The Relationship between Culture and Effectiveness of Internal Auditing, an Empirical Study

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Abstract

Following the announcement of the new framework by the Institute of Internal Auditors (The IIA) regarding the effectiveness of the internal audit function (IAF) in July 2015, we conducted a research on the influence of cultural differences on the IAF effectiveness. Hofstede's theoretical framework is applied to examine the influence. Responses of chief audit executives (CAE), internal audit directors and managers of companies from Turkey as well as from different countries ranging from United States to Saudi Arabia were collected. We found that, internal audit functions of organizations, of which masculinity and hierarchical means not providing enough ground for subordinates to state their justification against the management decision on activities are reflecting less effectiveness. We also identified that in organizations where CAEs are positioned as part of senior management and quality assurance programs are implemented, IAF effectiveness differentiate significantly.

Keywords: Internal audit effectiveness, internal audit function, culture, power distance, collectivism versus individualism, uncertainty avoidance, masculinity versus femininity.

1. INTRODUCTION

The Institute of Internal Auditors (IIA), a globally accepted organization with more than 180.000 members throughout the world, defines the 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." (IIA, 2009)

Corporate scandals in early 2000s and the global financial crisis of 2008-2009 leading to the downfall of financial giants have revealed serious inadequacies in the effectiveness of governance as well as worldwide new programs to increase this effectiveness. Under this circumstance, the internal audit profession has been increasing its importance.

Researchers have also interested in the effect of the differing cultural structures on the general auditing practices, auditor choices as well as the quality of the audit work (Abdolmohammadi&Sarens, 2011; Al-Shetwi et al. 2011; Alzeban, 2014; Chan et al. 2003; Cohen et al. 1995; Hell & Wang, 2009; Hope et al. 2008; Jeffery et al. 2004; Patel et al. 2002; Sim& Goodwin, 2004; Umar &Anandarajan, 2004).

In July 2015, The IIA announced enhancements to its International Professional Practices Framework (IPPF) referring to 10 core principles IAF effectiveness. These principles in summary are integrity, competence and due professional care, independence, strategic alignment, adequate resources and appropriate positioning, quality and continuous improvement, effective communication, being risk-based assurance provider, being insightful and proactive, promoting organizational improvement (The IIA, 2015). Those principles are in line with findings of the research and articles on the effectiveness of IAF (Arena&Azzone,2009; Bender, 2006; Burten et al., 2012; Chambers, 1992; Chambers, 2008; Dittenhofer, 2001; Fazli et al. (2013); Gramling et al. (2004); Halimah et al., 2009; Lenz et al., 2014; Lenz & Hahn, 2015; Mihret&Yismaw, 2007; Pforsich et al., 2006; Prawitt,2003; Sarens and Abdolmohammadi (2009); Sarens et al. (2012); The IIA, (2010))

This study aims to investigate the relationship between dimensions of culture and IAF effectiveness. Hypothesis proposed within this scope are tested through the data collected from 198 respondents from different countries and industries. Pearson correlations and multiple regression analysis are used through the Statistical Package for Social Sciences (SPSS) to test the relationships.

2. PROBLEM STATEMENT

In this study, the dimension of culture and the differences among them are presumed to have an impact on the effectiveness of internal audit functions of companies. Said differences, in our assumption, can affect the overall effectiveness of IAFs.

The significance of the cultural dimensions in business life has been very well investigated. In addition there is an increasing interest on the IAF topic and its effectiveness. However there are rare empirical researcheson the relation between cultural dimensions and IAF

effectiveness. Information on the relation and their interactions can provide a very meaningful insight to chief audit executives as well as audit committees and senior management to increase the value provided by the function. This paper will analyze this relationship between cultural dimensions and IAF effectiveness.

3. THEORITICAL BACKGROUND

In Hofstede's theoretical framework there exist five dimensions of which national cultural differences and cultures as a whole can be compared such that; power distance, uncertainty avoidance, individualism versus collectivism, masculinity versus femininity and short-term versus long-term orientation. These were used as a basis for a number of research in internal auditing with significant findings in different contexts (e.g., Hughes et al.2009; Alzeban, 2014; Abdolmohammadi&Sarens, 2011; Hell & Wang, 2009;).

