sectors, banking and insurance, listed in Abu Dhabi Securities Exchange (ADX). A questionnaire was designed and distributed to the internal audit department in both sectors. Results indicate a negative relationship between individual-level factors and the objectivity of the internal auditors', and a significant positive relationship between internal auditors' objectivity and other factors (i.e., experience, qualifications, and salary and bonus) in both sectors. As well, the study's results reveal a significant positive relationship between internal auditors' objectivity and gender, with female auditors exhibiting higher levels of objectivity.

keywords: Factors, individual level, internal auditors, objectivity, gender, experience, qualifications, banking sector, insurance sector, Abu Dhabi Securities Exchange, ADX, UAE.

*Corresponding author:riham.muqattash@aau.ac.ae

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1 Introduction

In today's challenging and complex national and global business environments, boards of directors are increasingly looking to independent auditors for independent, objective assurance that their executives are managing risks well, that internal-control mechanisms are working effectively and that their organizations are effectively governed. An internal audit, with its detailed knowledge of the organization's mission, objectives and operations, is uniquely placed to do this (Chartered Institute of Internal Auditors, 2015). Sawyer et al. (2003), however, explained that "without a clear conception of auditor's objectivity, no matter how professionally the audit work carried out, may be considered suspect, therefore, objectivity must be jealously guarded and any compromise studiously avoided." Moreover, Paape (2007) questioned internal auditors' ability to be objective and avoid a conflict of interest; because they are employees of the organization they are auditing (Chapman, 2001). Internal auditors are considered to be the cornerstone of an organization's internal audit department; companies depend on them to offer independent and objective judgments and advice to the audit committee and board of directors. To carry out their duties effectively, however, internal audit teams must be appropriately qualified, experienced, trained and properly resourced, and must have unrestricted access to all parts of the organization and operate free from interference or obstruction. As well, internal auditors must be allowed to employ appropriate probing techniques without impediment (Chartered Institute of Internal Auditors, 2015). The Institute of Internal Auditors (2016a) defines internal auditing as "an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes." The Institute of Internal Auditors (2016b) Standard 1100: Independence and Objectivity states that: "The internal audit activity must be independent, and internal auditors must be objective in performing their work". The Institute defines objectivity as an unbiased mental attitude that allows internal auditors to perform their work in such a way that they are confident about the quality of their audits and that no compromises are made. Objectivity requires that internal auditors do not subordinate their judgment on audit matters to others. Any threats to auditors' objectivity must be managed at the individual auditor, engagement, functional and organizational levels. In order to maintain objectivity, internal auditors should have no personal or professional involvement with or allegiance to the area being audited, and should maintain an unbiased and impartial mindset for all engagements. Moreover, objectivity requires that internal auditors not subordinate their judgment on audit matters to others. The Institute of Internal Auditors (2016b) Standard 1210: Proficiency also recognizes that "internal auditors must possess the knowledge, skills, and other competencies needed to perform their individual responsibilities." Also, Standard 1220: Due Professional Care states that "internal auditors must apply the care and skill expected of a reasonably prudent and competent internal auditor. Due professional care does not imply infallibility." The United Arab Emirates (UAE) has been a leader in the profession of internal auditing in the Middle East. On the 24th of June 2006, UAE Internal Auditors

Association (UAE-Internal Auditors Association, 2015) was established as a non-profit organization and gained approval to become the official IIA affiliate in the UAE. The affiliate has collaborated with the IIA in the United States to conduct quality-assurance reviews of internal audit departments in the UAE when asked by boards of directors, chairs of audit committees, or even by a company's chief audit executive (CAE). UAE-listed companies in the banking and insurance sector operate in an environment that is regulated by a corporate governance code established in 2009, which outlines a statutory requirement to have an internal audit function in all companies listed in Abu Dhabi Securities Exchange (UAE Corporate Governance Regime, 2010). The internal auditor looks to the audit committee for strategic direction, reinforcement and accountability, and to the executive management for assistance in establishing direction, support and administrative interface. The main objective of this research is to investigate the factors that compel internal auditors to act objectively. This study is a unique contribution to this research field: it is the first investigation made in the UAE, we believe, to address the factors that influence internal auditors to act objectively. Within the banking and insurance companies listed on the ADX, seven individual-level factors, or threats, were examined. These factors are based on the Institute of Internal Auditors' framework for managing threats to objectivity (Mutchler, 2003) and how to manage these factors. They are: (1) Self-review (may arise when, for example, an internal auditor reviews his/her own work more than once, reviewing operations in one year that have previously been reviewed); (2) Social pressure (may arise when, for example, interested parties attempt to pressure an internal auditor. For example, pressure from a customer might compel an auditor to overlook suspicious items); (3) Economic interests (for example, an internal auditor may have financial interests in an organization that he or she is auditing, which could be threatened by negative audit findings, or he or she might be asked to audit the work of someone who is in a position to influence the auditor's future employment opportunities or salary); (4) Personal relationships (if, for example, an internal auditor is a relative or friend of the manager or an employee of the audit customer unit, the auditor might be tempted to alter any negative audit findings); (5) Familiarity (if, for example, an internal auditor has had a lengthy relationship with his or her customer or has worked for the customer in the past. Familiarity may compel an auditor to prejudge his or her customer rather than being objective); (6) Cultural and racial biases (for example, an internal auditor may be biased or prejudiced against customers whose offices are located in other countries); (7) Cognitive bias (an unconscious and/or unintentional bias against interpreting certain information). The study also investigated a further four factors that might influence internal auditors to act objectively: qualifications, experience, salary and bonuses, and gender. This paper will answer the following six questions:

1. Do the seven factors noted above affect internal auditors' objectivity in the banking and insurance sector?

2. Are there any differences between internal auditors' responses vis-*à*-vis their perceived objectivity in each sector?

3. Are there any differences between internal auditors' responses vis-*à*-vis their per-

ceived objectivity, in either the banking or insurance sector, that are related to their qualifications?

4. Are there any differences between internal auditors' responses vis-*à*-vis their perceived objectivity, in either the banking or insurance sector, that are related to their experience?

5. Are there any differences between internal auditors' responses vis-*à*-vis their perceived objectivity, in either the banking or insurance sector, that are related to their gender?

6. Are there any differences between internal auditors' responses vis-*à*-vis their perceived objectivity, in either the banking or insurance sector, related to their salary and bonuses?

2 Literature review and hypotheses development

Internal auditors' objectivity received a significant amount of attention from researchers during the 20th century. Stewart and Subramaniam (2010), for example, reviewed the literature on this area and their analysis revealed that both individual and organizational (i.e., audit committee and management) factors affected internal auditors' independence and objectivity. As well, Turley and Zaman (2007) concluded that the audit committee sets a tone that allows internal auditors to maintain their objectivity in the company. Furthermore, Yosep (2016) discussed the individual characteristics and competencies of internal auditors as determined by three factors (education, experience and professional education) that affect internal auditors' beliefs about the quality of their assessment of a company's financial statements. Usman (2016) examined the effect of internal auditors' competence and independence at regional inspectorate offices by examining the variable independence using three main indicators: organizational independence, individual objectivity and reporting. Usman's results indicated that the more independent and objective internal auditors were, the higher the quality of their internal audits. Higher levels of education and experience also positively affected the quality of the audits. A study conducted by Al-Shbail and Turki (2017) that explored the critical factors influencing internal auditors' effectiveness among industrial small and medium-sized enterprises (SMEs) in Kuwait indicated that two of the factors that may influence effective audit activities in terms of assurance services and consultations are the independence and objectivity of internal auditors. Moreover, Abu-Azza (2012) concluded that internal audit independence positively correlates with the perceived effectiveness of the internal audit function. Brody et al. (2015) examined whether external auditors' reliance on the work of internal auditors comes at the expense of audit effectiveness. The authors question whether adhering to Auditing Standard No. 5 is advisable, given that any changes in auditor/client relationships may affect both internal and external auditors objectivity. Their results indicate that internal auditors' objectivity has not improved over time. Thus, by complying with AS5, external auditors may be unwittingly incorporating internal auditors' biases into their own work. The study also concluded that "IIA needs