According to Hofstede, power distance is "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally." Uncertainty avoidance is "the extent to which the members of a culture feel threatened by uncertain or unknown situations." Individualism "pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family." Masculinity represents "the dominant male sex role pattern in the vast majority of both traditional and modern societies." Long-term orientation refers to longterm versus short-term orientation toward the future. Being the most widely accepted one in cross-cultural studies, this metric led researches to identify several significant associations between culture and political, demographic, economic and geographic indicators of societies (Yoo et al. 2011).

Compared to culture, IA effectiveness is a blur concept. Effectiveness being not a self-explanatory context recalls extremely different things to different stakeholders and assessed differently (Lenz at al. 2014). Unlike other functions in a company, the quality of the internal audit work is not easily determined, except for the cases of an audit failure (Bender, 2006). For this reason, it is more common for chief audit executives to be blamed for ineffectiveness compared to appreciation they receive for the effectiveness.

The internal audit is constructed on the three "Es", namely effectiveness, efficiency and economy (Ridley, 2008). Among these, effectiveness "doing the right thing" is the most important one, while other "Es" are efficiency "doing them well" and economy "doing them cheaply" (Chambers, 1992). An effective IAF is expected to influence the quality of corporate governance while helping the organization to achieve its objectives through a risk based approach (Lenz, 2013).

The Institute of Internal Auditors (IIA) was established in 1941 in Altamonte Springs, Florida, USA. Globally the IIA has more than 180.000 members and these members are mostly occupied in the area of internal auditing, risk management, governance and similar areas. The IIA is accepted to be the main standard setter for the internal auditing and this role is also accepted and referred in many aspects by regulators around the world. International Professional Practices Framework (IPPF) by the IIA, refers to 10 core principles of IAF effectiveness. These principles in are integrity, competence and due professional care, independence, strategic alignment, adequate resources and appropriate positioning, quality and continuous improvement, effective communication, being risk-based assurance provider,

being insightful and proactive, promoting organizational improvement (The IIA, 2015). The IIA expect IAFs comply with the principles of the framework to be evaluated as effective.

The empirical literature on the IAF states the crucial factors impacting the effectiveness as the working relationship between the internal auditor and a company's audit committee (AC), composition and independence of AC and IAF, reporting line of CAE, support from the senior management, risk based auditing approach, skills and competences of CAE and staff in other words the characteristics as the organization, resources, processes of IAF and its relations with stakeholders (Rezaee& Lander, 1993; Raghunandan et al.2001; Goodwin, 2003; Arena & Azzone, 2009; Rose & Norman, 2008; Norman et al., 2010; Sarens& De Beelde, 2006; Pfosrsich et al. 2008; Lenz et al. 2013).

Deeply analyzing the IAF characteristics of German companies, Lenz et al. (2014) identified items that significantly differentiate for effective internal audit functions. These are;a BoD level approved IA charter existence, career progression for IA staff in company, a balanced degree of co-sourcing and/or outsourcing of IA, training and professional qualification of IA staff and CAEs, the use of technology, risk-based auditing approach, communication of findings and recommendations with stakeholders, CAE's having proper and appropriate access to the board and audit committee, input from board, audit committee and senior management to IA planning and support to CAE and informal contact of CAE with senior management especially for support by IAF to consulting projects.

We believe there is always an influence by the culture on anything we handle as humans. Alzeban (2015), identified a significant relation between the individualism and quality of internal audit work in Saudi Arabian organizations stating that the IAF is mainly based on the accomplishments of individual staff. He also identified that in organizations of which the power distance and uncertainty avoidance are large, they represent a lower quality of internal audit. Sarens and Abdolmohammadi (2010, 2011) concluded that as low as the score on uncertainty avoidance, collectivism, and assertiveness, a more professional internal audit community is expected toexist in these countries. Influential role of culture on general operations, quality and implications of internal auditing was also identified in several researches where the power distance, uncertainty avoidance, collectivism and masculinity relates negatively with the internal audit quality and implications of the function (e.g., Abdolmohammadi& Tucker, 2002; Chan et al. 2003; Cohen et al. 1995; Hell & Wang, 2009; Hope et al. 2008; Jeffery et al. 2004; Patel et al. 2002; Sim& Goodwin, 2004; Umar & Anandarajan, 2004; Wingate, 1997).