to ask if it is appropriate for internal auditors to give up their objectivity and follow the expanded role they have been given." Brody et al. (2015) also explored whether recent audit reforms have improved internal auditors' objectivity when performing non-audit services. A sample of 69 internal auditors and 70 external auditors participated in the study, and two factors were used to test objectivity: whether the acquiring company's inventory was obsolete, and whether an inventory write-down was necessary. The results showed that objectivity was compromised for both internal and external auditors when they performed non-audit tasks. In their study, Hardies et al. (2010) addressed a significant potential major bias: that of gender. Study results indicated that female auditors may express more critical audit opinions than male auditors, who tend to be less risk-averse. Further, Abed and Al-Badainah (2013) examined the relationship between audit fees and gender through 10 semi-structured interviews conducted with five female and five male Jordanian licensed auditors. The results indicated that there was no relationship between audit fees and an auditor's gender. Female auditors were, however, more likely to reject unethical behavior. The study conducted by Brody et al. (2015), which examined self-serving interest bias, found that internal auditors tend to distort their interpretation of evidence due to an unconscious bias about what is "fair" or "right" within their own best interests. Laturkarv and Abolhoom (2014) evaluated the independence and objectivity of internal auditing conducted in private, joint-stock companies in the Republic of Yemen. The authors distributed a questionnaire (the design of which was based on the IIA standards) to 67 internal auditors in nine of these companies. Results indicated that the companies' internal auditors lacked the appropriate independence and objectivity needed to perform their functions. Zain and Subramaniam (2007) study reflected the importance of the powerful role that audit committees play in enhancing internal audit objectivity. Data were obtained through in-depth interviews with the heads of internal audit committees from 11 publicly listed companies. Their findings highlighted the importance of audit committees' leadership role in supporting internal auditors' objectivity through infrequent, informal communications and limited private meetings between the head of the internal audit function and the audit committee, as well as a need for clear reporting lines. Further, Bamber and Iyer (2007) explored familiarity as one of the factors that affect internal auditors' objectivity; results indicated that the significant relationships (familiarity) found between internal auditors and their clients is a potential concern, and that they may impair auditors' objectivity. Their results also showed that more experienced internal auditors who exhibit higher levels of professional identification are less likely to acquiesce to a client's position, and will act more objectively. In their study, Mgbame et al. (2012) investigated how gender influenced internal auditors' judgment and audit quality. Results indicated that differences between the genders may be a factor in assessing audit quality and affecting internal auditors' judgments, and that male auditors are more risk-taking than female auditors. Al-Shouha (2016) investigated the risks affecting the objectivity of internal auditors published in the Internal Auditor - Middle East magazine. They looked at the five most important risks affecting internal auditors' ability to act objectively: self-review, relationships and personal interests, social pressures, trust and intimacy, and job benefits. The author divided self-review into two parts: the risks of an employee joining the

internal audit department and auditing the work that he/she performed as an employee before joining the department; and the risk that trust and close personal relationships will affect internal auditors' objectivity through proactive judgments issued by an internal auditor before reaching the results of a required examination. Also, he found that job benefits can affect the objectivity of internal auditors, because the auditors may shy away from making decisions that might affect their salary or have an impact on their career development or continuing employment in the organization. These findings from the literature have informed this study's six hypotheses: (the hypotheses are illustrated in Figure 1).

H1 Individual-level factors (self-review, social pressure, economic interest, personal relationships, familiarity, cultural, and racial biases, and cognitive bias) do not affect internal auditors' objectivity in either the banking or insurance sector.

H2 There is no difference in internal auditors' responses vis-*à*-vis the effect of individual-level factors on their perceived objectivity in either the banking or insurance sector.

H3 There is no difference in internal auditors' responses vis-*à*-vis the effect of their qualifications on their perceived objectivity in either the banking or insurance sector.

H4 There is no difference in internal auditors' responses vis-*à*-vis the effect of their experience in either the banking or insurance sector.

H5 There is no difference in internal auditors' responses vis-*à*-vis the effect of their gender in either the banking or insurance sector.

H6 There is no difference in internal auditors' responses vis-*à*-vis the effect of their salary and bonus in either the banking or insurance sector.

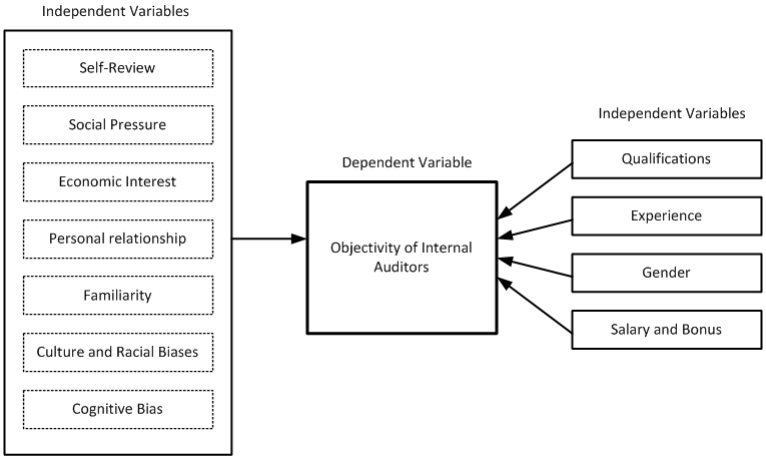

Figure 1: Research Model for the factors affecting the internal auditors' objectivity

3 Research design and data collection

3.1 Research instrument

Data were collected using a questionnaire developed to address the study's research questions. To ensure the suitability of the questions asked, the questionnaire was discussed and reviewed by five CAEs working in the banking and insurance sectors listed in Abu-Dhabi Securities Exchange. Based on the CAEs' remarks and notes, the questionnaire was modified and distributed. It was then piloted to the chief internal auditors and internal auditors in the banking and insurance sectors. Responses to the questionnaire produced a list of factors that are believed to affect internal auditors' objectivity in the UAE. The questionnaire comprised three parts:

1. The first part consisted of seven questions intended to capture respondents' basic demographic data, including qualifications, professional certificates achieved, their functional level, work experience, gender, salary and bonus, and company-sector type.