4. RESEARCH QUESTION AND HYPOTHESES

The question that this study is looking for an answer is; "Is there a relationship between the cultural differences and the effectiveness of the internal audit function and what is the degree of this association if there exists? In order to answer the research question, the following hypotheses are tested based on our literature review on the relation between culture and IAF effectiveness:

- H1: Power distance is negatively associated with IAF effectiveness
- H2: Uncertainty avoidance is negatively associated with IAF effectiveness
- H3: Collectivism is negatively associated with IAF effectiveness
- H4: Masculinity is negatively associated with IAF effectiveness

Additionally we included three control variables to our study to identify their effect on the effectiveness of internal auditing. Among demographic variables we collected from respondents, we took into account the regulatory level of the industry that the IAF function operates in terms of laws and regulations directly related with auditing, quality assurance review approach of the IAF and results of the last review and finally the title/position of the CAE within the company, in other words CAE being the member of the senior management/C-suit level. In order to embed these variables to our model, following hypotheses are tested:

H5: IAF effectiveness is higher where the industry is more regulated in terms of auditing H6: IAF effectiveness is higher where QAR processes exist and review results are positive H7: IAF effectiveness is higher where CAE is positioned among senior management/C-level

5. METHODOLOGY

This study utilized a quantitative method. Survey data was collected via questionnaires published on internet and social media targeting relevant respondents. Target sample comprises internal auditors, chief audit executives, internal audit directors and managers. The association between the two concepts; culture and IAF effectiveness is statistically examined.

5.1. Description of the Sample

The target population is the internal auditors, chief audit executives, internal audit directors and managers. To reach the target population, a short article including the description and the purpose of the research was published in linkedin.com, a social media platform mainly active on business networking. At the same platform, some discussions were started regarding the influence of culture on the effectiveness of IAF, in discussion groups and forums, where the members are internal auditors, CAEs, directors or managers. In addition, some CAEs, which are our official connections in this social networking platform, were informed and requested to distribute the link to the questionnaire which is published through surveymonkey.com, an online questionnaire service provider.

246 respondents accessed to the questionnaire from the web link which was provided through linkedin.com and 234 of them (96%) of them stated that they are from the internal audit profession which was targeted in parallel to the objectives of this study. Among 234,192 respondents (82%) completed the questionnaire items related with effectiveness of IAF and cultural dimensions. Demographic information provided by the respondents, shows that 85% are male, 80% are married and the average age is 40 with a mean of 17 years of total working experience while 21 of them having 30 years and above experience and 90% of the respondents stated that they are holding senior titles which are equal to manager, director or above.60% of the respondents have a graduate school degree (masters or Phd) while remaining are holding a bachelors. Only one respondent states that he is a high school graduate. Generally speaking, the responses were collected from a mature and well educated population. The distribution of the countries that respondents are currently located is presented in Table 1.

Table1.Countries that the respondents are located

Country	# of Respondents	Country	# of Respondents
TR – Turkey	76	AD - Andorra	1
US - United States	22	AR - Argentina	1
GB - United Kingdom	7	AT - Austria	1
SA - Saudi Arabia	7	AZ - Azerbaijan	1
AE - United Arab Emirates	6	BB - Barbados	1
BG – Bulgaria	5	BD - Bangladesh	1
PK – Pakistan	5	CA - Canada	1
AL – Albania	4	CI - Cote d'Ivoire	1
BR – Brazil	4	CL - Chile	1
AU – Australia	3	CY - Cyprus	1
DE – Germany	3	FR - France	1
EG – Egypt	3	IL - Israel	1
GR – Greece	3	IT - Italy	1
IN – India	3	JM - Jamaica	1
JO – Jordan	2	KE - Kenya	1
KZ - Kazakhstan	2	MC - Monaco	1
MK - Macedonia	2	NZ - New Zealand	1
NG – Nigeria	2	PE - Peru	1
NL - Netherlands	2	RO - Romania	1
QA – Qatar	2	RS - Serbia	1
RU – Russia	2	TZ - Tanzania	1
UA – Ukraine	2	VE - Venezuela	1
ZA - South Africa	2	ZM - Zambia	1

5.2. Measurement Instruments

The measures for culture, which is the independent variable in this research, are obtained from Yoo et al. (2011). They offered a new measurement instrument that assesses Hoftede's cultural dimensions at the individual level. Questions for power distance refer to relations between superior and staffs in terms decision making, social life and interactions (items PD1 through PD5). Five items in the uncertainty avoidance scale (items UA1 through UA5) refer to the certainty of task definition by instructions and procedures and perception of the respondent on this situation. Collectivism versus individualism is measured through items IC1 and IC6, where respondents rated the propositions on the group loyalty, welfare or interest of group against the individual. Questions for masculinity versus femininity refer to the differences between men and women in terms of decision making, job characteristics and problem solving through the items MA1 and MA4. Based on the other research on the relation between the cultural characteristics and the IA function general operations and the quality of the internal audit work, we did included these four dimensions while excluding the long term orientation. A 7-point Likert-type scale (1 for strongly disagree, and 7 for strongly agree) is used to measure the cultural dimensions in this study. **Appendix 1** shows the items used in this measurement.

The IAF effectiveness is the dependent variable in this study. The measures for IAF effectiveness are obtained from the study by Lenz et al. (2014). They identified items that significantly differentiate for effective internal audit functions. This measure includes 14 items which are related with the IAF characteristics in terms on organizational position, IA resources and processes as well as IA relationship. Four items measuring the level of risk based approach, Board/AC and senior management input to the IA planning and ease of access of CAE to board/AC, a 7-point Likert-type scale (1 for strongly disagree, and 7 for strongly agree) is used. We create dichotomous variables for these by assigning a value of 0 to the variable if it is below or equal to the median of the sample, and 1 otherwise, since the remaining items were structured as dichotomous and gets value of 1 for "yes" and 0 for "no" responses.

We excluded the item regarding the combined share of co-sourcing and outsourcing of IA services from this measurement since the majority of respondents are from Turkey and financial services, considering that the use of outsource services in IAF is prohibited by the regulatory authority in Turkey for banking industry. We also excluded the item questioning whether IAF makes recommendations for improving the governance process, again considering the country and industry based concerns since in mentioned industry, auditors are expected to review the governance process in the areas under audit and make recommendations. In addition we splitted the item regarding the rated findings and overall grading provided within the audit reports and put into the analysis as two different variables.

The items we included in our analysis are used to identify existence of a Board level approved IA charter, career opportunities for IA staff within the company, certification of staff and CAE, training, use IA technology, communication of findings and recommendations of audit function to organization. Finally we create an overall IAF effectiveness variable (OVALEFFC) asPrawitt et al. (2009) and Alzeban (2014) did. Effectiveness is the summation of 13 items used in the measure ranges from 0 to 14 such that larger results indicate better IAF effectiveness. Table two shows each item and labels provided for the responses.

Table2. Explanation of items used for IAF effectiveness measure.

Item	Item Explanation	Label 1	Label 0
EF1	Board level approved IA charter	Yes	No
	Lateral move or promotion opportunity for		
EF2	staff in company	Yes	No
EF3	Required certification for staff	Yes	No
EF4	Qualified/certified CAE	Yes	No
			Below 40
		Over 40 hours	hours
EF5	Total training hours provided to IA staff	yearly	yearly
EF6	Use of CAAT/IA technology	Yes	No
EF7	Risk based auditing approach	>median	.= <median< td=""></median<>
EF8	Board/AC input to audit planning	>median	.= <median< td=""></median<>
EF9	Senior management input to audit planning	>median	.= <median< td=""></median<>
EF10	CAE easily access to Board/AC	>median	.= <median< td=""></median<>
	CAE is contacted unofficially by senior	at least 3-5	below 3
EF11	manager for ad hoc projects	times and	times

		above yearly	yearly
EF12	Rating each audit finding in reports	Yes	No
EF13	Overall grade for the report	Yes	No

In addition, data regarding 13 demographic variables were collected from the respondents. These includes personal data (country, gender, age, marital status, educational background, total working experience, internal audit working experience, title/position,) as well as company data (industry, entity type, regulatory status, quality review results of the IAF function and administrative reporting line).

Among those, regulatory status questions if there are certain laws and regulations that regulate the internal audit function within the industry that the company operates. We take this status into consideration to evaluate the effect of the government intervention to the internal audit function. Secondly, quality review results of the IAF function is also worth to expand here since it represents the level that the IAF adhere to the standards within the IIA IPPF. As the widely accepted standard setter, IIA promotes IAFs to get a quality assurance review every 5 year conducted by certified independent reviewers. Those who follow this promotion are supposed to have tendency to adhere the standards and increase the effectiveness of their IAFs. Lastly, the title/level of the CAE in the company included in the analysis assuming that it represents the importance to the function and shows the tone at the top towards the IAF. These threeitems are used as controlling variables in the analysis with the forms as stated in table three.