2. The second part included 21 questions designed to investigate the degree of agreement among respondents about the individual-level factors affecting their objectivity (i.e., self-review, social pressure, economic interest, personal relationships, familiarity, cultural and racial biases, and cognitive bias).

3. The third part included six questions designed to investigate internal auditors' objectivity. A five-point Likert scale was used to determine the degree of importance for each item in this part the questionnaire. Five (5) points indicated that the respondent strongly agreed, four (4) that he/she agreed, three (3) points indicated a neutral response, two (2) points meant that the respondent disagreed and one (1) point meant that he/she strongly disagreed.

3.2 Research sample and techniques

In September 2016, 100 questionnaires were sent to five CAEs working in banking and insurance companies listed in ADX. The return rate of the questionnaires was 62%. A normal distribution was created, and demographic information was presented as both frequency and percentage. As well, means and standard deviations for all dependent and independent variables were calculated. To test the six hypotheses, simple regression analysis, multiple regressions and a one-way analysis of variance (ANOVA) were made.

3.3 Reliability analysis

Table 1 shows the coefficient of reliability (Cronbach's alpha), which measures the internal consistency of the questionnaire's paragraphs and its ability to produce results that closely correspond to respondents' answers. Results show that all values are statistically acceptable and reflect consistency to a good degree, reflecting the stability of the study.

Table 1: Results of reliability analysis

Scale	Cronbach's alpha
Self-review	0.77
Social pressure	0.74
Economic interest	0.72
Personal relationships	0.76
Familiarity	0.70
Cultural and racial biases	0.73
Cognitive bias	0.74
Individual level-factors	0.89
Objectivity	0.75

3.4 Normal distribution (Kolmogorov-Smirnov test)

Table 2 shows a normal distribution for all the variables in the study (z value is greater than 0.05).

Table 2: Kolmogorov-Smirnov test

	Kolmogorov-Smirnov z	Asymp. Sig. (two-tailed)
Self-review	1.205	0.11
Social pressure	1.175	0.127
Economic interest	1.151	0.141
Personal relationships	1.164	0.133
Familiarity	1.224	0.1
Cultural and racial biases	1.279	0.076
Cognitive bias	1.155	0.138
Individual-level factors	1.164	0.133
Objectivity	1.168	0.131

3.5 Respondents' characteristics

Table 3 highlights the respondents' demographic information, including qualifications, professional certificates achieved, functional level within their organization, gender, experience, salary and bonus levels, and sector type.

Table 3: Respondents' demographic information

		Frequency	Percentage
Qualifications	Graduate	29	46.8
	Undergraduate	33	53.2
Professional certificates achieved	CIA	18	29.0
	CMA	23	37.1
	CPA	21	33.9
Functional level	Internal auditor	31	50.0
	Senior internal auditor	26	41.9
	Chief internal auditor	5	8.1
Gender	Male	40	64.5
	Female	22	35.5
Experience	Less than 5 years	12	19.4
	5-10 years	30	48.4
	More than 10 years	20	32.3
Salary and bonus	High: more than 25,000 Dh	26	41.9
	Medium: 15,000-25,000 Dh	20	32.3
	Low: Less than 15,000 Dh	16	25.8
Sector type	Banking	32	51.6
	Insurance	30	48.4
	Total	62	100.0

Graduate degrees were held by 46.8% of the respondents, and 53.2% had undergraduate degrees. This level of educational attainment reflects the growing management trend for companies to have highly educated CAEs and internal auditors. As well, 29% of respondents had CIA certificates and 33.9% had CPA certificates. The results also showed that 48.4% of these qualified CAE and internal auditors had between 5 and 10 years of experience, and that 32.2% had more than ten years of experience.

4 Empirical analysis and results

4.1 Data Analysis

The study's first question was, 'Do the seven factors noted above affect internal auditors' objectivity in the banking and insurance sectors'? The means and standard deviations are calculated to measure the extent of agreement of the responses presented in (Table 4 and Table 5).

Responses to all of the self-review questions showed a mean of (4.68), with a standard

Table 4: Means and standard deviations for the all the factors in the individual level