 Table 3.Explanation of controlling variables

Item	Item Explanation	Label 1	Label 0
REGUL	Regulatory status	Yes	No
	Quality Assurance Review		
QAR	Results	Yes and conforms	No or fails
		EVP, Senior	Below EVP, Senior
CAETITLE	Title/position of the CAE	Manager, C-Suit	Manager, C-Suit

5.3. Pilot Test

A pre-test were implemented prior to the distribution of the questionnaire to the target population to ensure that items convey the expected meaning to the respondents. For this purpose, questionnaire was distributed to a limited number of internal auditors holding Certified Internal Auditor (CIA) qualifications and asked for feedback. Some minor changes were made on the wording of some items based on the pilot test. With these changes, we concluded that the items in the questionnaire are applicable to target population.

5.4. Data Analysis

This study uses multiple regressions to analyze the relationships between the dimensions of culture and IAF effectiveness. Independent variables are cultural dimensions (power distance, uncertainty avoidance, collectivism versus individualism and masculinity versus femininity), and dependent variable is the IAF effectiveness. We conduct first an exploratory factor analysis on dimensions of culture. Pearson Correlation is used to find the relation between the

variables and multiple regression analysis is used to determine the influence of cultural dimensions on the IAF effectiveness and to test the hypotheses of the research. SPSS version 21.0 is used for computing and analyzing the results.

5.5. Reliability and Validity Analysis

An initial reliability analysis is conducted for each item for the measurement of cultural dimensions separately. Reliabilities between 0.70 and 0.80 are acceptable and over 0.80 can be considered to be good (Sekaran, 2003). Analysis gives an acceptable Cronbach Alpha at 0.771.

Again for the cultural dimension measurement, an exploratory factor analysis is conducted to identify the validity of the measures. The factor structure explained 65,56% of the variances of cultural dimensions structure. However, the power distance items through PD1 to PD5 do not fit in only one component and we classify these items under two components. Results are shown in the Table 4.

Table 4.Exploratory factor analysis results

Cultural Dimensions					
	Items	Factor Loads		Items	Factor Loads
	IC3	.845		UA5	.897
	IC2	.806		UA4	.879
Collectivism vs	IC4	.796	Uncertainty	UA3	.849
Individualism	IC5	.783	Avoidance	UA2	.798
	IC6	.744		UA1	.649
	IC1	.727			
		Factor			Factor
	Items	Loads		Items	Loads
	MA2	.840	Dawen Distance	PD3	.825
	MA3	.832	Power Distance	PD5	.586
Masculinity vs Femininity	MA4	.749	Comp1	PD4	.525
	MA1	.711			Factor
	IVIAI			Items	Loads
			Power Distance	PD2	.796
			Comp2	PD1	.728

A new reliability analysis following exploratory factor analysis shows that 3 dimensions give good Cronbach Alphas at 0.880, 0.875 and 0.796 respectively for collectivism, uncertainty avoidance and masculinity. On the other hand analysis does not give acceptable results both for power distance components. For component 1, the first calculated Cronbach Alpha is 0.501 and it increases to 0.510 at maximum. For component 2, which includes two items PD2 and PD1, Cronbach Alpha is at 0.593. Consequently, these two components are not reliable.

6. RESULTS AND FINDINGS

6.1. Correlation Analysis

New components are created for 3 dimensions as COMPIC, COMPUA and COMPMA and data of items within these components are summated dimension wise prior to correlation analysis. The means of components together with separate items of power distance are included in the analysis and correlations executed between the independent and dependent variables. The results are shown below in Table 5.

 Table 5.Correlation Analysis Result

		Std.De									
Variables	Mean	v	1	2	3	4	5	6	7	8	9
OVALEFF	9.042	2.436	1								
C			1								
PD1	2.333	1.386	041	1							
	2.604	1.538	049	,423*	1						
PD2				*	1						
	1.651	1.087	111	,248*	,177*	1					
PD3				*		1					
	1.974	1.375	-,181*	,274*	,240*	,351*	1				
PD4				*	*	*					
	2.318	1.464	027	.141	,223*	,297*	,155*	1			
PD5					*	*		1			
COMPIC	4.730	1.216	.141	072	.132	037	.031	.039	1		
	5.245	1.148	.000	036	.068	068	.088	-	,265*	1	
COMPUA								.033	*	1	
	2.482	1.420		.064	,179*	.122	,202*	.113	108	,147	1
COMPMA			,268**				*			*	1

^{*}Correlation is significant at 0.05 level, ** Correlation is significant at 0.01 level

Power distance items are negatively correlated with the dependent variable while the relationship among each other is positive. Uncertainty avoidance and masculinity dimensions are positively correlated with each other and masculinity is negatively related with overall effectiveness of IAF, however uncertainty avoidance has no relation with the dependent variable. Collectivism is positively correlated with IAF effectiveness. The correlation of item PD4 (People in lower positions should not disagree with decisions by people in higher positions.) and masculinity dimension with overall effectiveness of IAF is negative and significant (p<0.05).

6.2. Test of Assumptions for Regression Analysis

The assumptions for the validity of the regression analysis are tested through independence, normality, linearity, multicollinearity and homoscedasticity. Independence is tested with Durbin-Watson test, normality is tested with Kolmogorov-Smirnov test,homoscedasticity is tested with Spearman rho test, and multicollinearity is tested by the Pearson Correlation analysis. Any of the assumptions are not violated and the model is valid.

6.3. Hypothesis Testing

Regression analysis is used for testing the hypotheses and the results are summarized at Table 6. Regression analysis indicates that masculinity dimension and PD4 item of power distance dimension which states that "People in lower positions should not disagree with decisions by people in higher positions" both have a negative influence on overall effectiveness of internal audit function (β = -0.279, β = -0.454, p<0.05). Based on this result, the hypothesis H4: Masculinity is negatively associated with IAF effectiveness is supported. The first hypothesis H1: Power distance is negatively associated with IAF effectiveness on the other hand, is partially supported only for the sub item that is related with relation between the people in higher and lower positions in terms of agreeing on the decision of the higher is significantly related with overall effectiveness. This study shows that relation between other 4 sub items of power distance dimension and the IAF effectiveness is not significant. In addition, other two hypotheses H2: Uncertainty avoidance is negatively associated with IAF effectiveness and H3: Collectivism is negatively associated with IAF effectiveness are not also supported based on the lack of significant relation.

Table 6.Regression Results of IAF effectiveness Against the Cultural Dimensions

	Ermoeted	jjj 		
Variable	Expected Sign	β	p value	\mathbb{R}^2
Constant		7.189	0.000	(
PD1	-	0.093	0.454	
PD2	-	0.079	0.487	Final I
PD3	-	-0.017	0.915	Varia
PD4	-	-0.279	0.022	Const
PD5	-	0.107	0.325	PD
COMPIC	-	0.069	0.604	COMP
COMPUA	-	0.219	0.118	QA
COMPMA	-	-0.454	0.000	CAETI
REGUL	+	0.362	0.236	
QAR	+	2.150	0.000	
CAETITLE	+	0.795	0.011	

\mathbb{R}^2	Adj. R2	F	Sig	N
0.337	0.297	8.32	0.000	192

Model

1 that Model						
Variable	Expected Sign	В	p value			
	~-8	7 100				
Constant		7.189	0.000			
PD4	_	-0.279	0.022			
101		0.217	0.022			
COMPMA	-	-0.454	0.000			
QAR	+	2.150	0.000			
CAETITLE	+	0.795	0.011			

The regulatory status among categorical variable is not significant while others, the title/position of the Chief Audit Executive in the company and the Quality Assurance Review results are significant with coefficients 0.795 and 2.150 respectively and p values less than 0.005. This states that internal audit functions where the chief audit executive managing the function has a table in the C-suit and the senior management level and the internal audit functions that emphasize the importance of the quality assurance review and passed the review conducted by independent certified auditors are significantly effective compared to other IA functions.

The overall model has a predictive nature at 0.337 indicating that 33.7% of the variance in the effectiveness of internal audit function can be explained by masculinity cultural dimension and degree of freedom of lower position staff to disagree on the decisions of their managers.

7. CONCLUSIONS

The objective of this study was to analyze and understand the influence of the cultural dimensions and the differences within dimensions on the overall effectiveness of the internal audit functions. Analysis was based on the Hofstede's theoretical framework to measure the cultural dimensions while a recent measurement by Lenz et al. (2014) used to evaluate the overall IAF effectiveness.

The results indicate that masculinity is negatively associated with the IAF effectiveness. According to Hofstede, masculinity is seen to be the trait that emphasizes ambition, acquisition of wealth and differentiated gender roles while femininity refers to the trait which stress caring and nurturing behaviors, sexuality equality, environmental awareness and more fluid gender roles. We believe this result relates with the discussion between the internal audit professionals whether the IAF should have the traditional "police" role seeking to identify the faults of the business people or to be a trusted advisor and a business partner to add value to the organization by helping to accomplish its objectives. The traditional internal audit profession was used to be a "tough" task to be practiced by the "men" based on its long travel interrogations made during investigations and responsibilities. However, our experience in Turkey and within our business network shows that profession is being transformed to its new position changing the attitude towards femininity in terms of cultural dimensions as well as the diversification of genders within the profession. On the other hand let us also remind the readers that 85% of the respondents to our study are male, which may also indicate the pace is not so fast.