	Item	Mean	Std. Deviation
1	The internal auditors do not provide consulting services for a system implementation that they must then audit.	4.68	.471
2	The internal auditors do not audit a department repeatedly, reviewing operations in one year that were previously reviewed in a prior year.	4.68	.471
3	The internal auditors do not provide recommendations for operational improvements and then review the operations that were revised in accordance with those recommendations.	4.68	.471
	Self-review	4.68	.367
4	Internal auditors are not affected by rumors in the internal audit assignment.	4.77	.422
5	Internal auditors are not under pressure to overlook suspicious items and/or transactions.	4.77	.422
6	Internal auditors always clearly understand what needs to be done if irregularities are discovered.	4.58	.497
	Social pressure	4.71	.349
7	Internal auditors do not accept any gifts or favors from others, such as company employees or clients.	4.81	.398
8	Internal auditors do not audit departments that make decisions about their career paths or their salary and bonus structure.	4.68	.471
9	Internal auditors do not receive stock options or other financial interests that could be threatened by negative audit findings.	4.68	.471
	Economic interests	4.72	.342
10	There are no family members (wife or husband) of the internal auditor working within units that are to be audited.	4.77	.422
11	Internal auditors are not tempted to overlook or delay reporting negative audit findings in order to avoid embarrassing a friend or relative.	4.68	.471
12	There are no relatives working within units to be audited.	4.68	.471
	Personal relationships	4.71	.316
13	Internal auditors do not assess any operations that have long-term relationships with the audit customer.	4.77	.422
14	Internal auditors do not audit any unit in which they have previously worked.	4.58	.497
15	Internal auditors have no previous judgments about the audit assignment.	4.68	.471
	Familiarity	4.68	.313
16	Internal auditors are not biased or prejudiced against audit customer units that are located in certain foreign locations.	4.81	.398
17	Internal auditors are not critical of the host culture's different practices and customs.	4.77	.422
18	Internal auditors are duly critical of audit customer units managed or staffed by employees of a particular race.	4.77	.422
	Cultural and racial biases	4.78	.314
19	Internal auditors do not oppose views that may affect management.	4.58	.497
20	Internal auditors do not discount negative information.	4.68	.471
21	Internal auditors do not search for evidence that confirms any preconceived notions.	4.81	.398
	Cognitive bias	4.69	.295

deviation of (.471). As well, two of the questions about social pressure (Internal auditors are not affected by rumors in the internal audit assignment) and (Internal auditors are not under pressure to overlook suspicious items and/or transactions) had the highest mean, at (4.77). Responses to one of the questions about economic interests (Internal auditors do not accept any gifts or favors from others, such as company employees or clients) had the highest mean (4.81) and the lowest standard deviation (.398). Moreover, results show that (There are no family members (wife or husband) of the internal auditor working within units to be audited) had the highest mean (4.77) and the lowest standard deviation within the questions about personal relationships, and the question (The internal auditors do not assess any operations with long-term relationship with the audit customer) had the highest mean (4.77) and the lowest standard deviation within that set of questions. As well, the question (The internal auditors are not biased or prejudiced against audit customer units located in certain foreign locations), which is related to cultural and racial biases, had the highest mean, at (4.81), and the lowest standard deviation; and within the cognitive bias set of questions, responses to (The internal auditors do not search for evidence confirming preconceived notions) had the highest mean (4.81) and the lowest standard deviation (.398). The results show that both banking and insurance companies are aware of the importance of this factor and its effect on internal auditors' objectivity.

Table 5 results show that responses to the statement, (Internal auditors are not involved in decisions that have been implemented within the organization) had the highest mean (4.94) and the lowest standard deviation (.248); the next-highest mean was for the statements, (The internal audit department's code of ethics explains the importance of internal auditor's objectivity), and (The company provides adequate training on its code of ethics to internal auditors), which both had a mean of (4.87).

Table 5: Means and standard deviations for the objectivity of internal auditors

Rank	Item	Mean	Std. Deviation
1	Internal auditors are not involved in decisions that have been implemented within the organization.	4.94	.248
2	The internal audit department's code of ethics explains the importance of internal auditors' objectivity.	4.87	.338
3	The company provides adequate training on its code of ethics to its internal auditors.	4.87	.338
4	The code of ethics is derived from the International Professional Practices Framework, which is recommended by the Institute of Internal Auditors.	4.84	.371
5	Internal auditors do not perform any executive audit work.	4.81	.398
6	Internal auditors are very conversant with professional values (competence, integrity, and the use of due care).	4.77	.422
	Objectivity	4.85	.164

4.2 Regression results

Table 6 highlights the results of the regression for this study's first hypothesis for the seven individual-level variables (self-review, social pressure, economic interests, personal relationships, familiarity, cultural and racial biases, and cognitive bias) on the dependent variable, the objectivity of the internal auditors. Results indicate a statistically negative relationship ($\alpha = 0.01$) between all the factors on the individual level and objectivity; F (7, 54) = 64.859, $P < 0.01$.

Table 6: Multiple Regression results

Model				Unstandardized	Coefficients	Standardized Coefficients		
		R	R Square	B	Std. Error	Beta	t	Sig.
1	(Constant)	.945	.894	1.941	.142		13.711	.000
	Self-review			-.128	.020	-.328	6.451	.000
	Social pressure			-.074	.023	-.191	3.209	.002
	Economic interest			-.057	.022	-.171	2.545	.014
	Personal relationship			-.260	.086	-.500	3.032	.004
	Familiarity			-.086	.020	-.248	4.413	.000
	Cultural and racial biases			-.195	.073	-.372	2.681	.010
	Cognitive bias			-.259	.087	-.465	2.974	.004

Moreover, Figure 2 shows the model results of the regression with a negative relationship between the seven individual-level variables on the dependent variable, the objectivity of internal auditors. Results indicate that 89.4% of the variations can be explained by the seven independent variables in the model at the level of $\alpha = 0.01$. This suggests that 10.6% of the variables behind internal auditors acting objectively in the banking and insurance sectors should be investigated in future research.

The results in Table 7 show the mean for all factors between (4.85) and (4.68); the correlation for all individual-level factors is statistically negative. The results also show a moderate correlation between familiarity and self-review (R = .316), and a strong correlation between cognitive bias and familiarity (R = .865). This relationship is explained by Prentice (2000), who notes that internal auditors, like the rest of us, behave, in accordance with self-serving bias, and that "the cognitive bias is clear at work and cannot be ignored because individuals engage in belief-maintaining reasoning because it produces a variety of positive short-term outcomes." Cognitive bias refers to a mistake in remembering, evaluating, reasoning and decision-making that occurs as a result of holding onto one's beliefs and preferences regardless of contrary information. In the UAE,

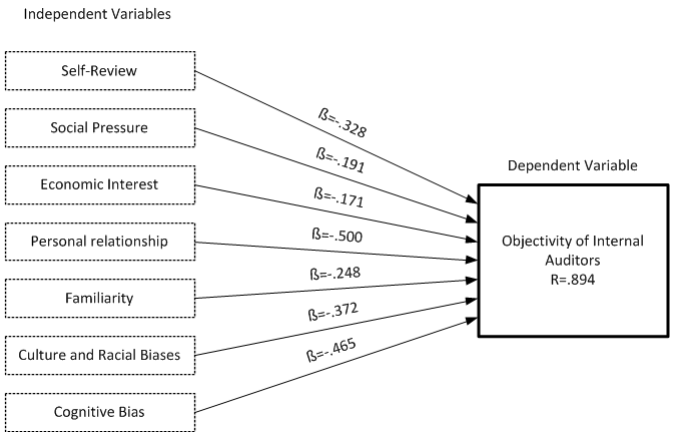

Figure 2: The influence of the individual level factors on internal auditors' objectivity

results indicate a strong positive relationship between cognitive bias and familiarity, and internal auditors' objectivity. Companies in the UAE have applied certain procedures to reduce internal auditors' bias, including not allowing auditors to audit their own work; this has led to a reduction in mistakes that could have been made because of the auditors' cognitive biases. At the same time, companies periodically rotate internal audit staff within their departments in order to reduce familiarity bias. According to the Basel Committee on Banking Supervision (2012), continuously performing the same or routine jobs (i.e., familiarity) may negatively affect an internal auditor's objectivity, so rotating staff is a recommended practice. These results are consistent with Mutchler (2003) who noted that, in some cases, multiple threats may exist, although the auditor may only be dealing with individual threats.

Table 7: Descriptive Correlation analysis for the study

	Mean	SD	self-review	social pressure	economic interest	personal relationship	familiarity	cultural and racial biases	cognitive bias
self-review	4.68	.367							
social pressure	4.71	.349	.332(**)						
economic interest	4.72	.342	.604(**)	.511(**)					
personal relationship	4.71	.316	.843(**)	.543(**)	.382(**)				
familiarity	4.68	.313	.316(*)	.828(**)	.504(**)	.399(**)			
cultural and racial biases	4.78	.314	.345(**)	.816(**)	.414(**)	.534(**)	.616(**)		
cognitive bias	4.69	.295	.435(**)	.628(**)	.782(**)	.419(**)	.865(**)	.601(**)	
Objectivity	4.85	.164	-.585(**)	-.765(**)	-.583(**)	-.756(**)	-.738(**)	-.791(**)	-.781(**)

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

4.3 One-Way ANOVA results

To test hypothesis two, a one-way ANOVA was used to examine the differences between the dependent variable (objectivity) and the sector type. Table 8 shows a statistically significant difference ($\alpha = 0.05$) in the internal auditors' objectivity depending on sector type (F = 4.37, P = 0.41) with a mean of 4.89 for the banking sector, higher than the mean of 4.81 for the insurance sector.

Table 8: One-way ANOVA of internal auditors' objectivity by sector type

		Sum of Squares	df	Mean Square	F	Sig.
Objectivity	Between groups	.112	1	.112	4.370	.041
	Within groups	1.538	60	.026		
	Total	1.651	61			

To test hypothesis three, a one-way ANOVA was used to examine the differences between the dependent variable (objectivity) and the qualifications. The results outlined in Table 9 show that there are statistically significant differences ($\alpha = 0.05$) in objectivity related to qualifications (F = 6.091, P= 0.016), with a mean of 4.90 for those with graduate degrees, higher than the mean of 4.80 for those with undergraduate degrees.