Even the power distance dimension does not show an overall significant influence on the IAF effectiveness, the sub-item included in our study which states that "People in lower positions should not disagree with decisions by people in higher positions", has a negative influence on the dependent variable. Specifically, in internal audit division where the staff in lower positions cannot disagree with the decisions of their managers and cannot freely argue their own decisions, the overall effectiveness is predicted to be lower. Furthermore, this result suggests that for overall effectiveness of the function, the best practice is imposed by the professionalism of the IA management valuing the thoughts of their staff rather than the hierarchical means.

Moreover, empirical evidence was identified that positioning of the chief audit executive whether he/she is the part of the senior management, the C-suit in other words, is significant in terms of effectiveness of the function he/she manages compared to opposite situation. We included this item to our analysis since we believe that this status of CAE represents the perspective of the company top management towards the internal audit of the company, in other words the "tone at the top".

On the other hand, the status of the CAE provides a very critical opportunity to the IAF as well, which is the alignment of the agenda of the IA with the business management. Global Pulse of the Profession Report, 2014 by the IIA reflected the fact that strategic business risksare the top priority for 37% of the audit committee member participants and 45% of the executive manager participants while only represents 8% of the annual plans of internal audit divisions. As the member of the senior management, (what we mean here is as the level of the CAE being among the top level managers not as having executive role considering the independence and the conflict of interest) naturally his/her agenda is expected to be more

aligned with the strategic business risks. This will also lead a way to participate committees and meetings, having a clear and frequent communication with full board, AC, CEO and executive management as well as a deeper understanding of the challenges the organization is facing to achieve the objectives. Please kindly note that, these consequences are directly related with the items that are included in the measurement we used in this study to evaluate the effectiveness of the IAF.

Another result of this study is on the significance of the Quality Assurance Reviews. The IIA defines the Quality Assurance and Improvement Program (QAIP) as evaluation of the IAFs conformance with the international standards for the professional practice of internal auditing. This program also assesses the effectiveness of the IA activity.QAIP requires not only anexternal review but a continuous monitoring and improvement program, namely an internal quality program within the division. Such a continuous effort within the function is expected to differentiate the division compared to other IAFs that have not implemented such a program and according to our study it does.

8. RECOMMENDATIONS

8.1. Recommendations for Corporate Management

Cultural dimensions are important for corporate management to understand and identify their influences on business practices. The result of this study states that corporate management is recommended to consider the degree of masculinity in the internal audit function of the company as this attitude influence the overall effectiveness in a negative way. Change is the key word in terms of relationshipsto transform the IAF.Debates on the role of internal audit whether being a police targeting the defects of business management punishment or a trusted advisor and a business partner role will find a ground within this transformation.

Corporate management should consider the change again in case they believe the IAF is structured and operates by certainly hierarchical means. Providing grounds to field staff in internal audit divisions to state their own thoughts and justifications regarding the decisions made by the IAF management significant in terms of overall effectiveness of internal audit meaning professionalism is worth to be promoted by the senior management as an appropriate action.

Tone at the top is critical and positioning the chief audit executive in the senior management of the company will differentiate significantly positive the IAF in terms of effectiveness compared to other situations. Such a positioning will also enable chief audit executive to align the agenda of the IAF with the executive management leading more resources for review of strategic business risks to help the stakeholders to accomplish their objectives.

Quality assurance reviews were identified to differentiate the IAF functions in terms of effectiveness significantly from others. Based on this result, chief audit executives are recommended to implement internal quality programs within IA and external reviews by certified reviewers at least each five years as recommended by the IIA. Especially the internal quality program will give the opportunity to CAE to continuously review the function and take corrective actions for the areas need improvement.

8.1. Recommendations for Future Research

Data collection for this study was made through the social media platform linkedin.com which is a platform specialized for business networking. Discussion was started in the forums and groups where the members are supposed to be the internal audit profession. By this method a significant amount of relevant responses collected. However, data showed that majority of the respondents which are mostly having mid-level or senior manager roles in their companies are also very well educated and are holding post graduate or at least bachelor's degrees. Actively participating such platforms and following profession related discussions, we believe, is also an indicator of an interest by these respondents to the latest developments on the IA profession and exchange of ideas among each other.