Table 9: One-way ANOVA of internal auditors' objectivity by qualifications

		Sum of Squares	df	Mean Square	F	Sig.
Objectivity	Between groups	.152	1	.152	6.091	.016
	Within groups	1.498	60	.025		
	Total	1.651	61			

To test hypothesis four, a one-way ANOVA was used to examine the differences between the dependent variable (objectivity) and internal auditors' experience. The results outlined in Table 10 show that there are statistically significant differences ($\alpha = 0.05$) in the objectivity of internal auditors that are related to their experience (F = 3.531, P =.036). As well, post-hoc tests for multiple comparisons were conducted (see Table 11), and the results show that there are statistically significant differences ($\alpha = 0.05$) between those who had more than 10 years and less than 5 years of experience, and between those who had more than 10 years and between 5 and 10 years of experience, with those having more experience exhibiting more objectivity.

To test hypothesis five, a one-way ANOVA was used to examine the differences between the dependent variable (objectivity) and the gender. The highlighted results in Table 12 show that there are statistically significant differences ($\alpha = 0.05$) in the objectivity of internal auditors depending on their gender (F = 6.175, P=.016), with a mean of 4.81 for males, lower than the mean for female auditors (4.92). The result indicates that

Table 10: One-Way ANOVA of internal auditors' objectivity by experience

		Sum of Squares	df	Mean Square	F	Sig.
Objectivity	Between groups	.176	2	.088	3.531	.036
	Within groups	1.474	59	.025		
	Total	1.651	61			

Table 11: Post-hoc tests for multiple comparisons

(I) Experience	(J) Experience	Mean Difference (I-J)	Std. Error	Sig.
Less than 5 years	5-10 years	-.03	.054	.574
	More than 10 years	-.13(*)	.058	.024
5-10 years	Less than 5 years	.03	.054	.574
	More than 10 years	-.10(*)	.046	.028
More than 10 years	Less than 5 years	.13(*)	.058	.024
	5-10 years	.10(*)	.046	.028

* The mean difference is significant at the .05 level.

female is more objective when performing audit assignments than male in the companies operating in UAE.

Table 12: One-Way ANOVA of internal auditors' objectivity by gender

		Sum of Squares	df	Mean Square	F	Sig.
Objectivity	Between groups	.154	1	.154	6.175	.016
	Within groups	1.497	60	.025		
	Total	1.651	61			

To test hypothesis six, a one-way ANOVA test was used to examine the differences between the dependent variable (objectivity) and auditors' salary and bonus. Table 13 shows that there are statistically significant differences ($\alpha = 0.05$) in the objectivity of internal auditors related to their salary and bonus with (F = 7.955, P = .001). Post-hoc tests for multiple comparisons were also conducted (see Table 14), and results show that there are statistically significant differences ($\alpha = 0.05$) between higher and lower salaries and bonuses, with those who earn more exhibiting greater objectivity; and between medium and higher salaries and bonuses, with those who earn more again exhibiting greater objectivity. This result might help the companies' top management to be aware of the effect of the internal auditors' salary and bonus on their objectivity

when preforming auditing.

Table 13: One-way ANOVA of internal auditors' objectivity, by salary and bonus

		Sum of Squares	df	Mean Square	F	Sig.
Objectivity	Between groups	.351	2	.175	7.955	.001
	Within groups	1.300	59	.022		
	Total	1.651	61			

Table 14: Post-hoc tests for multiple comparisons

(I) Salary and Bonus	(J) Salary and Bonus	Mean Difference (I-J)	Std. Error	Sig.
High: more than 25,000 Dh	Medium: 15,000-25,000 Dh	.06	.044	.192
	Low: less than 15,000 Dh	.19(*)	.047	.000
Medium: 15,000-25,000 Dh	High: more than 25,000 Dh	-.06	.044	.192
	Low: less than 15,000 Dh	.13(*)	.050	.012
Low: less than 15,000 Dh	High: more than 25,000 Dh	-.19(*)	.047	.000
	Medium: 15,000-25,000 Dh	-.13(*)	.050	.012

* The mean difference is significant at the .05 level.

Figure 3 show a summary of one-way ANOVA test for the four variables related to internal auditors characteristics which affect internal auditors objectivity.