Moreover, quality assurance review item investigated in our study is a reflection of the adherence to the international standards for the professional practices framework of internal auditing stating that CAEs of these companies are following the benchmarks since benchmarking is a step in QAR exercise through the data provided from Global Audit Information Network (GAIN).

Abovementioned issues representour concern on the effect of the institutional isomorphism, a concept by Di Maggio & Powel (1983), on the results of our study. This concept states that there are three kinds of isomorphism which are mimetic, normative and coercive. The normative isomorphism states that structures and changes in existing structures are driven by the professional pressures, where norms developed during education or developed by professional organizations and networks (like the IIA) applied by the organizations. Mimetic isomorphism is the form of imitation of others, e.g. industry benchmarks in case of uncertainty while coercive isomorphism takes place when organizations are forced by external factors like regulators.

In the light of abovementioned limitations as similarities among respondents in terms of educational backgrounds, possible linkedin.com social media platform networking effect on the data as well as influence of quality assurance programs on differentiating the functions in terms of effectiveness, researchers can adopt a study on the internal audit effectiveness including the institutional isomorphism concept in their research.

Al-Twaijry et al. (2003) conducted a study on internal audit in Saudi Arabia with an institutional theory perspective and concluded that state should play a more coercive role for the development of the IAF. Moreover, The IIA submitted a letter to Securities and Exchange Commission (SEC) on September 8, 2015 seeking for a requirement of IAF in public companies in United States. However, our study concluded that regulatory status of the industry is not a categorical factor having an influence on the effectiveness of IAF compared to industries that are not regulated. We recommend researches to expand our study with isomorphism concept, considering latest developments in the profession.

Hofstede's theoretical framework was used in this study through a measurement at the individual level and identified some findings. However, this framework is not the only model in the field of cultural study and all dimensions of this framework were not investigated within the study. Researches can adopt different models using different cultural dimensions available in the literature to regress with the effectiveness of the internal audit.

IAF effectiveness and cultural dimension were investigated through the responses of the internal auditors. Internal audit is a service provided by the auditors and the main receivers of

this service are board members, audit committee members, CEOs and senior managers as well as the line managers. Stakeholder perspective evaluating the effectiveness of the internal audit function is missing in this study and may provide interesting results in case incorporated to a research together with IA responses and cultural dimensions.

IA provides assurance on the internal control framework of the company and recommends improvements for the identified drawbacks. This is a continuous feed-back and feed forward information flow between IA and the business lines and effective IA function can be achieved through the learning organization as well the organizational learning can be improved by the help of IA function. Organizational structure has also an influence on the level of organizational learning and the structure of IA organization should be considered (Dicle & Okan, 2015). Considering this continuous information flow as well as the relationship between the organizational structure and the learning, future research can adopt the relation between the organizational learning and IA effectiveness and their impact on each other and the organization.

Some personal and company demographic variables were not hypothesized in this study but can produce interesting outcomes in future research as to identifying reasons behind the effect of company demographics or function managements' personal demographics to have relation with the IAF effectiveness.

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Appendix I. Cultural Dimensions Measurement

Power Distance

People in higher positions should make most decisions without consulting people in lower positions.

People in higher positions should not ask the opinions of people in lower positions too frequently.

People in higher positions should avoid social interaction with people in lower positions.

People in lower positions should not disagree with decisions by people in higher positions.

People in higher positions should not delegate important tasks to people in lower positions.

Uncertainty Avoidance

It is important to have instructions spelled out in detail so that I always know what I'm expected to do.

It is important to closely follow instructions and procedures.

Rules and regulations are important because they inform me of what is expected of me.

Standardized work procedures are helpful.

Instructions for operations are important.

Collectivism versus Individualism

Individuals should sacrifice self-interest for the group.

Individuals should stick with the group even through difficulties.

Group welfare is more important than individual rewards.

Group success is more important than individual success.

Individuals should only pursue their goals after considering the welfare of the group.

Group loyalty should be encouraged even if individual goals suffer.

Masculinity versus Femininity

It is more important for men to have a professional career than it is for women.

Men usually solve problems with logical analysis; women usually solve problems with intuition.

Solving difficult problems usually requires an active, forcible approach, which is typical of men.

There are some jobs that a man can always do better than a woman.