5 Discussion and conclusions

The internal audit activity within companies should be an independent process, and the internal audit professionals who conduct the work should remain objective if a company wants to achieve highly effective audits. To maintain objectivity, companies must also ensure that internal auditors are structurally independent from the companies by whom they are employed. The results of this study indicate a significant negative relationship between all seven individual-level factors (self-review, social pressure, economic interests, personal relationships, familiarity, cultural and racial biases, and cognitive bias), and internal auditors' objectivity: that is, the more these factors came into play, the less objective the auditors' were (and vice-versa). Moreover, Stewart and Subramaniam (2010) declared that "it is thus no surprise that internal auditors can face considerable familiarity and social pressure threats stemming from their relationship with management". The results are similar to Barr-Pulliam (2017) study, which indicated that; internal auditors' objectivity might be affected if any social pressure by top management is exercised, and self-review practices are made by internal auditors. In the UAE, because many companies' CAEs and internal auditors are aware of the importance of

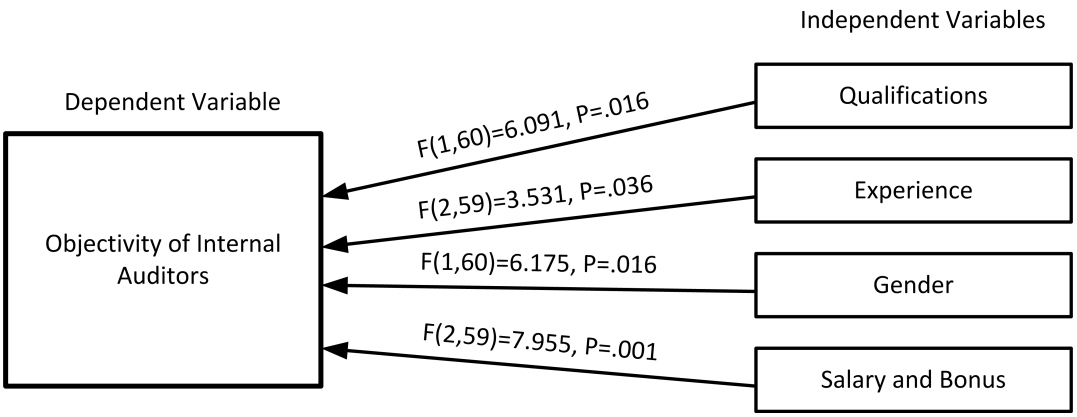

Figure 3: One- way ANOVA test for the objectivity of internal auditors' characteristics

acting objectively when performing audit assignments, they use a rotation method of internal audits in order to reduce self-review bias and maintain objectivity. As well, management encourages internal auditors to practice professional skepticism and critical thinking as a way to reduce social pressure, and tends to depend on teams rather than on individuals to perform auditing tasks. Moreover, their international auditors, like their other employees, often come from diverse backgrounds and are thus more aware of, and know how to deal professionally with, any cultural and racial biases that might influence their objectivity. The companies also have defined rules around accepting gifts and the role and influence of personal relationships on performing auditing tasks. This study's results also indicate that female internal auditors are more objective than males, and take a different approach to auditing tasks than their male counterparts. For example, female auditors might select larger sample sizes than male auditors, which help them detect and report a higher number of material misstatements. These results are similar to those noted by Hardies et al. (2010) study on the effect of gender on internal auditors. The internal auditing role requires independence, objectivity when monitoring and evaluating the effectiveness of internal control systems, and an understanding of risk assessment (Sarens and De-Beelde, 2006). Objectivity comprises not only the rules of professional conduct that internal auditors must follow: it is also a state of mind that is influenced by many factors, including religion, education, and values of the surrounding community. Thus, if we want to strengthen internal auditors' objectivity, simply put the right person in the right place. This study must be interpreted carefully due to the limited number of respondents in both sectors, since some of banks have large internal audit departments consisting of approximately 60 internal auditors with different positions, while one of the insurance companies studied employs just two internal auditors. As well, the sample type includes only two sectors (banking and insurance) out of a total of nine sectors that were not investigated. Future research should examine the remaining seven and attempt to make comparisons between the sectors.

6 Recommendations

The results of this study make a strong case for recommending that all companies establish a code of ethics within their internal audit departments. This code should clearly define the concept of objectivity and its importance to conducting thorough, independent internal audits. As well, regular meetings should be held between senior management and internal auditors in order to discuss substantive concepts and procedures for disclosure for dealing with any cases in which objectivity is impaired. Moreover, CAEs must play an important role in periodically evaluating the risks that might impair internal auditors' objectivity, and focus on creating objective measurements that give internal auditors collective feedback on their performance. Chief audit executives also need to raise awareness of the importance of objectivity and the need for constant, ongoing training to their internal auditors, as well as the need to apply best practices. A chapter about the rules of professional conduct for internal auditors should also be included in curriculum plans in accounting departments at universities in the UAE, as well as a chapter that outlines the rules of professional conduct for the profession of internal auditing, with a focus on holding workshops, and seminars. This study might also benefit parties that are responsible for setting internal auditing rules and best practice standards in the profession. This study addresses the individual-level factors that affect internal auditors' objectivity in both the banking and insurance sectors in the UAE. Further research should include all business sectors in the UAE, and address other factors that may impair auditors' objectivity within those sectors.

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